Middle Class WELFARE

James Cox

NEW ZEALAND BUSINESS ROUNDTABLE
AUGUST 2001

First published in 2001 by
New Zealand Business Roundtable,
PO Box 10–147, The Terrace, Wellington, New Zealand
http://www.nzbr.org.nz

ISBN 1–877148–72–5

Design and production by *Daphne Brasell Associates Ltd, Wellington*
Typeset by *Chris Judd*
Printed by *Astra Print Ltd, Wellington*

CONTENTS

ACKNOWLEDGMENTS

Many people have helped me in preparing this report. I am especially grateful to Roger Kerr for first suggesting and then supporting this project, Greg Dwyer for advice and assistance throughout the project and Peter Bushnell and Ron Crawford for making available the data on which Chapters 5 and 6 are based.

I would also like to thank everyone who has provided comments on the paper: Ron Crawford, Greg Dwyer, Roger Kerr, David Preston, John Savage, Conal Smith and Bryce Wilkinson. Although I have not always been able to accept their advice fully I have no doubt that the report is much better than it would have been without their assistance.

EXECUTIVE SUMMARY

- The main purpose of this study is to consider the reasons for, and the consequences of, government provision of welfare state benefits to persons who are comfortably off.
- The term 'churning of income' is used in this report to refer to situations where a household both receives government benefits and pays a substantial amount in taxes.
- The provision of government benefits to the middle class and the churning of income are consequences largely of government provision of the core welfare state services of education, health and retirement incomes.
- The churning of income is worrying because it suggests that some government benefits are not necessary. Unnecessary government expenditure substitutes for private effort that would otherwise have occurred, displaces higher priority government expenditure and worsens the disincentive effects of taxation.
- Churning involves a redistribution of resources through government that does nothing for equity. Because the disincentive effects of taxation come into play, society is unambiguously worse off as a result of churning.
- This report emphasises the potential *diversity* of providers for welfare state services, the extent of *substitutability* of private for government effort, the *risks* associated with both government and private effort and the *vulnerability* of the poorest to changes in safety net arrangements.
- New Zealanders are, by the standards of other English-speaking and East Asian countries, unusually dependent on funding of health, education and retirement incomes from taxation.
- New Zealand's heavy reliance on government for the provision of welfare state services is undesirable. Greater private sector involvement in providing these services would assist in better meeting people's needs. Moreover, it is reasonable for New Zealanders now to be more concerned about the adverse consequences of welfare state programmes than they were 20 or 30 years ago.

- Although markets for education, health and retirement incomes sometimes fail, it is not obvious that the benefits of government action always outweigh the related costs. Moreover, the provision of welfare state services by government has adverse as well as favourable consequences for equity.
- There undoubtedly is a case for some government funding and provision of welfare state services. This includes a safety net income for those who are unable to work or are looking for work. However, equity and efficiency criteria suggest a less extensive role for government than occurs at present. This is true of all areas of welfare state services but especially so for retirement incomes and tertiary education.

THE NEW ZEALAND WELFARE STATE

- The government is the main provider and funder of education in New Zealand. Government spending on education has been around 6 percent of gross domestic product (GDP) in recent years.
- Students are now required to finance a higher proportion of the cost of a tertiary education than they were before the 1990s.
- The high level of subsidies provided for state schools, including integrated schools, relative to non-government schools has discouraged the development of a genuinely independent private schools sector in New Zealand.
- The public sector dominates the funding of health care in New Zealand. By comparison with other countries, the New Zealand health system emphasises the provision of in-patient care in hospitals. Public hospitals are funded almost entirely by government. However, the private sector makes an important contribution to the cost of pharmaceuticals and, especially, medical care that is provided outside hospitals.
- Public funding of health care has exceeded 6 percent of GDP in recent years. Private expenditure on health care increased from 0.8 percent of GDP in 1979/80 to 1.8 percent of GDP in 1998/99.
- Public expenditure on retirement benefits declined from 7.7 percent of GDP in 1991/92 to 5.5 percent of GDP in 1998/99. This decline is largely due to the increase in the age of eligibility for superannuation. Self-provision of retirement incomes (other than imputed rent from owner-occupied dwellings) is around 2.0 percent of GDP.

- New Zealand spends about 25 percent of its GDP on the welfare state in total, compared with expenditure of 5 to 10 percent of GDP in Hong Kong, Singapore, Korea and Taiwan, 17 percent in Japan, 20 percent in Australia and the United States, 28 percent in the United Kingdom and over 30 percent in Germany, France and Sweden.
- Public spending on education is a higher proportion of GDP in New Zealand than in Australia, Germany and the East Asian countries. These other countries rely on private funding and provision of education to a greater extent than New Zealand. Educational outcomes in these countries appear to be at least as good as in New Zealand.
- Government spending on health care as a share of GDP is similar in New Zealand to many other Organisation for Economic Cooperation and Development (OECD) countries; it is higher in New Zealand than in Hong Kong, Korea or Singapore. This reflects the low non-government share of total health care expenditure in New Zealand. Australia, for example, has a privately funded health care sector which is substantially larger than New Zealand's. Total health expenditure (both public and private) is higher as a share of GDP in Australia than New Zealand.
- Government spending on retirement incomes varies greatly between countries. New Zealand spends a lower proportion of GDP on retirement incomes provided by government than European countries with contributory social insurance programmes. However, it spends a higher proportion of its GDP on retirement incomes programmes than Australia, which has means tested benefits, and the East Asian countries.
- Private provision for retirement is greatest in those countries (such as Australia) in which governments provide the least extensive benefits.
- The New Zealand welfare state absorbs around 75 percent of tax revenues. Because it is so large, the effects of the welfare state on people's economic behaviour are likely to be substantial.

WHO GAINS AND WHO LOSES FROM NEW ZEALAND'S WELFARE STATE?

- The consequences for equity of the welfare state depend both on who receives benefits and who pays for them.
- Middle class professionals are heavily involved in the provision of health and education, and have sometimes actively opposed changes to the funding and provision of these services.

- Despite many difficulties, fiscal incidence studies provide the best available basis for assessing the immediate consequences for equity of the welfare state and its financing.
- Incomes fluctuate from year to year and over a lifetime, and not everyone with a low current market income is disadvantaged.
- Benefits and superannuation are mainly received by households with low current market incomes. By contrast, education and health expenditures are more evenly spread throughout the income distribution. Tax payments are largely made by households with high current market incomes.
- The welfare state redistributes from high current income to low current income households. However, the extent of redistribution between income classes varies substantially depending on which income measure is chosen to rank households.
- The conclusion that the welfare state redistributes from high current income to low current income households could well be modified substantially if data were available on household income over a number of years or a person's income over their lifetime.
- The general direction of redistribution in the New Zealand welfare state is from younger couples and couples with children to older people, sole parents and other family groups. Couples with children and other family groups both pay substantial amounts in tax on average and receive substantial amounts in benefits.
- Australia has been more successful than New Zealand in restricting cash assistance to the lowest quintiles of the current income distribution. This is because of the means testing of age pensions and a less extensive system of benefits for low-income people in employment.
- The Australian welfare state seems to treat couples with children more generously on balance than the relatively larger New Zealand welfare state.
- The welfare state has both favourable and unfavourable consequences for equity. This is a relevant factor in deciding how extensive a welfare state a country should have. Because New Zealand's welfare state is larger than Australia's, both the favourable and the unfavourable consequences for equity are larger in New Zealand than in Australia.

- The total amount of government benefits received by the two highest quintiles of taxpayers in New Zealand was equivalent to $5,526 million or 5.6 percent of GDP in 1997/98. This amount was made up of $2,232 million in education benefits, $1,666 million in health benefits and $1,417 million in income support payments.
- Twenty-seven percent of government social expenditure benefited taxpayers in the two highest quintiles of taxpaying households in 1997/98. Forty-eight percent of government education expenditure, 35 percent of health expenditure and 14 percent of superannuation expenditure benefited households in the two highest quintiles of taxpaying households.
- Two demographic groups are particularly likely to be affected by churning of income. These groups are couples with children and households that include young adults. These groups comprise 43 percent of households but 65 percent of households that pay more than 150 percent of the median amount of taxation. They pay 56 percent of all taxes and benefit from 40 percent of government social expenditure, including 75 percent of education and 46 percent of health spending.
- By contrast, sole parents and retirees make up 32 percent of all households. They receive 50 percent of all government social expenditure but pay 16.5 percent of taxes.
- Around 60 percent of government benefits that are paid to high taxpayers go to families with children. Education and health subsidies are mainly involved.
- Policy changes should not be limited to restricting the amount of education and health subsidies that are received by higher income households. Changes to superannuation and benefits should also be considered. These measures would provide scope for substantial reductions in taxation that would especially benefit households with children and young adults.

POLICY ISSUES

- Reform of the core welfare state is both necessary and difficult. Continuing existing social policies is not an attractive long-term strategy for New Zealand. Lower taxation, less and more flexible regulation and greater reliance on the market are all likely, once the transition has been negotiated, to improve the standard of living of most people and, in particular, to improve education, health and retirement incomes.

- A reduction in taxes that is financed by a reduction in middle class welfare can confidently be expected to lead to greater work effort and higher market incomes for those who are affected by these changes. The reduced impediments to market transactions arising from lower taxation will assist families to adjust to reduced availability of government services.
- Despite some reversals, New Zealand has been generally successful in reducing government spending on middle class welfare in recent years. However, there have been difficulties with income testing and some health sector changes.
- Although further transfer of responsibility for welfare services to the private sector would in principle be desirable, the recent policy debate in New Zealand has also highlighted difficulties that would need to be addressed in any such transfer of responsibility.
- Further policy changes should work with, rather than against, the public's views about fairness. This points to the importance of making incremental changes across a wide range of areas.
- The immediate objective should be to establish privately provided education, health care and retirement incomes as a viable alternative to government provision.
- One way to move towards this objective would be to introduce in New Zealand social policies that are similar to those that already exist in Australia. For example, subsidies to privately provided education and health care could be increased, pensions could be allowed to fall in relation to earnings for future retirees, and incomes and assets tests could be applied to pensions. These policies are a step in the right direction in themselves and would open up possibilities for further change.
- Better arrangements for paying for education and health care are likely to involve a combination of increased fees for service, some means testing, increased subsidies to private providers and scholarships or loans to assist those in temporary poverty.
- A reduction in taxation is needed in New Zealand. In reducing taxation, a balance needs to be struck between lower tax rates and

the introduction of tax credits to benefit families with children. The extension of tax credits would be a larger departure from New Zealand's simple income tax structure. However, this change may be necessary if families with children are to be asked to pay more for health and education and undesirable distributional consequences are to be avoided.

- Periodic, detailed reporting on who benefits from the welfare state and who pays for it would assist in improving the transparency of social policies. The analysis undertaken in this report is a contribution to improving the transparency of social policy and may provide an example of the analysis that is worth undertaking.

Middle Class Welfare

The important thing for Government is not to do things which individuals are doing already, and to do them a little better or a little worse; but to do those things which at present are not done at all.

JM Keynes (1926), *The End of Laissez-faire*

The State is the great fictitious entity by which everyone seeks to live at the expense of everyone else.

F Bastiat (1848), *The State*

1

THE WELFARE STATE DEBATE

INTRODUCTION

The main purpose of this study is to consider the reasons for, and the consequences of, government provision of welfare state benefits to persons who are comfortably off. The report focuses on the benefits that people receive when governments provide them with an income or with services that are priced below cost, and it focuses on the taxes that are required to fund these benefits.[1] Alternative methods of providing welfare state services are considered to some extent but are not the main focus of the report.

The welfare state is usually supported because it helps those who earn low incomes. However, as this report will demonstrate, a large proportion of government expenditure on education and health subsidies goes to those with high current incomes. In addition, some superannuation payments are made to those with high incomes. As a consequence, households that receive government benefits also help to finance these benefits through taxation. The term 'churning of income' is used in this report to refer to situations where a household both receives government benefits and pays a substantial amount in taxes. Churning is undesirable because it indicates that some government expenditure is unnecessary. Unnecessary government expenditure substitutes for private effort that would otherwise have occurred, displaces higher priority government expenditure and worsens the disincentive effects of taxation. People who are comfortably off can be trusted to make their own arrangements for education, health and retirement incomes and would be better able to do so if tax rates were lower. Moreover, the adverse economic and social consequences of high taxation are increasingly apparent in New Zealand today. It is important to investigate, therefore, whether other ways of providing social services that involve less churning are available and whether they are likely to provide people in New Zealand with the services they want.

---

[1] This study is based on statistical and other information that was available to the author up to 31 March 2001.

In addition to the amount provided by way of benefits and services to those with high current incomes, a substantial amount of government expenditure on superannuation, health and income-tested benefits is received by households whose current income is low but who received higher incomes in the past or expect to receive higher incomes in the future. It is likely that the recipients of income-tested benefits are drawn to a disproportionately great extent from those whose incomes are low on average over their lifetimes. But a great deal of health and superannuation expenditure is received by households whose economic experience over their lifetimes is likely to be representative of the economic experience of their age group as a whole. This provides another perspective on the extent of churning. Tax rates for the current working generation would be lower than they are now had the current retired generation made greater self-provision while they were still working for their income and health needs during retirement.

New Zealand has a number of programmes that provide tax credits to low-income families. These include family support, the independent family tax credit and the guaranteed minimum family income. Although the recipients of assistance under these programmes have, in many cases, current incomes that are higher than those of retirees, the needs of these families are also great. These tax credit programmes do not involve churning of income because assistance is provided through a reduction in tax payable rather than direct expenditure. But tax credit programmes have adverse consequences particularly because of disincentives arising from withdrawal of assistance when the family's income increases. The need for tax credit programmes would naturally be less if tax rates were lower. Greater self-provision of education, health and retirement incomes (and hence less government provision of these services) would help to achieve this.

The provision of government benefits to households that are comfortably off, and the churning of income, are consequences largely of government provision of the core welfare state services of education, health and retirement incomes. These are services that everyone wants for themselves and their children. Many New Zealanders would argue that these services should be provided by government and funded through taxation. They would also argue that higher taxation is the price of the better welfare state services that everyone wants.

I will argue in this report, however, that New Zealanders are unusually dependent on government funding through taxation of health, education and retirement incomes. Citizens of some other countries (including

Australia, the United States and the East Asian countries) provide for their own education, health and retirement income needs to a greater extent than New Zealanders. Because people provide more for themselves and their families, and governments do less, taxes are lower in these countries. There is no reason to think that the citizens of these other countries enjoy poorer standards of services because of the lesser degree of government involvement. Indeed, the evidence suggests that standards are often similar or higher elsewhere. A combination of lower taxes and similar or better services is clearly to be preferred to the present situation in New Zealand.

I will argue, nevertheless, that there is a clear role for government in the provision of welfare state services. If people cannot or will not provide essential services for themselves and cannot be assisted in other ways, then government should do so. Even so, many people are willing to devote large amounts of their income towards saving for retirement, purchasing better quality health care, or providing a better education for themselves and their children. Much expenditure on the core welfare state services falls into Keynes's category of "things which individuals are doing already" and which, writing before the great welfare expansion of the 1930s and 1940s, he did not see as a priority for government activity.

There were some important moves away from middle class welfare in New Zealand during the 1990s. These included the increase in the age of eligibility for superannuation, greater reliance on user charges for health services and private health insurance, and the increasing extent to which tertiary students are expected to finance their education through fees and borrowing against future income. More recently, there have been signs of a reversal of this trend. The abolition of the superannuation surcharge, for example, reinforced the dominance of government in providing incomes in retirement. The reintroduction of free medical care by general practitioners for children aged under six in moderate and higher income families will undoubtedly be of assistance to these families. Nevertheless, this policy change involves the replacement of expenditure that many families were willing and able to make for themselves by tax-financed government expenditure. Although some families with children have benefited from this policy change, families with children are, in general, substantial taxpayers and net contributors to the welfare state. They are unlikely to benefit from a large tax-financed expansion of government welfare. Moreover, a general climate of high taxation will make it more difficult for younger people to provide for their own needs and those of their children.

PROBLEMS WITH MIDDLE CLASS WELFARE

This recent history suggests that it may be useful to restate the case for moving, at least to some extent, from government welfare services to private welfare provision. There are a number of reasons why it is desirable to rely on private effort in funding and providing welfare services to the extent that it is reasonable to do so.

Limited information

The most fundamental reason for preferring private to government welfare is the very limited information about people's preferences and the costs of meeting them that is available to decision makers in government. Faced by huge responsibilities, ministers and senior managers in the public service have little alternative but to focus on a few indicators such as overall costs, waiting lists for elective surgery or examination and test results for schools. These indicators can provide only a simplified account of what the public wants from education and health facilities. Costs and service quality are hard to measure accurately and it may be difficult to draw valid comparisons between the performance of different units. Moreover, the work of schools and hospitals can easily be distorted by the desire of those working in them to present good results to their superiors. These problems are well known to those who have studied the economics of the former Socialist countries and there is no reason at all to think that welfare state services are immune from them. In the absence of market prices there is little information to guide production and investment decisions, and poor decisions have sometimes been taken.

By contrast, market prices resulting from the interaction of supply and demand take account of a great deal of information about preferences and costs. Although individuals lack technical knowledge, they usually know what they require from education, health and retirement incomes systems. They can be expected generally to make sound choices of advisers to guide them through the complexities. Although markets in health, education and retirement incomes may often fail, the extent of market failure can be overstated. There may often be acceptable private sector responses to failure in a particular market. The extent of government involvement required to address a particular instance of market failure may be quite limited. Finally, the disadvantages of government production need to be set against the problems arising from market failure. The issue of market failure is discussed in detail in Chapter 2.

Political decision making

Secondly, production and investment decisions for government-provided welfare services are likely to be taken according to political criteria. This ensures that decisions are to some extent responsive to public opinion but there are difficulties. For example, a perfectly reasonable desire by government to limit spending (and hence taxation) may mean that certain services that people are willing to pay for are not made available. The rationing of medical services that are provided using high technology equipment may be a good example of this. Decision making in the public sector may be distorted by the desire to achieve the political priority of the day (perhaps to reduce waiting lists for general surgery). Services that are no longer needed in their present form may be continued because it seems expedient to do so. The result of political decision making can easily be a combination of shortages in some areas and over-provision in others. Although shortages and surpluses can also arise from private provision, they are unlikely to persist in the absence of government action.

There are some further difficulties with public sector decision making (see Stiglitz, 1998, for further discussion of some of these). Any government subsidy programme will generate a constituency among those who work for it or benefit from it that will argue for continuation of the programme. The existence of this constituency will increase the difficulties in winding back or modifying the programme should circumstances subsequently require this. Because no government can bind its successors, it can be difficult for governments to enter into long-term commitments involving, perhaps, the withdrawal at a later date of temporary assistance. This limits the ability of governments to respond to temporary emergencies. Because it is always tempting to continue paying the existing level of benefits it is equally desirable to make early changes to increasingly costly programmes (for example, superannuation) to avoid a country from digging itself into a deeper hole. Such early changes will also reduce, but not eliminate, the political risks from future policy changes. These risks are a further disadvantage of government provision of services. The public may not be well-informed about the side-effects of government programmes because of complexity, 'rational ignorance' and because the side-effects often become apparent only after a considerable delay. In my experience, the adverse consequences of government programmes are typically under-estimated at the time of their introduction. Finally, New Zealand's new electoral system involving proportional representation will increasingly require negotiation between political parties to form coalition governments and pass legislation. This may be a difficult and protracted process in a 'zero sum' context in which one party's gain is seen as another's loss. It may be that openness in decision making and the further development of expertise in policy analysis both inside government and outside it will address these problems to some extent.

Considerable efforts are likely to be made to encourage a political or administrative decision maker to continue or modify a government programme, or to make a decision that favours a particular individual. This rent-seeking behaviour can absorb substantial resources and is wasteful. By contrast, market outcomes emerge from the interaction of decisions by many providers and suppliers. This makes rent seeking both pointless and unnecessary, because suppliers will compete to satisfy customers' needs.

Still further problems are likely to arise if services are provided by a government monopoly (or a government service that is given a substantial degree of protection from competition through subsidy). Costs are likely to be too high and the services provided may not be what many people want.

Crowding out

Thirdly, government welfare prevents private initiatives that would otherwise occur. This may be because only government-owned providers are permitted to supply the service. Alternatively, the availability of a government-provided service (often supplied free of charge at the point of delivery) reduces the need for private initiatives and taxation reduces the willingness of people to pay for them. Because 'crowding out' of private initiatives tends to occur, the gains in terms of improved social performance from government spending above a minimum tend to be disappointing (see Tanzi and Schuknecht, 1995). To the extent that the crowding out of private provision by government welfare initiatives reduces work and savings, a country's macroeconomic performance is likely to worsen. These issues are discussed in detail in Chapters 3 and 4 of this report.

Adverse effects of taxation

Fourthly, it is increasingly coming to be realised that taxation has adverse economic consequences. Some early discussion emphasised the effects of taxation on hours of work – the easiest aspect of labour supply to measure. Although the number of hours worked in a given period by some groups (such as married women for whom child care is often a good alternative use of time) react to the post-tax wage rate, those of men do not do so to any great extent (see Putterman, Roemer and Sylvestre, 1998, pp 874–880, for a recent presentation of this argument). However, the effect of taxation on hours of work is likely to be a poor guide to the overall economic effects of taxation. In the longer term, marginal tax rates will affect decisions about how hard to work, whether to retire or acquire new skills and whether or not to move to a new location. In addition to the effect on labour supply, marginal tax rates will affect the form in which employee compensation is taken, income from investments, spending on items that are deductible from taxable income and taxpayer compliance. In a recent study using data from a panel of over 4,000 taxpayers in the United States, Feldstein (1995) concludes that "the evidence shows an elasticity of taxable income with respect to the marginal tax rate that is at least one and could be substantially higher". (This means that an increase in the marginal tax rate by 10 percent would lead to a reduction of taxable income by at least 10 percent.) This study was based on comparing the tax returns of the same individuals both before and after the 1986 tax reforms.

In addition to the macroeconomic effects on work and savings, taxation gives rise to administration and compliance costs, costs arising from fraud and evasion, and excess burdens. (Excess burdens are the costs that taxation imposes on taxpayers in addition to the revenue that is collected. A simple example may help. A family might decide to increase its hours of work in response to an increased tax rate. The value of leisure forgone is a cost of taxation to the family in addition to the revenue that is collected.)

Some recent New Zealand studies have emphasised the idea of excess burdens. In a study commissioned by the New Zealand Business Roundtable, Diewert and Lawrence (1994) found that the taxation of labour income and consumption both involve large excess burdens. (The study did not consider the excess burden arising from taxation of capital.) They concluded that "government expenditure comes with a high price tag" and argued that priority should be given to reducing government expenditure and the public debt, thus paving the way for sustainable reductions in tax levels. Studies typically find that the excess burden of taxation is about 20 cents for each dollar of taxation. This means that governments should only enter into new expenditure programmes that provide benefits worth $1.20 for each dollar of taxation that is used to fund them. Equally, governments should withdraw from programmes that provide less than $1.20 of benefits for each dollar of taxation. To this should be added administration and compliance costs.[2]

Equity

Fifthly, inequities arise from financing the welfare state through taxation. As will be argued in Chapter 5, the cost of the welfare state is increasingly paid by younger childless people and families with children. This places a heavy burden on these groups. Inter-generational inequities have become apparent as the welfare state has matured because it has not been possible to continue the generous treatment provided to earlier groups. Younger people are, therefore, not only required to pay more than their predecessors to finance the welfare state but receive less generous benefits. New Zealand Superannuation provides an excellent example

---

2 Estimates of the marginal cost of public funds are based on estimates of the degree of responsiveness of the supply of labour and capital to the after-tax returns that the owners of these factors of production are able to achieve. Other studies have attempted to examine directly whether there is a link between the size of government, and hence taxation, and economic performance. This is not an easy task. Prosperous countries are likely to want and be able to afford a larger government sector than less prosperous countries. This may be true even if the size of government has an adverse effect on economic performance. A large and inconclusive literature has attempted to unravel these separate relationships. (A recent survey of this literature is provided by Temple, 1999.) Galt (2000) provides an interesting and fair-minded review of the issues from a New Zealand perspective. He concludes (p 108) that "empirical studies tend to suggest that lower tax rates compared to New Zealand levels would be beneficial for achieving high GDP levels, but without strong suggestions that growth rates would improve markedly". Alesina (1999, p 219) points to "convincing empirical evidence of the negative effect of larger government size on growth in OECD countries". Although there is still room for doubt, I think it is fair to say that evidence of the adverse effect of government size on economic output and growth is accumulating. Historical studies such as the ones undertaken by Giersch *et al* (1994) for Germany and Lindbeck (1997) for Sweden are, however, more persuasive. These studies describe the process through which increasing government spending, taxation and regulation over the post-war period has worsened economic performance by impeding market signals and hence reducing the responsiveness of the employment of factors of production to changing market signals. Although government spending in New Zealand takes a smaller share of gross domestic product (GDP) than in the northern European welfare states, these countries emphasise contributory benefits to a greater extent than New Zealand. Substantial participation in the labour force is required to receive full benefits under a contributory programme. See Bates (2001) for a general review of this literature.

of this process. The extent of redistribution from the young to the old exceeds what seems to be required by differences in the needs of these groups. Moreover, it is likely that private sector alternatives would arise to replace reductions in government services. Provided that transitional problems can be addressed, a reduction in welfare state spending could improve inter-generational equity. Although younger people would pay more for some services they now receive either free of charge or at subsidised prices, an overall reduction in marginal tax rates would make it easier for them to improve their standard of living through their own efforts.

The free society

Finally, the overall effect of the welfare state on the quality of life in a free society needs to be considered. There are undoubtedly differing ideas about what constitutes a good society. In his recent book, David Green (1996) argued that welfare states should be judged not only by their ability to provide welfare for all but also on whether they encourage personal responsibility for one's actions and individual freedom. By making some very important choices collectively, government welfare diminishes individual freedom and personal responsibility. The exercise of personal responsibility is a matter of habit and lack of it, or 'learned helplessness', can develop if personal responsibility is not exercised frequently. Because a shift to greater reliance on private welfare would strengthen the institutions of a free society it is to be preferred to continuation of existing arrangements, provided that there is no adverse effect on individual welfare. I am in considerable sympathy with this view.

SOME ALTERNATIVE VIEWS

I argue in this report that government provision of health, education and retirement incomes is not always an effective way to meet society's welfare needs. Although government programmes may be needed to supplement private provision it is usually worth investigating whether a superior, private alternative can be developed. This view that much middle class welfare is ineffective can be contrasted with three other arguments that are sometimes made. These are:

(a) 'middle class capture' – the idea that the middle class has been able to obtain a disproportionate share of benefits that were originally intended for the disadvantaged;

(b) 'Director's law' – the idea that the middle class has (for electoral reasons) been able to enjoy benefits that are paid for, to a substantial extent, by the rich and the poor;

(c) the idea that the replacement of private by government effort in the provision of welfare services has not had major effects on the level and composition of output because a combination of government and private effort now provides the same services as would have been provided by private effort alone in the absence of government programmes.

Brief comments follow on each of these views.

Middle class capture

This issue has been extensively analysed in the New Zealand context by Bertram (1988) for the Royal Commission on Social Policy. Bertram concluded that there are a number of separate problems that might be covered by the label 'middle class capture'. These include: an inability to target cash benefits effectively because of the political power and ability to exercise influence of middle class groups; undue influence exercised by monopoly providers of services (such as professional groups) over which services are provided; and undue influence possibly exercised by some government departments over the agendas of government.

A debate about capture was started by Julian Le Grand's book, *The Strategy of Equality* (Le Grand, 1982). Le Grand noted, for example, that free university tuition disproportionately benefits the better-off, not all residents in public housing are disadvantaged and the British national health service has not eliminated inequalities in access to health care. There have been important recent changes in government assistance for housing and tertiary study in New Zealand and other countries that have addressed some of the issues which Le Grand raised in his book. Others (for example, O'Higgins (1985), Harding (1984), Snively (1988)) have noted that although government spending on education, health and retirement incomes does not redistribute from the rich to the poor, it nevertheless equalises the distribution of income to some extent because it is less unequally distributed than market income. These issues are discussed in Chapter 5 of this report.

These debates do not address the central concern of this report: are government services a good way of meeting the welfare needs of most New Zealanders? But it is worth noting that a combination of self-provision and government programmes for those who are unable to provide for themselves is likely to lead to a more redistributive pattern of government expenditure than now exists. Some targeted benefits (for example, for family assistance) have been successfully introduced in New Zealand in recent years.[3]

Director's law

Director's law, as stated by Stigler (1970), holds that "the middle classes may have been the beneficiaries of [the expansion of government] because they were in coalition with the rich in the nineteenth century, and are entering into coalition with the poor today" (page 9). The middle classes, according to this view, have used their strategic middle position in politics to advance their own interests. Unfortunately, however, the argument that public expenditures are made for the benefit of the middle class but are financed to a considerable extent by the rich and the poor, although admirably clear, does not seem to be a very accurate description of the facts about income distribution in New Zealand.

As discussed in my previous report for the New Zealand Business Roundtable (Cox, 1998) there is an extensive system of income-tested benefits, costing around 6 percent of GDP, which is directed disproportionately at those with lower earning potential.[4] The lowest income groups do not contribute very large amounts in tax. For example, the lowest 20 percent of households ranked according to gross (that is, before tax) income received 6 percent of such income but paid 4 percent of direct taxes and only 9 percent of indirect taxes in 1997/98. Moreover, even high incomes in New Zealand appear to be fairly modest. Only 20 percent of

---

[3] Having said this, I would argue that the objective of government policy should not be to achieve a desired degree of inequality in the distribution of income but to provide a safety net. Although it is often argued that inequality in earnings is undesirable, inequality will assist in guiding resources to their highest valued uses by providing, for example, incentives for the acquisition of skills. Although equity is an important consideration for government policy it involves far more than the distribution of income. Equity is discussed in detail in Chapters 2 and 7 of this report.

[4] As is discussed in Chapter 5 of this report, education and health subsidies benefit households throughout the income range. Superannuitants tend to have low current incomes, but many would have enjoyed higher incomes when they were working. This is illustrated by high levels of home ownership among superannuitants. By contrast, the majority of long-term beneficiary sole parents have below average education and well below average living standards. Better educated sole parents tend to move quickly into paid employment.

households reported gross incomes in excess of $72,400 in 1997/98. This group paid 52 percent of direct taxes and 35 percent of indirect taxes. Either there are not many households earning high incomes in New Zealand or they are quite successful in minimising their income for taxation (and hence statistical) purposes.

It is, I believe, more accurate to think of the welfare state as involving redistribution within the broad group of middle class New Zealanders, as well as from that group to the poor. As will be argued in Chapter 5, the direction of redistribution is increasingly from younger to older people, and from childless couples and families with children to sole parents and 'other family groups' (that is, a nuclear family plus some others). Redistribution can also be thought of as occurring over the lifetime (for example, from when a person is working to when they retire). However, the rate of return that a person receives from participation in government programmes is lower for late retirees than for earlier retirees.[5]

Because of the need to build coalitions of support to win elections, the political process favours redistribution to small, well-organised groups who might be expected to change their votes as a consequence of the extra assistance. The costs are likely to be spread among the population as a whole in the least transparent manner possible. This makes it difficult for citizens to work out who is paying for the welfare state; an important objective in writing this study is to provide up-to-date information on who pays. The introduction of a new government benefit provides a windfall gain to the first beneficiaries. But the net gain from a well-established benefit is far less clear because many households will move from being payers to beneficiaries and back again. Indeed, many households both pay for and receive benefits at the same time. Increasing concern about the economic cost of redistribution, and better information about the distributional consequences, may well result in an increasing willingness to consider alternatives in the years ahead.

---

5 These paragraphs present what may be an unnecessarily literal interpretation of the main point made in Stigler's article. Political parties need to build coalitions of supporters to win elections. In so doing they will offer benefits to groups that will change their votes in response to the benefits. There are many dimensions over which electoral competition takes place and the poor as well as the middle class may sometimes find that their votes are being competed for. The provision and expansion of benefits for the poor advances the careers of those who are providing the benefits, and governments may sometimes expand programmes to attract these voters.

The state as friendly society

According to Kealey (1998), the replacement of private by government effort in welfare during the twentieth century has in reality changed very little. The same kind of benefits that would once have been provided by private effort are now being provided by government and are being paid for by the same people. This view is perhaps not plausible for benefits (such as income-tested cash benefits) that primarily involve redistribution to those with low incomes. It is likely that government is more generous to these groups than private donors would be. However, this view is more plausible for those services (such as education, health and superannuation) that people would otherwise provide for themselves and their families. Brennan and Pincus (1983, p 360) note that "the connection between an increase in the level of public expenditure on an item and the ensuing increase in the level of aggregate consumption of that item is vague. It depends on whether there is private supplementation of public supply, retrading of publicly provided units and/or the possibility of replacing public consumption with market alternatives. The effects of public expenditure increases on aggregate consumption of the items in question are therefore probably small, and may even be negative in some cases or over some ranges". Moreover, the restrictions on individual behaviour required as a condition of benefiting from government programmes may be important in determining the direction and magnitude of the response of aggregate consumption of the relevant item to an increase in public expenditure.

Some further points should be made here. First, it is usually possible for households to supplement government expenditure on welfare state services by expenditure that they finance themselves. If supplementation occurs, an increase in government expenditure may simply displace private expenditure that would otherwise have taken place. Secondly, welfare state expenditures that are provided by government are generally non-tradeable. This may make it possible for governments to ensure that all households have access to a minimum amount of relevant services. Thirdly, government-imposed restrictions (for example, on starting new schools or on the number of health professionals) may make it harder for private effort to redress the imbalances of the public sector.

Although the effects of an expansion of government-provided services on the composition of output may not be large, the effects of the taxes that finance the extra services are likely to be significant. Lightly taxed activities such as leisure, home production and underground activities are likely to expand at the expense of other forms of work and savings. As noted elsewhere in this report, an expansion of government expenditure will have distributional consequences. But even these may be offset to a considerable extent through gifts or bequests.

REASONS FOR INCREASING CONCERN ABOUT THE WELFARE STATE AND ITS FINANCING

The main argument in this report is that government provision is not a very good way of meeting the welfare needs of many New Zealanders. If this argument is persuasive it will, by itself, justify a search for alternative methods of provision. There are, in addition, some reasons why concern about the adverse consequences of the welfare state may reasonably be greater now than it was 20 or 30 years ago.

Consequences of welfare state programmes

First, knowledge about the consequences of the welfare state is much greater now than it was a generation ago. Some programmes are of fairly recent origin: for example, New Zealand Superannuation was introduced in its present form only in 1977. The consequences of these programmes are only now becoming apparent. Because it takes time for decisions, and even more so for customs and attitudes to change in response to changing incentives, it was easy for an earlier generation to overlook, or not sufficiently appreciate, the adverse effects of social programmes. These consequences are now much more obvious than they used to be. Moreover, improvements in information technology, and the steady, unglamorous work of compiling internationally consistent databases have made it easier than it used to be to compare the consequences of the different welfare state institutions that exist world-wide.

The effect of retirement incomes systems on work by older people is a good example of the consequences of welfare state programmes on incentives to work. There is now a good deal of evidence to suggest that the more generous are benefits in retirement, and the greater the reduction in the expected lifetime value of benefits received if work is continued past age 55, the less the extent of work among older people (see, for example, Gruber and Wise, 1998). Although New Zealand has been quite successful so far in avoiding the development of an early retirement culture, the generous New Zealand retirement incomes system provides an excellent reason for people to retire once pension age is reached.

Unlike in some other countries (such as Australia and the United States) the amount of superannuation received by New Zealanders who are eligible is not affected by whether the recipient works or not. However, the amount of superannuation received is sufficiently generous to ensure that few recipients choose to work. The introduction of National Superannuation in 1977 was followed by a sharp fall in employment among persons aged 60 to 65 years. Moreover, the recent increase in the age of eligibility for superannuation has resulted in increased employment for those age groups who are no longer eligible. Concern about the costs of the programme may well result in continuing scrutiny of the age of eligibility for superannuation.[6]

Ageing of the population

The consequences of the expected ageing of the population are a second reason for increasing concern about government provision of welfare state services. The old-age dependency ratio in New Zealand (the ratio of the population aged 65 years and over to the population aged 15 to 64 years) will increase from its present level of 18 percent after about 2005. By the 2040s each person of working age will have to support more than twice as many superannuitants as would be required of their counterparts during the first decade of the twenty-first century (Statistics New Zealand, 1998b, p 104). As a consequence, public spending on superannuation is projected (on the basis of certain assumptions) to increase from 5 percent of GDP in 2010/11 to 10 percent in 2050/51. Public expenditure on health is projected to increase from 6 percent of GDP in 2010/11 to 12 percent of GDP in 2050/51. Education expenditure is expected to remain roughly constant as a share of GDP. Polackova (1996, p 16) projects that the taxation revenue required to achieve a balanced government budget will fall slightly from 32 percent of GDP in 1996/97 to 29 percent in 2010/11 but will then increase to almost 40 percent by 2050/51. This large increase in taxation is undesirable for reasons that were discussed earlier. Further transfers to the private sector of responsibility for the provision of health care and retirement incomes would enable tax reductions in the short term without the need for excessive tax increases later on.

---

6 New Zealand's generous invalid and unemployment benefits may well generate an early retirement culture in the future unless great care is taken with the administration of welfare benefits.

Effectiveness of programmes

A third reason for increasing concern about government-provided welfare state services is that they are not always very effective in achieving their main function of advancing people's welfare. The retirement incomes programmes place a heavy burden on younger people and probably over-emphasise the provision of what has been termed a period of subsidised leisure towards the end of life. It will be argued later in this report that, provided adequate notice is given, privately provided income in retirement can take the place of much government provision. It is not clear that New Zealand's large government programme has resulted in an overall improvement of the standard of living of older people in New Zealand.

Although the New Zealand secondary and tertiary education systems have been successful in increasing the years of schooling undertaken by young people, and the employment record of those with educational qualifications is good, some New Zealand school leavers are inadequately prepared for adult life. For example, according to the International Adult Literacy Survey (ILAS), only 53 percent of New Zealanders aged 16 to 25 years received an IALS score of level 3 and above (the minimum level considered desirable to avoid difficulties in functioning in a modern society): see Organisation for Economic Cooperation and Development (OECD) (1998a, p 52). Corresponding figures are 45 percent in the United States, 50 percent in Ireland, 56 percent in the United Kingdom, 62 percent in Australia, 66 percent in Germany, 67 percent in Canada and 80 percent in Sweden. Some other countries (including other English-speaking countries) appear to be more successful than New Zealand in achieving a high level of literacy among recent school leavers.

Research undertaken by the International Association for the Evaluation of Educational Achievement shows that achievement levels in mathematics are relatively low in New Zealand schools (OECD, 1998a, p 315). Mathematics achievement is also below average in the United States and the United Kingdom and around average in Australia and Canada. The highest levels of achievement are reported for Korea and Japan. These are, incidentally, countries in which parents are prepared to pay substantial amounts in addition to what the state provides to advance the education of their children. Despite the dominance of the state in providing education, New Zealand is one of the countries that has the largest differences between schools both in terms of the socioeconomic composition of the school population and the educational aspirations of parents, and in school characteristics such as size of school and the frequency of homework (OECD, 1998a, p 323).[7]

There are, then, aspects of the New Zealand school system that are less than satisfactory. It is probably also true that there is, at an international level, some relationship between the willingness of parents to assist in the financing of their children's education and good school performance. This is because parents who place a high value on educational attainment are likely to insist on good school performance and be willing to pay for it if necessary. It can also be argued that encouraging parents who can afford to do so to take greater financial responsibility for their children's education would be an effective way to raise standards gradually. The search for better value for money would encourage competition between schools and innovation in educational offerings.

These conclusions are supported by a good deal of research, especially in the United States, which shows that Catholic schools are more efficient than public schools because they achieve better results (especially for minority groups) at lower cost. Cohn (1997) provides a recent review of this literature. These results appear also to be consistent with the Australian experience (see Buckingham, 2000, for further discussion on this point). Hoxby, (1995(a), 1995(b) and 1997) has found that competition between public schools (as a result of dezoning) improves educational attainment and reduces cost.

New Zealand's total health expenditure (by both public and private sectors) has increased over the 1990s from around 7 percent of GDP to over 8 percent of GDP. The share of total health expenditure that is financed by government has fallen from 83 percent in 1990/91 to 77 percent in 1998/99. This change partly reflects government policy decisions to increase charges but also partly reflects the increasing importance of private health insurance and the willingness of New Zealanders to finance health expenditures 'out of pocket'. The Ministry of Health reports that health outcomes (such as life expectancy, perinatal

---

7 In its brief for the incoming Minister of Education, the Ministry of Education (1999b, p 16) acknowledges that New Zealand schools perform poorly in teaching mathematics at young ages and in "adult levels of quantitative and document literacy", especially for Maori and Pacific Island peoples. The authors also argue that international comparisons "point to a number of strengths in New Zealand's educational performance, particularly in reading at primary and lower secondary levels and maths and science literacy at school leaving age" (page 8). Nevertheless, the authors are very concerned about the low levels of achievement of many students including those from deprived backgrounds, isolated regions and those of Maori or Pacific Islands ethnicity.

mortality rates and infant mortality rates) are a little worse in New Zealand than in Australia, Canada or northern European countries, but a little better in New Zealand than in the United States (Ministry of Health, 1998, p 38). New Zealand has higher death rates from cardiovascular diseases (on an age standardised basis) than England and Wales, the United States, Sweden, Singapore, Australia, Canada, France and Japan. But death rates from cardiovascular diseases are lower in New Zealand than in Germany, Finland, Northern Ireland, Scotland, Switzerland and Poland (Australian Institute of Health and Welfare (AIHW), 2000, p 62). The reduction in the share of public funding of health services in New Zealand has coincided with continuing improvement in these indicators. In any event these health outcomes may reflect differing social and economic conditions between the countries, including differences in lifestyle, as much as the contribution of the health system.

Health is not the same as health care. A relevant measure of health care might be the extent of customer satisfaction with the health care system but I do not know of any attempt to measure this in New Zealand. There is some evidence to suggest that, by the standards of other countries, government provision of health care in New Zealand has resulted in over-provision of hospital care at the expense of ambulatory medical care (OECD, 1998c). New Zealand also appears to be slow to adopt some new medical technologies. Rationing of services other than by price appears to be widespread (Stewart, 1998). As the public becomes more aware of the extent of such rationing, dissatisfaction with the health system may increase.[8]

Comparison with Australia

A fourth reason for New Zealanders to be increasingly concerned about the welfare state and its financing is the contrast with Australia. Australia and New Zealand have a similar history and similar institutions, and there

---

8 It is not easy to form an assessment of the extent of rationing in the New Zealand health system. One possible indication is the number of various types of health personnel per head of population. Organisation for Economic Cooperation and Development health data indicate that New Zealand has more doctors per 1,000 of population than the United Kingdom but fewer than in Australia or the United States. The number of specialists per 1,000 of population is low in New Zealand (OECD, 1998c). For example, the number of practising physicians per 1,000 of population was 2.1 in New Zealand in 1996. By comparison, the number of practising physicians per 1,000 of population was 1.6 in the United Kingdom (1994), 2.1 in Canada, 2.5 in Australia, 2.6 in the United States, 2.9 in France and 3.4 in Germany. The number of practising specialists per 1,000 of population was

is increasing freedom of movement of goods, services, labour and capital across the Tasman. By comparison with New Zealand, Australia relies to a significantly greater extent on private provision of health, education and retirement incomes. Australians also seem to enjoy generally higher standards of education, health care and retirement incomes. Government spending on education, health and retirement incomes is about 13.4 percent of GDP in Australia and about 17.6 percent of GDP in New Zealand. This difference, and lower spending in other welfare state areas such as benefits (see Cox, 1998), permit generally lower tax rates in Australia. The Australian economic environment has undoubtedly been attractive to many younger New Zealanders in recent years. This does not mean that New Zealand is compelled to follow Australian policies or, indeed, that Australian policies are the best that can be devised. However, the maintenance of high tax rates in an environment of increasing mobility of labour and capital is likely to prove costly for New Zealand.

CONTRIBUTION OF THIS REPORT

There have been some notable contributions to the debate about middle class welfare in New Zealand in recent years. Three are noted here.

David Thomson (1991) argued that early welfare state programmes (such as housing assistance and family benefits) were of particular assistance to families with children. But as the generations that were born in the 1920s and 1930s grew older they expected, and were successful in persuading governments to provide, more generous health and retirement

---

0.6 in New Zealand in 1996. By comparison, the numbers were 0.9 in Canada and Australia, 1.2 in the United States (1990), 1.5 in France and 2.1 in Germany. These data may reflect New Zealand's relatively low GDP as well as the method of organisation of health services.

According to David Green and Laura Casper (Green and Casper, 2000), rationing in the United Kingdom's National Health Service results in sub-optimal treatment of patients with diseases of the circulatory system and the most common forms of cancer. As a consequence, they argue, outcomes (such as survival rates) for such patients are worse in the United Kingdom than in countries where rationing is less prevalent.

The extent to which treatment in New Zealand meets guidelines for good practice that are increasingly being established overseas is worth investigating.

The rationing of health care is not confined to government health programmes. Health maintenance organisations in the United States also ration care. However, health maintenance organisations must compete on price and service quality with each other and other forms of organisation of health care.

incomes benefits. Faced by increasing concern about rising costs, governments have found it easier to reduce benefits for families than those for older people. At the same time taxation rates have increased. According to Thomson, people born in the 1920s and 1930s have received benefits which, over their lifetimes, exceed substantially the contributions they have made. By contrast, those born after the 1940s will make contributions that exceed the benefits they will receive, and the losses grow with each generation. I would argue, however, that this result is the inevitable consequence of the decision of governments to provide very generous benefits to the 'welfare generation' that was born in the 1920s and 1930s. Rather than further benefits, families now need an environment of low taxation that will encourage them to improve their circumstances through their own efforts. Some limitation of benefits to older people may be needed to achieve this.

David Green (1996, 1998) in his wide-ranging report for the New Zealand Business Roundtable argued that the state should reduce its role in welfare. Governments "should, first, step back to increase the space for the renewal of public, but not political action; and, second, refrain from actions which undermine personal responsibility, the family and voluntary associations" (1996, p ix). Green made a number of recommendations to encourage reliance on private health insurance, the finance of education by parental payment, not taxes, and the private provision of retirement incomes.

There have been some further important recent contributions to the debate about retirement incomes. The two reports of the Periodic Report Group that were published during 1997 provided a good deal of information about the retirement incomes system and the consequences of an ageing population for expenditure on superannuation. Unfortunately, only limited information was presented on the standard of living enjoyed by people now receiving New Zealand Superannuation and how it differs from the standard of living enjoyed by the same people prior to retirement, and how New Zealand's retirement income arrangements differ from those of other countries.[9] The July report

[9] Stephens *et al* (1995, p 101) noted that analysis of the Household Income and Expenditure Survey "showed that over 60 percent of the elderly underspend their income, 20 percent have expenditure and income roughly equal, and only 20 percent have expenditure greater than income". Other low-income groups have expenditure in excess of income. There are problems with the measurement both of income and expenditure in household economic surveys. However, it seems reasonable to conclude that most elderly people have sufficient income to meet their expenditure requirements. An official survey of the living standards of the elderly which supports this conclusion has recently been published (Fergusson *et al* (2001)).

concluded that a combination of government assistance and voluntary private provision for retirement will serve New Zealand's needs well. The December report presented a number of options (including an income-tested age benefit) for the better integration of public and private provision. The review group argued that time should now be taken to allow debate on the best way forward; the next review group should test progress towards consensus (Periodic Report Group, 1997b, p 58).

By contrast, the Investment Savings and Insurance Association of New Zealand (ISI) concluded that the Periodic Report Group may have taken too complacent a view about the soundness of New Zealand's retirement incomes provision (ISI, 1998). The ISI concluded (p 23) that "the status quo is likely to impose large and probably unacceptable costs on future generations" and that "we have some time, but the costs of delaying change can be very large". The ISI recommended policies to promote growth and returns on investment and savings, restrain increases in the size of government and reduce tax-funded pensions.

This paper attempts to make a further contribution to the debate about middle class welfare in a number of ways:

- Information is provided on how New Zealand's welfare state differs from that of some other countries. This information assists in an assessment of the consequences of continuing with New Zealand's existing policies or adopting an alternative to them.
- Up-to-date information is provided on who is paying for, and who benefits from, the welfare state. This information is needed for an assessment of the equity consequences of the welfare state.
- Information is also provided on the reductions in taxation potentially available from limiting the payment of benefits to those who also pay substantial amounts in taxes (churning). This information assists in understanding the consequences of alternative arrangements both for economic efficiency and for equity.

To make a persuasive case that New Zealanders should consider placing greater emphasis on non-government provision of welfare state services, it is I believe necessary to demonstrate that:

- there are alternative arrangements that would avoid many of the problems of the existing New Zealand welfare system and that should be seriously considered, for example because they are operating successfully elsewhere;
- there would be worthwhile gains to important groups, for example families with children, from doing so; and

- there are policies that are capable of being adopted in New Zealand that move at least partially in the desired direction.

The following chapters of this report attempt to satisfy the above requirements. The plan of the rest of the report is as follows:

- The arguments that have recently been made in favour of government provision of welfare state services are examined in Chapter 2 and I explain why I consider that these arguments are over-stated. These arguments appear to be influential in New Zealand policy circles and it is important to examine their limitations.
- The roles of government and the private sector in providing, financing and deciding on welfare state services in New Zealand are reviewed in Chapter 3. Although this chapter emphasises education, health and retirement incomes, it also takes a broader perspective on the New Zealand welfare state as a whole.
- Chapter 4 then compares the extent of government and private welfare effort in New Zealand and overseas countries.
- Information on who benefits from, and who pays for, the welfare state is presented in Chapter 5. This chapter examines whether the New Zealand welfare state is of particular benefit to older people and places a particularly heavy burden on families.
- Chapter 6 then discusses the scope that exists to reduce taxes by simultaneously reducing churning – the payment of welfare state benefits to households that also play large amounts in taxes.
- Although this report does not make detailed policy recommendations, some strategies available to New Zealand governments to move away from reliance on government provision of welfare state services are presented in Chapter 7. This chapter also discusses some important transitional issues.
- Finally, Chapter 8 offers some concluding comments. An important conclusion is that the public should be provided with accurate and timely information on who benefits from and who pays for the welfare state, and by how much.

2

An Assessment of the Arguments for Government Provision of Welfare State Services

INTRODUCTION

The events of the twentieth century demonstrated conclusively that economies work better when most goods and services are produced by private enterprise and sold in competitive markets. Many countries have either privatised or are considering the privatisation of formerly state-owned enterprises, and the introduction of competition into parts of the economy from which it was previously excluded. In particular, people rely on markets to produce many of the essentials of life, including food, shelter, clothing and power.

Producers in a competitive market economy must, if they are to be successful, be good at discovering what people want or need, and be able to meet these demands as cheaply as possible. Under the stimulus of competition there is a constant search to develop new and higher quality products better to meet people's needs, and to find cheaper ways to do so. The consequences of the absence of the competitive threat were only too apparent to those (like the present author) who spent some time in the formerly socialist economies of eastern Europe.

By contrast, health, education and retirement incomes are largely funded and provided by governments in New Zealand. Nevertheless, there is great diversity between countries in their arrangements for funding and providing education, health care and retirement incomes. Australia, for example, relies on private provision to a much greater extent than New Zealand.[10] New Zealand spent 5.5 percent of GDP on retirement benefits that are funded by taxpayers in 1997/98; Australia spent 3.2 percent of GDP. Private spending on retirement incomes is, as is discussed

[10] This includes, but is not limited to, a compulsory superannuation programme in which benefits are financed from earnings and vested in the contributor. However, because of its recent introduction, the compulsory superannuation programme has yet to make a major contribution to financing incomes in retirement.

in Chapter 4 of this report, much higher in Australia than in New Zealand. I am not aware of studies that compare the living standards of older people in the two countries. But it is far from clear what return, if any, New Zealand receives in terms of better social outcomes from its higher spending. The high taxation that is required to finance high levels of spending on retirement incomes has adverse economic and social consequences that are discussed throughout this report. Similar arguments arise for education and for health care.

The diversity of arrangements that exist in developed countries for providing retirement incomes, education and health care should warn us against accepting uncritically that the present arrangements in New Zealand are the only possible ones or the best that can be devised. There is a clear case on equity grounds for the government to be involved in financing education, health and retirement incomes. In addition, a number of arguments have been made to suggest that education, health care and retirement incomes are different from other goods and services, and that these differences justify on efficiency grounds a larger role for government in financing and providing these services than for other goods and services. As will be clear from the following discussion I think that these arguments are over-stated. Nevertheless, I think that it is worth reviewing them for two reasons. First, I have encountered them frequently in the New Zealand policy debate. Secondly, a review of the arguments may assist in obtaining better understanding of what part government should play in providing education, health care and retirement incomes, and what should be left to private effort.

According to some writers, such as Barr (1992, 1993) the development of government programmes is a predictable and reasonable response to the inability of markets to provide adequate health insurance, retirement incomes and educational services. Barr argues that government social programmes are not only the most effective way to reduce poverty and inequality, but also to protect living standards against serious and unexpected events (such as a major illness) and to enable people to reallocate consumption from working years to retirement. These latter two objectives need not involve redistribution from the rich to the poor. According to Barr (1992, p 795), the failure of the Thatcher and Reagan administrations to do more to roll back the frontiers of the welfare state demonstrated the essential soundness of government-funded welfare. The recent reversal in New Zealand of some policy measures to transfer responsibility for welfare state services to the private sector may be thought by some to confirm this view. In any event, the views expressed by Barr and similar writers seem to have struck a chord in some New

Zealand policy-making circles (see, for example, Scott and Cumming, 1998, p 105). The main purpose of this chapter, therefore, is to explain why I think that policy makers should not accept these arguments.

There is little doubt that markets sometimes fail in education, health care and retirement incomes. As a general comment, the market failure arguments seem strongest for health care and weakest for retirement incomes. Market failure does not, by itself, justify government intervention: one has first to show that government intervention produces benefits that exceed the costs. Moreover, the extent of government intervention that is justified by market failure arguments is sometimes less extensive than the government programmes that exist at present.

Market failure arguments are concerned with the inability of markets sometimes to provide services that people want and are prepared to pay for. In addition to this, it is frequently argued that government action should override people's preferences for welfare state services. It is sometimes argued that people do not always consider their long-term income needs and, hence, should be compelled to participate in compulsory retirement income arrangements. Parents may not sufficiently consider their children's interests, and, hence, should be compelled to send the children to school and subsidised to seek medical care for their children. Parents may also make poor decisions about which school their children should attend.

A further, and very important, group of arguments is about equity. The public requires, for fairness reasons, at least minimum standards of access to education, health and retirement incomes to be available. In fact, government welfare programmes can both advance and (through their financing) detract from equity objectives.

One possible response to arguments about market failure is to point to the large amounts of private money that are spent on welfare state services in countries (such as Australia) where the state is prepared to stand aside to some extent. This issue is discussed in Chapter 4. This chapter, however, reviews the market failure and equity arguments for government provision of welfare state services. It gives some reasons for caution in accepting these arguments. The chapter also attempts to isolate the comparative advantage of government and private effort in deciding on, financing and producing welfare state services in the expectation that this will assist in developing guidelines for future policy. In the final section I provide a summary of the main reasons for government involvement in education, health and retirement incomes and an assessment of the extent of government involvement that appears to be justified in each area.

MARKET FAILURE ARGUMENTS FOR GOVERNMENT PROVISION

The central idea comes from Arrow (1963). He argued as follows (p 947):

> I propose here the view that, when the market fails to achieve an optimal state, society will, to some extent, recognise the gap, and non-market social institutions will arise attempting to bridge it. Certainly, this process is not necessarily conscious; nor is it uniformly successful in approaching more closely to optimality when the entire range of consequences is considered … Certainly, the government, at least in its economic activities, is usually implicitly or explicitly held to function as an agency which substitutes for the market's failure. I am arguing here that in some circumstances other social institutions will step into the optimality gap, and that the medical care industry, with its variety of special institutions, some ancient, some modern, exemplifies this tendency.

Arrow wrote this at a time when the government financed only 25 percent of health expenditure in the United States. His central concern was to explain how various characteristics of the medical care market as it then existed (such as the absence of advertising and price competition, charity treatment, the dominance of non-profit hospitals, restrictions on entry to the medical profession and price discrimination) could be explained by uncertainty for customers about the consequences of the purchase of medical care (both financially and in terms of health outcomes) and the limitations of insurance markets.

I think it will be useful to give another example of a private sector response to market failure. It is argued that the private sector is unable to provide pensions that are indexed to inflation and that this is an example of market failure.[11] People will react to the unavailability of indexed pensions in a number of ways. They may, for example, invest in

---

[11] This problem will not arise, of course, if the price level remains stable as it has tended to do in recent years. The difficulties experienced by many people who planned to be self-sufficient in retirement were greatly increased during the high inflation years of the 1970s and 1980s. There now seems to be widespread agreement that price stability is an important objective for macroeconomic policy. Inability to maintain price stability is an example of government failure.

Although the availability of indexed pensions in retirement is highly desirable, it is not obvious that the inability of the market to provide enough of them to win the approval of outsiders is an example of market failure. Although people value the security that indexed pensions provide, many may not be willing to pay the costs of providing themselves with this level of security. Governments provide income in retirement mainly for equity rather than efficiency reasons.

property or other financial assets that tend to increase in value with inflation, or they may continue working long enough to accumulate a sum that they believe (rightly or wrongly) will be sufficient to last them through most eventualities. Each of these private sector responses has both advantages and disadvantages. But, once all the consequences are taken into account, it is far from obvious that the introduction of a government pension programme to address the market failure will produce net efficiency advantages that exceed those of the private sector responses to market failure.

More recently, market failure has come to be seen as a reason for government finance and provision of welfare state services. I outline the main arguments below and make brief comments on the implications of each.

Externalities

The term externalities refers to situations where actions by one person provide benefits or costs to another that are not compensated for through market exchange. Public health measures (such as vaccination) provide external benefits. Some education is needed for a person to function successfully in a democratic society. Education can help people to cooperate and communicate with each other and, hence, assist work in team settings. It may also help to reduce the need for spending on crime control.

Retirement income programmes have less obvious external effects. A failure to provide a minimum income in retirement may impose costs on others in terms of distress and social unrest. However, a minimum income provided by government will reduce the incentive for people to provide for retirement themselves. Similar arguments can be made for health insurance.

These externality arguments do not themselves support a very extensive role for government in providing education, health and retirement incomes. Externality arguments support public health programmes (for example, to control infectious diseases) and some compulsory education (for example, to achieve the minimum levels of literacy and numeracy required in modern society). The case on externality grounds for subsidisation of tertiary education is weak: most of the benefits are received only by the individual. This is particularly the case where, as sometimes happens, the highly qualified person subsequently decides to live in another country. There are arguments on externality grounds for government provision of a minimum income in retirement and ensuring the availability of medical care for those who could not otherwise afford it. But the humanitarian concern to avoid distress is the main reason for these programmes. It is not clear that any of the externality grounds require the government to fund or provide education or health insurance. Because of the limited extent of government involvement in education, health care and retirement incomes that can be justified by externality arguments, other arguments are needed to support the government programmes that actually exist.

Adverse selection

This is one of a number of information problems which, it is argued, makes private insurance of certain contingencies either impossible or grossly inefficient.

An adverse selection of risks can arise because insurance companies do not know as much about the risks they are insuring as the people seeking insurance. If insurers were perfectly informed about individual risks, they would be able to set correct premiums in all instances. If not, they will be required to set an average premium for a limited number of categories of risk and then decide to which category each insured risk should be assigned. In practice, however, the community rating that has been traditional for health insurance premiums seems to have had as much to do with equity considerations as with problems with information.

This 'pooling equilibrium' will be undermined in the presence of competition because those who can persuade insurers that they are low risk will tend to be offered a lower premium by entrants to the industry. Community rating tends to break down in the presence of competition. Those who are unable to persuade insurers that they are low risk will be faced with rising premiums (as insurers adjust premiums to take account of the now higher average risk) and may, in extreme cases, find that insurance is impossible to obtain. Even low-risk individuals may find, in the presence of information difficulties, that insurance does not meet their needs very well.

If insurers are unable to distinguish between good and bad risks, they are likely to offer policies that might be expected to be attractive to good risks and unattractive to bad risks. This limits the amount of insurance that can be offered to the good risks. Rothschild and Stiglitz (1976) argue that, in certain circumstances, both high- and low-risk groups might be better off it they were required to pool their risks. This may provide an argument for governments to require health insurance to be compulsory; it does not require governments to provide insurance themselves.[12]

The practical significance of the adverse selection problems can perhaps be overstated. In a competitive market many people would have every reason to seek to inform insurers about the degree of risk involved in insuring them, and would make considerable efforts so to inform insurers. Hartley and Kyle (1985, p 92) argue that, in a competitive market, good risk customers may invest too much in providing information to distinguish themselves from higher risk customers. Moreover, self-insurance (for example, by those who expect to incur only minor medical expenses) is often reasonable. Not all departures from universal health insurance are evidence of inefficiency. There may be substantial efficiency losses if such low-risk persons are required to participate in insurance programmes.

It is not clear that government action to address adverse selection problems will produce benefits that exceed the costs. In addition, over the longer term, a competitive market is more likely than a government programme to develop innovative approaches to address this issue. However, high-risk individuals are likely to be charged high premiums in a competitive market; this may well be considered undesirable on distributional grounds. Hartley and Kyle (1985, p 100) note that, rather than limiting differences in premiums through community rating and requiring universal coverage, it may be preferable for the government to subsidise the medical costs of high-risk individuals from general tax revenues.

Moral hazard

The term 'moral hazard' refers to the tendency for the cost of insurance to increase because of the change of behaviour in response to insurance. This issue arises in the health insurance area because of the limited ability of insurers to monitor the behaviour of patients and doctors. The availability of insurance to pay health care bills may discourage patients

[12] This argument suggests that there are circumstances in which people may be made better off if they are required to contribute to insurance. It does not establish that compulsory insurance programmes as they actually operate in practice represent an improvement over the absence of compulsory insurance. For example, insurance may be financed by taxation that has adverse consequences for economic efficiency. In reality, compulsory insurance is typically supported for equity reasons.

from taking preventative measures and may encourage them to seek expensive treatment should they fall ill. Doctors may be less careful in seeking value for money in treatment if they think that someone other than the patient is paying the bill. The response of insurers to these problems is to: limit the amount of insurance that is available (through payment by the patient of a deductible amount before the insurer pays the claim and by instituting co-insurance, payment by the insured of some of the costs of claims above the deductible amount); require higher premiums from frequent claimants or offer discounts for low or no claims; and institute controls over the treatment that is provided to insured people, for example requiring prior approval of the insurer for expensive but not urgent treatment. Insurance companies may decide to operate hospitals and employ doctors. None of these aspects of insurance is inefficient. The best practicable health insurance policy is a compromise between the desire of people to protect themselves against loss in the event of illness and their equally strong desire to minimise the costs of doing so.

Deductibles and co-payments may lead to worries about the affordability of health care. A government programme may provide services free of charge at the point of sale; private insurance will usually not do so. But it is far from clear that government programmes to enable services to be provided free of charge for everyone have benefits that exceed the costs. The moral hazard problems that affect private insurance also cause problems for government programmes; this is perhaps especially so if free services are provided. Moral hazard is likely to lead to rising caseload, rising costs and the introduction of rationing in government programmes.

The discussion of the information problems of insurance that has just been presented is not inconsistent with and does not invalidate the discussion of the information problems arising from government production that was presented in Chapter 1 of this report. The discussion of the problems of insurance (which derives from Arrow, 1963) emphasises the fact that insurers have less than perfect knowledge about the risks that they are insuring. This limits what insurance is able to achieve. By contrast, the discussion in Chapter 1 (which is ultimately due to Hayek: see Caldwell, 1997, for a recent discussion) emphasises the ability of markets to mobilise dispersed information about individual preferences and the costs of meeting them. By contrast, little information is available to government decision makers. The moral hazard problems of government programmes, the inefficiency of government production and the possibility of non-government responses to market failure all suggest that governments should be careful not to intervene in insurance markets any more than is necessary.

Uncertain events

The argument here is that there are some events for which the probability distribution is so uncertain that insurance cannot be offered. This risk of future inflation is said to be one of these.[13] Governments might accept some of the risks either by selling indexed bonds (which makes it possible for private insurers to offer indexed annuities) or by providing a pension programme (Barr, 1992, p 769). The first of these strategies would involve only a modest intervention by government. The second would result in a large-scale government programme that would replace private effort that would otherwise occur. As noted earlier in this chapter, the possibility of non-government responses to market failure is relevant here.

Barr argues that the choice between the two strategies should be made according to equity criteria. Equity issues are discussed later in this chapter. I would argue that the effect on non-government welfare provision (an efficiency issue) is also a relevant consideration.

Uninsurable events

It will be impossible to insure against some events because they are likely to occur and hence there is no possibility of pooling risk. The congenitally and chronically ill, for example, will find it hard to purchase health insurance.

Although it is impossible to insure against the risk of becoming chronically ill once illness has occurred, is usually possible to do so in advance. There is, for example, considerable interest in several countries in the development of private insurance to cover long-term care and home care services for people who are elderly. Concern that the government may in future confine subsidies for residential disability care to those who do not have private insurance is one factor that will limit the growth of such insurance. Income protection insurance policies pay benefits if the insured person cannot work because of accident or illness. Vital care policies pay lump sum benefits on diagnosis of certain serious illnesses.

---

13 Of course, governments can and should follow policies that avoid inflation. They do not always do so. Inflation is an example of government failure.

Non-government responses to market failure are also very relevant here. People make enormous efforts to care for the sick and those with disabilities; this is done mainly by close relatives. (These are largely welfare rather than health services.) Because no money changes hands, these activities are generally outside the scope of the national accounts. Nevertheless, some estimates have been made. For example, the Australian Institute of Health and Welfare (AIHW, 1999) has estimated that the bulk of welfare services in Australia – AU$24.8 billion out of a total expenditure of AU$36.0 billion in 1997/98 – were provided by households (p 9). This includes work done at home caring for people who are sick or who have a disability, caring for other people's children, caring for one's own sick children and other welfare services, and includes unpaid as well as paid work. Non-government community organisations provided services with a value of AU$8.2 billion and governments provided services with a value of AU$ 4.2 billion dollars. Government expenditure on welfare services is about AU$7.0 billion; some of this finances services that are delivered by community organisations. In addition, government helps families to care for relatives by providing income support. Government expenditure on welfare services was around two-thirds of all monetary expenditure on such services.

Some difficult issues arise in the provision of welfare services by governments. According to the Australian Institute of Health and Welfare (AIHW, 1997, p 90), "systems funded by government should not be seen as gearing up only when the private system fails. Of course, public systems must support those who have no other means of support, but their principal role should be to support private family roles". Much depends on the type of service that is being provided. The provision of respite care, for example, helps caregivers by enabling them to take a holiday. The provision of home care services by governments may substitute in some cases for care that would otherwise have been arranged privately.

In summary, it is reasonable to conclude that the government has a role, but not an exclusive or even a predominant one, in providing care for the congenitally and chronically ill. The task of government should be to help those people who cannot provide for their own care and cannot be helped in other ways. Moreover, governments need to ensure that their activities do not unduly displace care that would otherwise have been provided privately.

Customer information

Customers, it is frequently argued, may not have access to, or may have difficulty in evaluating, complex information about the consequences of purchasing welfare services. They may therefore not be capable of making informed choices. Medical knowledge in particular is undoubtedly very complex. A major illness is, from the individual's point of view, an unusual event with large and unpredictable consequences. People are, in practice, likely to be unusually dependent on recommendations made by professionals. As a consequence, markets in health care in particular, and to a lesser extent markets in education and retirement incomes, are not likely to work very well.

The difficulties in understanding medical knowledge can be overstated. The Australian philosopher, John Passmore, records the following incident in his memoirs (Passmore, 1997, pp 186–187):

> Another neighbour was a businessman named Hill. At one stage his wife was taken to hospital with pneumonia. She was given sulfa drugs but they did not work, so the doctors resigned themselves to the perilous climax. That was not enough for him. He made his way to the Public Library and read everything he could find on pneumonia, discovering in the process that a patient with anaemia might not respond to sulfa drugs. The doctors were not pleased when this layman demanded a blood test. Mrs Hill did have anaemia and recovered once it was treated. I have had little reason to complain of my doctors but have always, after that experience, checked their decisions. It showed me, too, that a man I could well have dismissed as uninteresting could have an admirable tenacity and independence.

This is no doubt exceptional. A more common response is for people to choose agents, whom they believe they can trust, to guide them through the complexities of medical knowledge. General practitioners may be able to guide their patients through the complexities posed by secondary and tertiary level services. (A second opinion may help a patient who is not confident about following the advice provided by a general practitioner or specialist.) This situation is perhaps analogous to the selection, by a person who has just received a large lump sum as the result of a bequest or leaving employment, of an adviser to guide them through the complexities of financial markets and the taxation system. The receipt of a large lump sum is an unusual event. No doubt some people are more successful in their choice of advisers than others, but most people seem to make sensible decisions about the use of lump sums.

In managed care systems, such as exist in the United States, the functions of health insurer and medical practitioner are combined. This enables the managed care organisation, at least in principle, to establish a good balance between providing the care that people want when they are ill and avoiding excessive costs. In a competitive market, health insurers have every reason to strike a good balance. It appears, then, that markets are capable of finding answers to customer information problems.

This discussion clarifies the issue of 'supplier induced demand' for health services. Because of customer ignorance it is argued that doctors can in effect determine their own incomes by deciding how many services to provide. However, such behaviour is unlikely to persist in competitive health insurance markets where there is pressure to achieve value for money.

A government monopoly insurer will face few competitive pressures. Although it will be under some pressure to control costs, it will have available to it a smaller amount of relevant information than is provided by a competitive market. It is likely that a competitive market will be more effective in controlling moral hazard and supplier-induced demand than a government monopoly insurer. Until the scheme was opened up to competition in 1998 the costs of New Zealand's monopoly accident compensation arrangements increased rapidly and appeared to be higher than the costs of comparable programmes in countries that permit competition in the provision of accident insurance (see Cox, 1998, pp 29–31, for further discussion). The generosity of benefits paid to persons who have suffered accidents has worsened moral hazard problems arising from New Zealand's accident compensation arrangements.

The difficulties that customers experience in evaluating medical information, including claims to expertise, have in the past been considered sufficient to justify the occupational licensing of health professionals by statutory boards. More recently the effectiveness of the current regime has been questioned, for example because it fails to guarantee continuing competence once registration is granted. Stewart and Stewart (1998) have argued for a deregulated approach in which a voluntary certification regime would be combined with a review of legislation to ensure that the liability for malpractice is borne by the practitioner and not the state.

The rising cost of private health insurance

The argument most frequently made against private markets in health is that the combination of decisions by doctors on treatment and reimbursement of expenses by third parties can easily result in high and rising prices for health insurance. For example, Scott and Cumming (1998, p 113) argue that "government control over premiums and purchasing allows lower expenditure overall, with little evidence of significantly reduced access to care, poorer quality of care or reduced health status".[14] These authors also note, however, that: "Lengthening waiting lists and times, a perceived excess number of beds and small hospitals, poor incentives for efficiency and cost-effectiveness, and poor co-ordination between secondary care and primary care sectors are well-recognised problems in New Zealand's health care policy history" (p 102). The United States, where total spending on health is around 14 percent of GDP, is frequently identified as an example of what is wrong with private health markets.

There are, however, a number of points that need to be made about this argument. First, there is a strong relationship between the amount a country spends on health and its per capita GDP. According to the Ministry of Health (1998, p 32), "this relationship suggests that on average every 10 percent increase in nominal per capita GDP is associated with around a 15 percent increase in per capita spending on health, thus resulting in a growing share of GDP for health spending". Around 40 percent of the difference between spending on health care in the United States and New Zealand can be attributed to the higher level of GDP in the United States. Despite the dominance of public sector finance and provision, spending on health care in New Zealand is not unusually low in comparison with that of other OECD countries once account is taken of New Zealand's relatively low GDP.

Secondly, the objective of health policy is to balance the benefits and costs of health care rather than to minimise expenditure. It is reasonable to expect that an ageing and increasingly prosperous community will

[14] Scott and Cumming point to "international evidence" that government purchasing of health care services leads to lower costs, more cost-effective purchasing and better access to health care for priority groups such as Maori and low-income people living in rural areas. They do not say what this evidence is. As noted below, it is far from clear that government purchasing of health care always leads to low health care expenditure. Much depends on the detailed structure of the government programmes.

choose to devote an increasing share of GDP to health care. Against the higher costs of the United States health care system must be set its greater diversity, responsiveness to needs and ability to innovate.

Thirdly, the United States system is in fact a mixed public/private system; almost half of health care costs are financed by public expenditure. Moreover, as emphasised by Danzon (1991), there are large tax subsidies to employment-based health care in the United States because employer contributions to health insurance are not included in the employee's taxable income. These subsidies have encouraged people to purchase a higher level of insurance than they would otherwise have chosen. The high level of insurance has given people every reason to select the highest quality of care, and little reason to search for low-priced policies that require people to finance the costs of minor illnesses. Fourthly, other countries with a relatively high proportion of private expenditure on health (including Korea and Australia) do not have an unusually high level of total spending on health once differences in GDP are taken into account. By contrast, Germany, which, like New Zealand, finances most health care costs from government expenditure, has relatively high spending on health.

In fact, the relationship between public finance and provision, and total spending on health care is complex and hard to untangle. The type of public (or private) health programme seems to matter. For example, in a cross-country study of OECD countries, Gerdtham, Jönsson, McFarlan and Oxley (1994) first allow for the effect of GDP on health care spending. They then find that, other things being equal, countries with integrated health services, such as New Zealand, have relatively high total health expenditure (pp 97–98). This is because these countries emphasise expensive hospital care. By contrast, countries that reimburse physicians using capitation fees and countries (also including New Zealand) that use general practitioners as gatekeepers to govern access to specialist care have lower health expenditure. Having allowed for all this, these authors then find "some evidence (although not particularly robust) that public sector provision of health services … is associated with lower overall health expenditure" (p 106).

The final point to be made about health expenditure in the United States is that it has stabilised at about 14 percent of GDP in recent years because both government and private payers have taken steps to manage actively the health care they are paying for. Ultimately, high and rising health care costs are generated by an environment in which third party payers (whether private or government) are important and are not under strong pressure to control costs. This situation is unlikely to persist either if there are strong competitive pressures or if the government institutes controls over spending.

Capital market failures

Although many tertiary students have low incomes while they are studying they can expect to enjoy fairly high incomes following graduation. Many students might wish to finance their education by borrowing against their future incomes. But lenders may be unwilling to make these loans (or lend only at high rates of interest) because of doubts about whether the loans would be repaid. This is likely to be a particular problem for students from low-income families who lack assets that can be offered as security and relatives willing to guarantee a loan. It is frequently argued that the government should control the fees paid by tertiary students and should provide student assistance or subsidised loans to enable such students to continue their studies.

A similar argument can arise for health insurance. Some people may find it hard to continue health insurance during temporary periods of low income. If they could borrow against their expected higher future incomes such people might well choose to continue their health insurance, but lenders are reluctant to provide such loans. Gaps in coverage may provide a justification for a government programme.

These arguments should not be accepted uncritically. The private sector has increasingly provided loans to students as the proportion of the costs of a tertiary education paid by students has increased. Other options for financing an education, such as part-time work, are available to students. Moreover, as noted by Fane (1985), it is one thing to point to an instance of market failure, but another to argue that governments can develop policies for which the benefits exceed the costs to address the market failure. It will be as difficult for a government agency as for a private lender to determine which students from a disadvantaged background can be expected to repay their loans. (Indeed, competition between private lenders is likely to encourage the development of expertise in the assessment of potential borrowers.) A subsidised loan programme may encourage over-investment in education by some students.

Another approach is for the government to guarantee repayment of loans for education or health insurance that are provided by the private sector. This would avoid the inefficiencies that result from a tax-financed government programme but take advantage of the comparative advantage that the government may have in enforcing repayment of loans through access to information provided by the taxation system. Such a policy would be preferable to tuition subsidies or subsidised loans. There are, however, moral hazard problems with government guarantees: guarantees reduce lenders' incentives to monitor loan quality. Nor would it be easy for the government to decide to whom a loan guarantee should be given.

OTHER ARGUMENTS FOR GOVERNMENT PROVISION

This section is concerned with arguments to suggest that governments should, in some circumstances, override individuals' own preferences so as to advance their interests better by requiring participation in compulsory government programmes. Equity arguments are considered in the next section.

Myopia

It is argued that, in the absence of government programmes, people will under-provide for retirement because they do not sufficiently consider their own needs far into the future. Participation in a government retirement income programme should therefore be required. Government programmes may take a number of forms including tax-financed benefits, mandatory social insurance that is funded on a pay-as-you-go basis, and compulsory superannuation, as in Australia, that is funded on an accumulation basis.

Although it sounds reasonable, I believe we should be cautious about accepting this argument. Fear of an impoverished old age may well be a powerful offsetting emotion. As will be argued in Chapter 4, people in countries with only modest government retirement income programmes do in fact make substantial efforts to save for retirement. In addition, many people will choose to work for a year or two longer if they have been unable to save enough by the time they had hoped to retire.

The extent to which government programmes provide security in retirement can easily be exaggerated. Governments, which must face electoral deadlines, are likely to be no less oriented to the short term than their electors. Although they are not subject to market risk, government programmes are subject to political risk. A government retirement income programme, such as New Zealand Superannuation is, essentially, a promise by the government to pay a benefit in the future. This promise may well be modified by a future government, particularly if the promise is costly to keep because of demographic and economic developments.

Although government retirement income and health care programmes appeared, in the light of favourable demography at the time of introduction, to be an attractive method of providing additional assistance to older people, they now seem less benign in the light of an ageing population. There is much to be said for minimising political risk in future by moving these programmes on to a basis that is clearly consistent with the efficiency and equity criteria that are set out in this report.

Agency issues

It has sometimes been argued that, because it has access to better information, the state may be able to make better decisions about education than at least some parents. This has been taken to justify state finance and provision of education. According to Barr (1993, p 349) there are two crucial questions to be answered. "First, do parents on average make better or worse decisions than the state about their children's education? Second, if the quality of parental choice varies systematically with socioeconomic status, how do we weigh the relative claims of middle class children and their parents to be allowed private choice, against those of children in lower socioeconomic groups, whose interests might be served by the state?"

In its post-election briefing, the Department of Social Welfare (DSW, 1996) drew attention to the existence of a group of disorganised and conflict-ridden families whose children were only too likely to experience poor education and health outcomes and a range of problems including child sexual abuse, early sexual activity, substance abuse, conduct disorders, mood disorders and anxiety disorders (see Cox, 1998, pp 71–75 for further discussion). The Department noted that sole parent and beneficiary families are disproportionately likely to enter into a cycle of disadvantage; moreover, "benefit dependence may erode self-confidence or skills, stigmatise recipients in a way that limits opportunities, or weaken family or community responsibility. It may unnecessarily lock people into long-term reliance on benefit (and consequent low income)" (DSW, 1996, p 17). It is far from clear how the state can best help those families do better but much more than choice of school is involved. Perhaps intensive care management can assist in helping these families. The Children, Young Persons, and Their Families Act 1989 includes provisions for the state to intervene when a child or young person is being, or likely to be, harmed, ill-treated, abused or seriously deprived. However, only a small proportion of families (perhaps 5 percent) are severely dysfunctional.

The argument that the government is better able than parents in general to choose schools for children is not persuasive. By comparison with parents, government decision makers have limited information about the needs of individual children and about the strengths and weaknesses of particular schools. Parents, including many with low incomes, are willing to pay large amounts for a private education in countries such as Australia where this option is widely available. Among Australian families with school-age children, 22 percent of those in the lowest income quintile and 14 percent of those in the second quintile had children attending an independent school. In comparison, 41 percent of families with children in the highest income quintile and 27 percent of all families with children had children attending an independent school in 1993/94. Average school fees for children attending non-government secondary schools were AU$64.21 a week for households in the lowest income quintile, AU$63.19 a week for households in the second quintile, AU$93.48 for households in the highest quintile, and AU$75.78 for all households (Australian Bureau of Statistics (ABS), 1997, p 73). In a competitive situation schools would have every reason to provide information on performance to parents. Moreover, a minority of knowledgeable parents can have a disproportionate influence on the performance of a school (see Harrison, 1998, for further discussion).

Before 2001, the New Zealand government allowed parents some opportunity to choose their children's school. These choices are now more limited. Schools are now required to provide a place for all children within their zone. Spare places can be allocated to other children through a ballot. Some schools do not seem to be preparing their students well for later life; see Chapter 1 for further discussion. Extending the range of choice by allowing a greater diversity of schools may assist in improving performance.

A further argument for government provision of assistance is that consultations by general practitioners should be provided free because parents may otherwise be deterred from seeking advice. It is not clear how effective this policy would be because some families may neglect their children's health even if consultations are provided free of charge. For most families, however, general practitioner consultations are a normal expense that can be budgeted for. These families will seek an adequate number of consultations even if a payment has to be made. A general subsidy to enable general practitioner consultations to be provided free of charge is likely to be an expensive method of encouraging families who would not otherwise do so to visit general practitioners; a targeted approach is likely to be more effective.

The role of government in providing welfare state services

According to Snower (1993) the state has a number of unique characteristics as an economic organisation. These include: universal membership, the power to require participation in government programmes and to pay taxes, a diversity of objectives and the inability to enter into commitments. Each of these characteristics is both a blessing and a curse. They enable the government to provide a minimum income for the poor and to require participation in education and health insurance. On the other hand, governments can easily use their powers to limit competition. Services may be unresponsive to public needs, unnecessarily costly and subject to inflexible legislative constraints. Wasteful, rent-seeking behaviour to encourage governments to expand or maintain programmes will be encouraged. These issues were discussed in Chapter 1 of this report.

Lindbeck (1995) argues that welfare benefits and the taxes that finance them are similar in their economic effects to tariffs. Both sets of measures reduce economic welfare by reducing the gains from trade.

It may be useful for governments to adopt a few, simple guidelines to assist them in deciding what their role in social policy will be. I suggest the following rules:

- Government assistance should be directed towards the poor. The middle class can look after themselves, especially if taxes are lower, and are better at doing so than the government.
- Welfare services should generally be provided privately. The case for government production is weak.
- Private finance should be used whenever possible. This may sometimes involve the use of loan guarantees, which are likely to be of particular benefit to the poor.

In addition to this, the government has the general function of establishing the conditions under which production and voluntary exchange of goods and services can take place. This includes providing for defence, a system of justice, and rules for the just acquisition and disposal of property.

EQUITY ARGUMENTS

My earlier report on the New Zealand benefits system concluded (Cox, 1998, p x) that the government must ensure that a safety net is provided for those who have no other income and cannot be helped in other ways. The questions to be addressed in this section are: what role the state should have to provide assistance over and above this minimum, whether the existing arrangements are necessary to achieve equity objectives, and whether they are successful.

There are a number of arguments.

1 New Zealanders will wish to ensure that everyone has an acceptable standard of education and access to health care. However, government finance and provision is unnecessary to achieve this objective. A requirement to undergo a minimum number of years of compulsory education and to purchase health insurance of a minimum standard would be sufficient. Indeed, competition is more likely than government monopoly to encourage the provision of high-quality education and health care. Compulsory purchase of education and health care could be combined with targeted subsidies to help those who would otherwise have difficulty in paying. Alternatively, deregulated health insurance could be combined with government subsidies for those with low incomes or high health costs.

2 People will wish to protect themselves from a severe drop in living standards if they become ill or retire. Private insurance and retirement income arrangements will usually be able to achieve this. As noted, private insurers in a competitive environment have a strong incentive to strike a good balance between minimising deductible amounts and co-insurance in the event of illness, and minimising premiums. Governments also need to ensure the provision of a safety net income.

3 People need to be able to reallocate consumption over their lifetimes. There are many options for private savings that enable people to do this. There is no reason to expect governments to know more about the right amount of consumption at each stage of life than individuals themselves. The case for government involvement beyond the provision of a safety net income during retirement does not seem strong.

4 The benefits received by people and the taxes paid by them should take into account differences in needs, for example the presence of dependent children (horizontal equity). It is undoubtedly true that

families with children benefit from government education and some health expenditure. However, once account is taken of both government benefits and their financing, the overall direction of redistribution is from larger households (including families with children) to smaller ones (including older single people and older couples). This issue is discussed in detail in Chapter 5. It is perhaps questionable whether the welfare state now promotes or detracts from horizontal equity.

5 The public will want whatever welfare state arrangements are introduced to be fair. Indeed, it is arguable that public policy is driven more by considerations of fairness than by economic efficiency (see, for example, Zajac, 1995). Perhaps it is easier to point to situations that are clearly unfair than to define carefully what fairness is. For example, great differences in the benefits given to broadly similar groups, gaps in coverage and sharp cut-offs for income-tested benefits (particularly at low-income levels) are often considered to be unfair.

There are aspects of present welfare state arrangements that are widely (but not universally) considered to be unfair. Many people think it is unfair that New Zealand Superannuation is paid to people who clearly do not need it. The intergenerational fairness of welfare state benefits is increasingly being questioned. For example, the introduction of National Superannuation in 1977 provided benefits to those who were then elderly that far exceeded the value of any notional contributions they may be thought to have made through taxation. These generous benefits have had to be paid for by successive generations of taxpayers and the balance is increasingly unfavourable.

There are important fairness issues that need to be considered in designing the transition to new arrangements. It would be unfair if all the burden of change was placed on one generation: for example, if the present working generation were to be asked to bear the burden of financing the existing generous level of retirement incomes as well as taking additional responsibility for financing their own retirement. Some reductions in retirement benefits may be needed to preserve equity during the transition. The transition to new arrangements involving greater use of private finance and provision of health and education is more likely to be considered fair if, as far as possible, it involves making additional choices available to New Zealanders. The issues of fairness is discussed in detail in Chapter 7 of this report.

6 The compulsory nature of legislation makes it possible to arrange redistribution to groups favoured by the government. Much of this redistribution (for example to those who benefit from small hospitals in country towns) will tend to be eroded in a more competitive environment unless the government chooses to provide explicit subsidies. It is probably true that concern about the redistributional effects (rather than the consequences for efficiency and equity in themselves) is the major impediment to changes in welfare state arrangements in New Zealand today (see Stewart, 1998, pp 124–126). Better information about the redistributional consequences of the welfare state may assist policy makers to think through these issues. Once again, it will be important to ensure that the burden of transition is seen to be fairly shared.

7 It is often argued that the welfare state promotes equality because government benefits are less unequally distributed than market incomes. The exact contribution of government benefits to reducing inequality is uncertain because market incomes would be less unequally distributed than they now are if government benefits were less extensive than they now are. However, it is also questionable whether reduction in inequality, as opposed to the alleviation of poverty or other forms of distress, is a reasonable objective for public policy. The ethical basis for the reduction in inequality in itself is not strong (see Buchanan and Hartley, 2000). Inequality in wages and other factor rewards is an inevitable consequence of specialisation and exchange, and is needed to guide factors of production into their highest valued uses. Inequality in factor rewards is not always closely related to inequality in household incomes: many low-income earners belong to high-income households.

8 Any assessment of equity should consider not only the availability of services to those with low incomes and the price they have to pay, but also the quality of the services that they receive. As discussed in Chapter 1, because of the ageing of the population New Zealand faces increasing costs of financing health care and retirement incomes in the years ahead. Concern to minimise taxes is increasingly likely to limit the type of treatment that the government is prepared to fund. These restrictions will be binding for the bulk of the population but will increasingly be circumvented by those who are sufficiently wealthy or well informed and who will be able to obtain access to the best that the state system has to offer or who will, if necessary, be able to arrange

treatment privately or overseas. If those with low incomes and high health costs are to continue to be provided with the highest quality of health care, a retreat by governments in New Zealand from funding health care for those who can do those things for themselves may well be necessary. (Of course, private as well as public health insurers will be affected by technological and demographic change. The main issue here, I think, is the best use of increasingly scarce tax dollars.)

SUMMARY

The main points arising from this chapter are as follows:

- This chapter has considered the main arguments made, on efficiency and equity grounds, to justify government finance and provision of welfare state services.
- Although markets for education, health care and retirement incomes sometimes fail, it is not obvious that government measures to address market failures have benefits that exceed the costs. Moreover, the provision of welfare state services by governments has adverse as well as favourable consequences for equity. Government finance and provision of welfare state services tend to preclude innovations that would otherwise arise from market interactions. On balance, a less extensive role for government than occurs at present appears to be justified.
- Some compulsory schooling is justified by the externalities arising from education. There are advantages from competition and non-government production of schooling; the government does not need to be involved in the production of education services to the extent it is at present. Capital market failures and agency arguments justify involvement of government in the financing of school education, especially for children from low-income families. Arguably, higher income families can contribute towards their children's education to a greater extent than they now do and they would be better able to do so if taxes were lower.
- The arguments for government involvement in the finance and production of tertiary education do not appear to be strong. The benefits of tertiary education accrue largely to those being educated. Many students will achieve employment and earn reasonable salaries following graduation. There are many alternatives available to students for financing their studies, including privately provided student loans

and part-time work. Targeted subsidies or loan guarantees can be used to overcome any difficulties experienced by students from low-income families. There would be advantages from greater competition between tertiary institutions.

- There is a clear case for government provision of public health measures. However, these typically account for a small part of government expenditure on health.
- There are good equity (but not efficiency) arguments for government subsidies for the cost of health care for persons with low incomes or high health costs, including the congenitally or chronically ill who cannot be helped in other ways. Other health expenditure can be financed out of pocket or through private health insurance. There does not seem to be a strong argument for government provision (as opposed to finance) of health services.
- Arrangements are required (though not necessarily provided by the government) to certify the qualifications of health professionals (and perhaps other professionals as well).
- The government should provide a safety net income for people during their retirement. However, the case for government involvement in retirement incomes beyond this appears to be weak.
- In extreme cases, the government is required to supervise dysfunctional families more intensively. Because of the danger of 'learned helplessness', governments should be careful not to intervene in this way unnecessarily.

The next two chapters examine the scope to move towards greater private production and finance of welfare state services. Chapter 3 investigates the extent of public and private effort in welfare services in New Zealand at present and Chapter 4 makes comparisons with other countries.

3

Welfare State Services in New Zealand

INTRODUCTION

The objective of this chapter is to estimate the amount of public and, as far as the available information permits, private expenditure on welfare state services in New Zealand. The core welfare state services of education, health and retirement incomes are emphasised here. However, to present a more complete picture and to enable comparisons to be made between countries, some information is also presented on peripheral welfare state areas, including personal social services, benefits and family tax credits.

Much expenditure, which in other countries would be classified under the heading 'personal social services', is in New Zealand under the administrative responsibility of the Ministries of Health and Education. The New Zealand Ministry of Health pays subsidies to nursing homes, providers of home help services and services for the intellectually handicapped, which are outside the current World Health Organisation (WHO) definition of health services because they do not involve the provision of services to people with an illness. Similarly, the Ministry of Education pays subsidies to playgroups and child care centres which, in many countries, would be the responsibility of a social welfare department and would be classified under welfare services. In its excellent publication on health expenditure trends in New Zealand (Ministry of Health, 2000) the Ministry of Health takes considerable care to distinguish between government spending on health and non-health items. This is discussed below. The situation is, however, less clear for education expenditure.

The first issue that needs to be considered is what exactly is meant by government and private activity in the provision of welfare services. In general, governments attempt to advance their objectives by regulating welfare state services, subsidising others to provide them or by providing them directly through government-owned entities. Decision making for a tightly regulated service is effectively shared between the customer, the service provider and the government. The customer decides whether to buy and the supplier decides whether to provide the service, but the terms on which exchange can take place are governed by regulation.

At one extreme, therefore, there is the purely public sector programme in which the government not only makes all the decisions and finances the service but also provides the service. Examples of purely public sector programmes include New Zealand Superannuation, education provided by state schools and treatment of patients in public hospitals. At the other extreme is the purely private service, such as much saving for retirement and much expenditure on housing, which arises from private decisions only.[15] In between is a whole range of mixed situations (see Burhardt, 1997, for further discussion).

Some of these combinations of government and private effort are worth considering a little further. First, some government financed and provided programmes, such as pharmaceutical benefits, require the beneficiary to make a contribution. Although the bulk of decision making here is undertaken by the public sector, the requirement for a contribution also introduces some private decision making. The individual may decide that the benefits expected from the service are not worth the time and personal expenditure that would be involved. Next, consider a contracted-out service (for example, a service provided by a general practitioner) for which a co-payment is charged. The element of private decision making is greater here because the service is provided competitively and the customer can choose which practitioner to see. But the public sector element in decision making is also important here. Finally, consider a government subsidy to a private provider, such as a private school. If the subsidy is small, most decisions about funding and service provision will be made by private sector decision makers. However, if the subsidy is large, the government can have a substantial influence on private sector decision making by attaching conditions to receipt of the subsidy.

The consequences of government programmes for efficiency and equity may depend as much on how intervention takes place as on the extent of intervention. Two issues are considered here.

First, a distinction can be drawn between benefits that are financed from taxation and those that depend on the amount of contributions made previously by the contributor or their family. Contributions, like taxes, give rise to disincentive effects. The disincentive effects will, however,

[15] This statement needs to be qualified because there is industry specific regulation of the insurance, savings and housing industries. Having said this, I think it is reasonable to describe the relevant decisions as being made, not by governments, but by individuals and firms.

be less to the extent that the benefits of programmes are valued by beneficiaries and benefits depend on contributions.

The second issue is that of 'public–private partnership'. As noted, a large territory exists between the extremes of government monopoly service and voluntary private arrangements in which outcomes are influenced, to a varying extent, by the preferences both of individuals and governments. Examples include:

- Compulsory retirement programmes in which contributors can choose what fund to belong to.
- Compulsory insurance programmes (including for health insurance and employee work injury) in which there is competition and choice of insurer.
- Subsidies for private education and school voucher programmes.

Although these partnership programmes are receiving increasing attention overseas they are as yet fairly undeveloped in New Zealand. They involve less dependence on tax revenue than New Zealand social policies. They may well provide profitable territory to explore to find better ways to achieve government social objectives. This issue is discussed further in Chapter 7.

Although the situation is complex, it does not seem too inaccurate in the New Zealand context to take the shares of public and private sector financing of an activity as an indication of the influence each sector exercises over decision making about the activity. This is, in any event, the approach that is adopted in this chapter.

EDUCATION

Description of the government programmes

Early childhood education is provided in a number of ways, including by kindergartens, playcentres, Te Kohanga Reo, child care centres and community playgroups. These are managed by kindergarten associations, local and national management groups, profit and non-profit making private organisations and by parent groups. Local government sometimes provides facilities on a subsidised basis.

A high proportion of young children take part in early childhood education of one form or another. According to the Ministry of Education (1998a, p 3): "12.6 percent of children aged under one year; 31.4 percent of children aged one to two years; 50.1 percent of children aged two to three years; 85.9 percent of children aged three to four years; and

96 percent of children aged four to five years took part in some form of early childhood education in 1997". These are high percentages by international standards (see OECD, 1998b, p 20); moreover, the number of children participating in early childhood education has grown rapidly in recent years. However, the New Zealand definition of early childhood education includes many activities that would not be so classified in other countries.

Early childhood education providers are required to be licensed to certify that they meet minimum standards. In addition, providers are required to have their charters approved by the Ministry of Education if they are to receive government funding. Both centre-based and home-based services can receive government funding. The amount of funding depends on the type of service, the quality standard met and the ages of the children enrolled. Targeted fee subsidies are available through the Department of Work and Income New Zealand for low-income families and those with special needs. The funding of formal early childhood education is therefore a responsibility shared between the parents and government. Parents meet a substantial share of the costs of provision either through fees or in-kind labour. As noted, some young children are educated informally at home.

Schooling is compulsory for all children from their sixth to sixteenth birthday. Most children start school at five years of age. Schooling is free at public schools from age five to age 19.

State schools and formerly private schools that have been integrated into the state system are funded by the government for their staffing and operational requirements. The amount of funding depends on the number of students, among other factors. Supplementary funding is available for students with special needs, rural students, senior secondary students and those schools that run Maori language programmes. Targeted funding is available to assist "state schools with a significant proportion of students from backgrounds that are likely to cause extreme barriers to achievement" (Ministry of Education, 1996, p 30). The government provides property for state schools and pays directly for major maintenance of such property. Minor maintenance is funded by each school board from its operating grant and other school funds. Integrated schools provide their own property, undertake major maintenance of it and charge attendance dues to meet the costs of doing so. Both state and integrated schools accept donations and undertake fund-raising. The Ministry of Education (1999a, pp 46–47) notes that, after allowing for expenses, local funds accounted for 5 percent of total revenue for state and integrated primary schools, and 7 percent of revenue for state and integrated secondary schools.[16] Government funding provided 90 percent and 85 percent of total revenue for primary and secondary schools, respectively.

A small proportion of students (24,461 out of a total of 727,396 in all schools in 1999) are enrolled in fee-paying private schools. According to the *New Zealand Official Yearbook 1998*, (Statistics New Zealand 1998b, p 207), funding support for private schools from government increased from the previous level of around 14 percent of the average total (operating) cost of state schooling to around 25 percent in 1997. By 1999 students in years 1 to 10 in private schools received a 30 percent subsidy and students in later years received a 40 percent subsidy.

In its post-election briefing, the Ministry of Education (1999b) noted that New Zealand has developed a greater diversity of schools in recent years. In addition to the 236 integrated Roman Catholic schools, there were by 1998 "seventy-six integrated schools representing diversity from Seventh Day Adventist schools, Muslim schools and Jewish schools, to Rudolf Steiner and Montessori schools". Other schools provide for those who wish to be educated in Maori language and culture, have disabilities or are unable to be educated in an ordinary school. The number of private schools seems also to have increased in recent years.

The Ministry of Education noted (page 22) that, for geographic and financial reasons, not all parents are in a good position to choose which schools their children should attend. However, parents are much more likely to be satisfied with the quality of the education that their children receive when the children attend the school that their parents prefer. The Ministry of Education recognised that a greater diversity of schools is required to meet the needs of students and is considering removing barriers to greater diversity and innovation. A review of the regulation of government schools was to be undertaken to provide legislation that focused on the responsibility of schools for promoting the educational achievement of their students and the responsibility of government in maintaining, supporting and intervening in a national schools system.

However, the present New Zealand government considers that children should generally be educated at their local state school and has reintroduced zoning. The review of regulation of government schools

[16] Gross of expenses, the percentages are 8 percent and 14 percent, respectively.

has now been suspended although some of the results of the review may be carried forward into new draft legislation.

Post-secondary education is provided in universities, polytechnics, colleges of education, wananga and private training establishments. The number of student places funded by the government has increased steadily in recent years. The Ministry of Education negotiates with universities, polytechnics and colleges of education over the number of equivalent, full-time student places to be funded. These arrangements are currently under review. Private training establishments may apply for government funding from a contestable pool under arrangements similar to those that apply for tertiary institutions (Ministry of Education, 1997b, p 17). The former government announced its intention in the 1998 budget to move progressively towards equal funding for universities, polytechnics and private training institutions. A student contribution towards the cost of tuition is required, which increased from 3 percent of tuition costs in 1990 to an average of about 20 percent in 1994. The contribution was then increased progressively to reach 25 percent by 2000.

Student allowances are available. For single students aged under 25 years the amount of the allowance depends on age, the income of the student's parents and whether the student lives at home. There is also a subsidised student loans scheme. Loans are funded by the government and income-related repayments are made through the tax system.

The Ministry of Education (1999b, p 33) observed that, when the government's budget is constrained, imposing limits on places may impose greater barriers to participation in tertiary education than an open enrolment policy with fees, loans and targeted living allowances. New Zealand has now achieved a high level of participation in tertiary education by the relevant age group.

The current government has undertaken fees stabilisation. In return for an increase in funding, institutions have agreed not to increase student fees.

Government and private expenditure

The preceding discussion suggests that a number of levels of education need to be distinguished: early childhood education, primary and secondary education and tertiary education. A number of sources of funding have been identified: government direct spending on educational institutions; government subsidies to educational institutions; government subsidies for student assistance; private payments to educational institutions; and other private payments (for example, assistance to students not living at home). Ideally, sufficient information would be available to determine how much of each type of expenditure is used to finance each level of education. The available information on public spending on education in 1997/98 is summarised in Table 3.1.[17]

Table 3.1: Government spending on education – 1997/98 actuals ($ million)

Early childhood education	277
Primary and Secondary Education	
• Primary schools	1,515
• Secondary schools	1,158
• Secondary allowances[(a)]	–
• School transport	94
• Special need support	211
• Total primary and secondary funding	2,978
Tertiary education	
• Tuition	1,183
• Other tertiary funding	258
• Tertiary student allowances	344
• Student loan provisions and write-offs	86
• Total tertiary funding	1,871
Departmental expenses	316
Other educational expenses	272
Total education expenses	5,714
Total education expenses as percent of GDP	5.8

Note: (a) Included in tertiary student allowances figures.

Source: Treasurer (1999), p 52.

Some estimates of the average government contribution towards the operating expenditure of various types of educational institutions are presented in Table 3.2. These estimates include direct spending on teachers' salaries and bulk grants, and also 'external' expenditure on central administration and support services such as the special education service and school transport. They exclude spending on capital expenditure (including major maintenance), student assistance and the GST. Estimated

[17] The data in Table 3.1 are for total expenses for education as defined in the budget papers. They include subsidies and transfer payments, operating expenses, personnel expenses, depreciation on assets, rental and leasing costs and finance costs. Goods and services tax on departmental inputs has been excluded. Expenditure with an educational component by departments other than the Ministry of Education is included. Those data may understate government subsidies to education because, for example, no account has been taken of the assistance provided to students through loans at below-market rates of interest.

Table 3.2: Government expenditure on education, 1997/98 – dollars per student, excluding GST[a] [b]

Early childhood education	
• Kindergarten and Te Kohanga Reo	2,406
• Other early childhood education	2,236
Schools	
• State or integrated schools, years 1 to 8	3,570
• State or integrated schools, years 9 to 15	4,648
• Independent Schools, years 1 to 8	1,370
• Independent Schools, years 9 to 15	1,837
Tertiary[c]	
• Universities	7,272
• Polytechnics	6,260
• Colleges of Education	6,508
• Wananga	5,994
Youth Training[d]	
• Eligible recipients	9,761

Notes:

(a) Vote: Education expenditure for the year ended 30 June, exclusive of GST, reconciled to Statistics New Zealand's Crown Accounts Analysis. Also excludes depreciation and the capital charge.

(b) Excludes expenditure on the training opportunities programme for persons aged over 18 years.

(c) Funding per bulk funded equivalent full-time student's (EFTS) place. Includes bulk and wholly research funding.

(d) Persons aged 15 to 17 years.

Source: Sutton (1999a); Treasury data.

expenditure on students in independent schools has been obtained by dividing the relevant government expenditure totals by the numbers of students as recorded in administrative data.

A number of interesting points arise from Table 3.2:

- Government subsidies for tertiary education per student exceed those for secondary education despite the increased share of the cost of tertiary education that students are now expected to pay. The data for tertiary education in Table 3.2 include, however, government spending on research in institutions of tertiary education.
- Government subsidies to independent schools are far lower than subsidies to state or integrated schools. Independent schools receive about 40 percent of the subsidy per student that state and integrated schools receive.

- State schools are more expensive on a per student basis than either integrated or independent schools. This is especially so because state schools benefit from land and buildings that are supplied free of charge, but integrated schools receive subsidised loans for such facilities. Private schools receive no capital subsidies.

The total subsidy provided to independent schools is, therefore, much lower than the subsidy provided to those schools that are prepared to accept integration into the state system. These arrangements are financially disadvantageous for the parents of students in private education, who are also required to contribute to financing state education through taxation, and help to explain why the level of private schooling in New Zealand is lower than in some other countries, such as Australia.

Total public spending on education was about 5.8 percent of GDP in 1997/98. Information on private spending on education is not very plentiful. Some information is available from the Statistics New Zealand *Household Economic Survey*. Expenditure on educational and tuitional services includes fees paid to schools and tertiary institutions, vocational courses, driving instruction, coaching for schoolwork and so on. It appears to exclude private donations to educational institutions. Expenditure on educational and tuitional services is estimated to have been $11.30 a week per household in 1996/97 and $12.40 a week on average per household in 1997/98 (Statistics New Zealand, 1998b, p 111). In addition, fees and other costs for nurseries, kindergartens, playcentres and pre-school institutions averaged $1.00 a week. After multiplying these amounts by the estimated number of households, I estimate that private spending on education is about 0.9 percent of GDP. An estimate of private expenditure on education of $868 million in 1997/98 (or 0.88 percent of GDP) has also been made on the basis of modelling using a detailed model, Taxmod, that has been developed by the Treasury (see Chapter 5, Fiscal Incidence in New Zealand for further details). Of this amount, $162 million was for private spending on primary and secondary education. All these estimates are derived from information from the *Household Economic Survey*.

Growth in government expenditure on education

Growth in government spending on education is described in Table 3.3. The data on spending on education include spending on the National

Library of New Zealand and the Education Review Office. The data are reported net of receipts and exclude cash flows associated with the government's lending minus repayments. The principal source of this cash flow in education is student loans. Data are for the year ended 31 March up to 1989 and the year ended 30 June from 1990. The data on GDP are for the year to 31 March up to 1990 and for the year to 30 June thereafter.[18]

Government spending on education grew rapidly as a share of GDP during the late 1980s. Spending peaked (as a share of GDP) in 1992 and then declined. However, spending has increased as a share of GDP in the most recent years. Indeed, spending was higher during the 1990s than over the period from 1975 to 1980. The decline in government education spending as a share of GDP after 1992 was due, in part, to the growing share of the costs of tertiary education that was being paid by students. Indeed the share of government education spending in GDP would have been even lower but for the demographic 'bulge' of students during the second half of the 1990s and increased participation in tertiary education from the late 1980s.

Table 3.3: Government spending on education as a proportion of GDP

Year	*Government spending on education ($ million)*	*Gross domestic product ($ million)*	*Government spending on education as a proportion of GDP (%)*
1975	527	9,754	5.4
1980	1,009	19,795	5.1
1985	1,729	39,346	4.4
1990	4,068	70,742	5.8
1991	4,401	72,137	6.1
1992	4,467	72,276	6.2
1993	4,539	74,579	6.1
1994	4,627	80,830	5.7
1995	4,803	86,556	5.5
1996	4,949	91,462	5.4
1997	5,353	95,149	5.6
1998	5,714	98,287	5.8
1999	5,889	99,058	5.9
2000	6,310	103,681	6.1

Source: Treasurer (1997), Ministry of Education (1998c); personal communication from the Treasury.

18 There are several breaks in this series. Although the data are not strictly comparable, the Treasury reports that it is reasonable to link the series.

HEALTH

Description of the government programmes

The New Zealand health system is complex. Services are provided, among others, by public and private hospitals, general practitioners and specialists, dentists and the owners of pathology and other diagnostic services. Funding is provided by government, by the private sector through out-of-pocket expenses and health insurance, and by not-for-profit organisations.

Until January 2001, a single agency, the Health Funding Authority (HFA), was responsible for managing the share of public sector funding of personal health and disability services. The HFA entered into service agreements with providers such as Hospital and Health Services.[19]

Currently, the Ministry of Health manages the public sector funding that provides for free in-patient and out-patient treatment in public hospitals (including psychiatric hospitals) and free dental care for those aged under 18 years. The government also subsidises visits to general practitioners, pharmaceuticals and other referral services. From 1 July 1997 the first subsidy was increased to enable general practitioners to provide free services for all children aged under six years. The Accident Compensation Corporation (ACC) pays for some stays in private and public hospitals, and general practitioner, physiotherapy and referral services for accident victims. Health sector teaching and research are largely funded by the Ministry of Education.

The public sector dominates the provision of funding of health care in New Zealand: 77 percent of total funding is from the public sector. In particular, the public sector provides around two-thirds of hospital beds. However, the share of private sector beds in the total has been increasing in recent years.

By comparison with other countries, the New Zealand health system emphasises the provision of in-patient care in hospitals. Total expenditure on in-patient care was 54.4 percent of total health expenditure in New Zealand in 1997, compared with 43.2 percent in Australia (1996), 44.5 percent in Canada (1996), 42.2 percent in the United Kingdom (1995), and 42.2 percent in the United States (1996). Public expenditure on in-patient care amounted to 48.5 percent of total health expenditure in New

---

[19] The HFA was dis-established in January 2001 and its funding responsibilities have been transferred to the Ministry of Health. The intention is that some of the functions of the HFA, including funding responsibilities, will be devolved to the recently formed District Health Boards.

Zealand in 1997, compared with 32 percent in Australia (1994), 39.5 percent in Canada (1994), 37.9 percent in the United Kingdom (1995) and 26 percent in the United States (1996). (These data are from *OECD Health Data, 1998*. I have estimated the figures for New Zealand from Ministry of Health, 1998, Appendix 6.) However, in-patient care has been falling as a proportion of total health expenditure in recent years.

The private sector makes, through out-of-pocket expenditure and health insurance, an important contribution to the financing of surgical and medical care in private hospitals, and to the financing of general practitioner, specialist and referral services. The private sector also makes a contribution towards the cost of pharmaceuticals (other than those provided through public hospitals).

By comparison with some other countries, New Zealanders pay privately for a high proportion of the costs of medical care outside hospitals. According to the *OECD Health Data, 1998*, New Zealanders met 53 percent of the costs of ambulatory medical care either out-of-pocket or through health insurance in 1996. The corresponding figures were 40 percent for Australia, 32 percent for Canada and 12 percent for the United Kingdom. By contrast, subsidies for pharmaceuticals are relatively generous in New Zealand: New Zealanders paid 36 percent of the costs of pharmaceuticals privately in 1996, compared with 50 percent in Australia, 57 percent in Canada, 75 percent in the United States and 10 percent in the United Kingdom. As a consequence, public expenditure on pharmaceutical goods is a higher proportion of total health expenditure in New Zealand than in Australia, Canada or the United States.

Despite high private payments for some types of health care, the proportion of the population in New Zealand that is deterred from seeking treatment because of cost is not great.[20] According to a survey undertaken by the Ministry of Health in 1992/93, 4 percent of the population said that they needed to see a general practitioner during the preceding four weeks but had not done so (15 percent of those who said they needed treatment). Two percent of the population reported an unmet need for other benefit services (mainly dental services) and 6 percent reported not having collected a prescription item during the previous three months. Cost was given as the reason for not seeking health care in slightly over half of all instances of non-treatment (Ministry of Health, 1995).

[20] It may be that those who are deterred are heavily concentrated within particular socioeconomic groups, including some income support recipients.

Private hospitals have developed to provide services not adequately supplied by public hospitals, including elective surgery and geriatric care. Private insurance has developed over the past 30 years to cover services provided in private hospitals and the out-of-pocket costs of using general practitioners and some other health services. Private insurance generally supplements, rather than replaces, government-provided health care. Although the amount of expenditure that is financed by health insurance has grown rapidly in recent years, the proportion of the population that is covered by medical insurance has fallen to 37 percent in 1996/97 (Ministry of Health, 2000, p 35). Health insurance in New Zealand is only lightly regulated by government.

The private hospital sector is an important provider of disability support services, such as long-term residential care. These are, however, mainly funded by government.

The private sector has made an important contribution to the costs of disability services through fees paid to public and private hospitals. The previous government's proposals to remove the income and asset tests for older people in long-stay public hospital care, and to remove the asset test for people in private hospital care, from 1 October 1998 would have reduced the importance of private finance. The cost of these initiatives was estimated to be $31 million in 1999/2000 (Treasurer, 1998, p 107). The current government has undertaken to remove asset testing for those assessed as needing long-stay geriatric care by the end of the present parliamentary term.

Beneficiaries of government expenditure on health care

As part of the project on the distributional implications of government expenditure, which is described in Chapters 5 and 6 of this report, estimates were made of average benefits from government health expenditure for various groups within the population. The source of this information is administrative data. These data distinguish people according to their age and sex, ethnic origin, whether or not they hold a Community Services Card, and whether or not they receive disability support services in institutions.[21] The data do not classify people according to their incomes.

---

21 The Community Services Card is available to beneficiaries and others who earn low incomes. It provides access to extra subsidies for medical and pharmaceutical services in addition to those that are available to the public in general.

Table 3.4: Average per capita government expenditure on health in 1997/98 for persons not living in institutions

	With CSC(a)		*Without CSC(a)*	
	Maori/Pacific Island Peoples *$*	*Other* *$*	*Maori/Pacific Island Peoples* *$*	*Other* *$*
Females aged under 1 year	10,998.60	11,823.24	10,693.65	11,518.29
Males aged under 1 year	11,504.31	11,917.63	11,199.36	11,612.68
Females aged 1 to 4 years	1,108.98	1,064.48	798.89	754.39
Males aged 1 to 4 years	1,242.29	1,191.91	932.20	881.82
Females aged 5 to 14 years	582.39	561.61	506.67	485.89
Males aged 5 to 14 years	658.68	631.26	582.96	555.54
Females aged 15 to 24 years	892.84	840.35	743.24	690.75
Males aged 15 to 24 years	658.25	617.85	599.64	559.24
Females aged 25 to 44 years	1,225.49	1,121.59	837.48	733.58
Males aged 25 to 44 years	943.16	841.49	738.93	637.66
Females aged 45 to 64 years	1,825.77	1,462.51	1,238.71	875.45
Males aged 45 to 64 years	1,647.50	1,300.48	1,220.98	873.96
Females aged 65 to 74 years	2,941.86	2,369.72	2,350.96	1,778.82
Males aged 65 to 74 years	3,270.30	2,625.82	2,814.80	2,170.32
Females aged 75 to 84 years	4,053.83	4,053.83	3,354.47	3,354.47
Males aged 75 to 84 years	4,792.25	4,792.25	4,106.59	4,106.59
Females aged 85 years and over	5,715.93	5,715.93	5,016.57	5,016.57
Males aged 85 years and over	7,715.56	7,175.56	6,489.90	6,489.90

Note: Some entries refer to very small populations; expenditure amounts shown here exclude GST;
(a) Community Services Card.

Source: Sutton (1999b); Treasury data; author's calculations.

Table 3.4 presents information about the non-institutional population. The heavy government expenditure associated with pregnancy and childbirth has been allocated to persons aged under one year. Expenditure is at a low level during later childhood and young adulthood, but begins to increase with age for persons who are middle-aged or older. Government expenditure on health care is very high for persons who are 75 years of age or older. Table 3.5 shows that government expenditure on health care is very high for persons receiving disability support services in institutions. This is especially true for older persons.

Production and finance

The Ministry of Health (2000, pp 56–63) publishes two versions of an extremely useful table that describes the flow of funds from funders to providers of health services. (One version of the table includes, and the other excludes, non-health items as defined by the WHO. The version including non-health items does not contain, however, some important

Table 3.5: Average government expenditure on health care in 1997/98 for persons receiving disability support services in institutions

	Maori $	*Pacific Island Peoples* $	*Other* $
Females aged 1 to 4 years	71.7	71.7	71.7
Males aged 1 to 4 years	–	–	–
Females aged 5 to 14 years	703.7	657.7	657.7
Males aged 5 to 14 years	913.9	834.1	834.1
Females aged 15 to 24 years	2,501.4	1,854.3	1,854.3
Males aged 15 to 24 years	5,201.5	3,840.7	3,840.7
Females aged 25 to 44 years	3,783.4	2,022.8	2,022.8
Males aged 25 to 44 years	6,109.2	3507.0	3507.0
Females aged 45 to 64 years	2,941.7	1,842.5	1,842.5
Males aged 45 to 64 years	1,956.5	2,386.3	2,386.3
Females aged 65 to 74 years	5,489.2	3,185.5	3,185.5
Males aged 65 to 74 years	6,970.2	4,223.9	4,223.9
Females aged 75 to 84 years	23,806.0	12,459.0	12,459.0
Males aged 75 to 84 years	12,787.0	10,002.0	10,002.0
Females aged 85 years and over	28,820.0	32,491.0	32,491.0
Males aged 85 years and over	15,239.0	19,750.0	19,750.0

Note: Some entries relate to very small populations; expenditure amounts shown here exclude GST.

Source: Sutton (1999b); author's calculations. See Table 3.4.

private expenditure, such as the contributions made by older people towards the cost of long-stay public hospital and private hospital care – see Ministry of Health, 2000, p 34. This is because the institutionalised population is outside the scope of Statistics New Zealand's *Household Economic Survey*, which is the main source of information on private expenditure on medical goods and health services.)

The flow of funds between funders and providers of services is summarised in Table 3.6. The table indicates that public spending on health was over 6 percent of GDP in 1997/98 and that private spending on health was about 1.8 percent of GDP.[22] The table confirms that the

22 The main source for these estimates is Statistics New Zealand's 1998 *Household Economic Survey*. This was supplemented by surveys of health insurers and of the not-for-profit sector (Ministry of Health, 2000, pp 34–37). Separate estimates were made for out-of-pocket expenses and expenditure that is financed by health insurers (see Table 3.7). The estimates of out-of-pocket expenses are based on the *Household Economic Survey*. They exclude spending by persons living in institutions (such as hotels, hospitals, retirement homes, army camps and prisons) and by businesses, clubs and overseas visitors. The estimates of out-of-pocket expenditure are, therefore, understated.

Table 3.6: Health expenditure in New Zealand (non-health items excluded) by funding source and expenditure category – year ended June 1998 ($000)

	Source of funding				
Expenditure category	*Total public funding*[a]	*Out-of-pocket*	*Private health insurance*	*Not-for-profit organisations*	*Total all sources*
Public hospitals					
• Personal Health	2,611,549	2,558	389	0	2,614,496
• Disability Support	363,686	0	0	0	363,686
Private Hospitals					
• Personal health	140,053	163,981	300,091	605	604,730
• Disability support	453,961	0	0	13,185	467,146
Community care					
• GP services	417,190	226,536	72,503	10	716,239
• Medicaments	856,715	311,109	44,617	0	1,212,441
• Dental	35,288	258,853	3,809	0	297,950
• Other personalhealth[b]	550,264	340,080	89,058	1,438	980,841
• Disability support	245,342	0	403	6,233	251,978
Public health services	201,998	0	0	4,298	206,296
Teaching and research	204,015	2,287	0	1,286	207,588
Other[c]	102,938	0	0	0	102,938
Total	6,182,999	1,305,405	510,870	27,055	8,026,329
Percentage share of total expenditure	77.0	16.3	6.4	0.3	100.0
Total as percent of GDP	6.3	1.3	0.5	–	8.2

Notes: Entries may not sum due to rounding. Expenditure is inclusive of GST.
(a) Includes funding from Vote: Health, Crown Health Enterprise (CHE) deficit financing, ACC and other government agencies, including the Ministry of Education.
(b) Includes midwife and specialist services, referral services, other services.
(c) Includes Ministry of Health costs and other payments.

Source: Ministry of Health (2000).

government funds most public hospital services, private hospital disability services, public health and training and research. Private funding is important for personal care services in private hospitals, general practitioner services, dental services, other personal health services and, to a lesser extent, pharmaceuticals.

The table confirms that most government subsidies go to hospitals. Public and private hospitals received 45 percent of all government expenditure for personal health and a further 13 percent for disability support services. Fourteen percent of government expenditure was paid to subsidise medicaments and 9 percent was used to subsidise other personal health services. The remaining 19 percent of government expenditure was used to subsidise a wide range of activities; general practitioner services received 7 percent of all government subsidies.

Trends in health spending

Table 3.7 gives the total amounts of health care spending funded by the government and the main private sector funders over the period from 1980 to 1999. These data show that public spending on health was maintained at around 6 percent of GDP until 1996/97. Public expenditure on health has, however, grown as a share of GDP over the period from 1996/97.

Public spending on health seems to have grown rapidly as a share of GDP prior to 1980.

Private expenditure on health has doubled as a share of GDP in recent years from 0.8 percent of GDP in 1979/80 to 1.8 percent of GDP in 1998/99. As a consequence, the share of health expenditure that is funded by the government has declined from 88 percent in 1979/80 to 77 percent in 1998/99. However, the amount of private spending on health seems to have stabilised as a proportion of GDP in the most recent years.

Table 3.7: Health expenditure trends in New Zealand (non-health items excluded) as percent of GDP

Year ended June	*Total public funding (%)*	*Out-of-pocket expenses (%)*	*Health insurance (%)*	*Total all sources (%)*
1980	6.2	0.7	0.1	7.0
1984	5.6	0.7	0.1	6.4
1990	5.9	1.0	0.2	7.1
1991	6.2	1.0	0.3	7.5
1992	6.1	1.2	0.4	7.7
1993	5.9	1.4	0.4	7.7
1994	5.9	1.2	0.5	7.6
1995	5.9	1.2	0.5	7.6
1996	5.8	1.2	0.5	7.6
1997	6.0	1.2	0.5	7.8
1998	6.3	1.3	0.5	8.2
1999	6.5	1.3	0.5	8.4

Source: Ministry of Health (2000).

RETIREMENT INCOMES

In this section I first describe New Zealand's government programmes for providing incomes in retirement. The growth in government spending on retirement incomes benefits and the reasons for growth are then described. Finally, I discuss the extent of private provision of retirement incomes.

Government programmes

New Zealand Superannuation is a taxable retirement incomes payment payable free of income or assets tests to persons who have reached the qualifying age and satisfy a residential qualification. No contributions are required. A tax surcharge that was previously levied on recipients of New Zealand Superannuation with higher incomes was abolished from 1 April, 1998. The qualifying age was raised from 60 to 61 years on 1 April, 1992 and progressively increased to reach 65 years by April 2001.

A veteran's pension is payable to an ex-service person who has served in a war or emergency, has reached the age of eligibility for New Zealand Superannuation and qualifies for a war disablement pension of at least 70 percent. In addition, veterans' pensions are paid to ex-service persons who have served in a war or emergency, are below the qualifying age for New Zealand Superannuation and are unable to work for a substantial period because of a disability from any cause. Veteran's pensions are payable at the same rates as New Zealand Superannuation, are taxable but are not income tested. War disability pensions are payable in addition to veteran's pensions to compensate for disability due to, or aggravated by, war service.

The transitional retirement benefit was introduced to assist people who are adversely affected by the increase in the age of eligibility for New Zealand Superannuation. The age of eligibility for a transitional retirement benefit is being increased in line with the age of eligibility for New Zealand Superannuation and the benefit will cease to exist from April 2004. This benefit is payable at a rate lower than New Zealand Superannuation and is income tested.

Recipients of the above benefits may also qualify for additional assistance through the benefits system, including accommodation supplement, disability allowance, special benefit, special needs grants and benefits advances.

Government expenditure

Government expenditure on retirement incomes is presented and compared with GDP in Table 3.8. It can be seen from the table that government expenditure on retirement pensions and benefits remained at around 3 percent of GDP up to the mid-1970s. There was, however,

Table 3.8: Expenditure[a] on retirement benefits – 1940–1999

Year[b]	*New Zealand Superannuation[c] $m*	*Veteran's pensions[d] $m*	*Transitional retirement benefit[e] $m*	*Total retirement benefits $m*	*GDP[f] $m*	*Total retirement benefits as percent of GDP %*
1940	13.036			13.036	514	2.54
1945	18.974			18.974	772	2.46
1950	34.627			34.627	1,063	3.26
1955	58.002			58.002	1,869	3.10
1960	85.502			85.502	2,472	3.46
1965	110.314			110.314	3,591	3.07
1970	155.822			155.822	4,954	3.15
1975	365.803			365.803	9,754	3.75
1980	1,334.115			1,334.115	19,795	6.74
1985	2,743.512			2,743.512	39,346	6.97
1990	4,774.676	1.147		4,775.823	70,742	6.75
1991	5,173.859	29.639		5,203.498	72,137	7.21
1992	5,514.482	33.331		5,547.813	72,276	7.68
1993	5,315.899	47.793		5,363.692	74,578	7.19
1994	5,102.551	54.660	17.385	5,174.596	80,830	6.40
1995	5,083.119	57.217	79.167	5,219.503	86,556	6.03
1996	5,170.506	60.612	90.698	5,321.816	91,461	5.82
1997	5,239.129	64.963	96.819	5,400.911	95,151	5.68
1998	5,259.198	70.414	99.875	5,429.487	98,287	5.52
1999	5,221.501	72.645	105.412	5,399.558	99,058	5.45

Notes:

(a) Expenditure on benefits since 1975 includes supplements and emergency payments. From 1995 onwards, benefit advances and other recoverable grants are excluded. Excludes "departmental expenditure" involved in making these payments.

(b) Prior to 1990 expenditure is for years ended 31 March, from 1990 onwards expenditure is for years ended 30 June.

(c) To 1975, superannuation and age benefits combined. Includes expenditure on rest-home subsidy prior to 1994. Also includes payments of income tax on New Zealand Superannuation.

(d) War pensions are not included in this table.

(e) Introduced on 1 April 1994.

(f) From 1991 New Zealand Institute of Economic Research actuals for years ending 31 March. Up to 1990, Statistics New Zealand (1996) estimates for years ending 31 March.

Source: Ministry of Social Policy (2000).

some tendency for government expenditure to increase over time. Following the introduction of National Superannuation, government expenditure increased rapidly and reached 7.7 percent of GDP in 1992. Expenditure has since fallen mainly because of the increase in the age of eligibility for superannuation. However, government expenditure on retirement benefits remains in excess of 5 percent of GDP. These expenditure figures do not take account of the tax surcharge on higher income superannuitants, a revenue measure, which provided a partial offset to expenditure on superannuation. The Treasurer (1997, p 91) estimated that the abolition of the superannuation surcharge would cost $300 million (about 0.3 percent of GDP) by 1999/2000.

It is useful to look behind the total expenditure figures and examine separately the growth in the number of beneficiaries and growth in the average benefit. Table 3.9 provides some information on the number of beneficiaries and compares the number of beneficiaries with the number

Table 3.9: Number of beneficiaries, retirement benefits – 1940–1999

Year	*New Zealand Superannuation*	*Veteran's pensions*	*Transitional retirement benefit*	*Total*	*Population aged 60 years and over*[(a)]	*Beneficiaries percent of population aged 60 and over (%)*
1940	93,262			93,262	193,200	48.27
1945	158,332			158,332	226,540	69.89
1950	186,512			186,512	253,380	73.61
1955	199,236			199,236	270,943	73.53
1960	204,036			204,036	290,860	70.15
1965	214,659			214,659	316,776	67.76
1970	241,772			241,772	350,868	68.91
1975	289,348			289,348	396,993	72.88
1980	405,834			405,834	418,270	97.03
1985	459,813			459,813	466,850	98.49
1990	495,500	3,428		498,928	503,050	99.18
1991	506,047	3,130		509,177	535,840	95.02
1992	504,561	5,393		509,954	542,840	93.94
1993	488,893	6,117		495,010	549,040	90.16
1994	477,400	6,278	6,540	490,218	555,050	88.32
1995	469,239	6,380	7,327	482,946	560,340	86.18
1996	459,901	6,559	7,870	474,330	567,070	83.64
1997	452,759	7,045	7,958	467,762	572,300	81.73
1998	447,487	7,131	8,152	462,770	580,350	79.37
1999	440,054	7,159	8,689	455,902	589,690	77.31

Note: (a) Data are for the resident population after 1991; up to 1990 data are for the de facto population. Figures for years earlier than 1980 are interpolated from census estimates.

Source: Ministry of Social Policy (2000); Statistics New Zealand (2001).

of people aged over 60 years. Although the age of eligibility for retirement benefits has varied, it is useful to compare the change in numbers with an age group that is defined consistently. This enables the effect of changes in eligibility conditions to be assessed. In reading this table it should be noted that where each spouse qualifies for superannuation, both are counted as beneficiaries. Non-qualifying spouses are excluded from the tables.

The table shows that around 70 percent of the population aged 60 years and over received a retirement benefit during the period from 1945 to 1975. Following the introduction of National Superannuation, the proportion receiving benefits increased rapidly to over 90 percent. By 1990, almost 100 percent of the population aged 60 years and over received a benefit. The proportion receiving retirement benefits fell from 1991 and is now below 80 percent.

A measure of the average benefit can be obtained by dividing expenditure on retirement benefits by the number of beneficiaries. These estimates are not a true measure of a rate and can be influenced by changes in the composition of recipients, changes in the availability and use of additional payments, and accounting changes such as the exclusion of rest-home subsidies from expenditure on superannuation from 1995. Nevertheless, they provide some indication of changes in benefits. Estimates of average benefits are shown in Table 3.10. The effect of adjustment of benefits by the Consumers Price Index is also shown.

Benefits grew steadily in real terms from 1945 up to about 1970. There was then a period of rapid growth in benefits between 1970 and 1980. After 1980 benefits have been roughly constant in real terms. Retirement benefits in New Zealand are high in relation to earnings for low-income earners in comparison with other OECD countries, but less so for medium- to high-income earners (see Chapter 4, Comparisons with OECD Countries).

Further evidence on benefit rates is presented in Table 3.11. This table examines one particular rate – that payable to a couple – over the period from 1970 to 2000. The general picture presented in this table is similar to the one shown in Table 3.7. Retirement income benefit rates grew rapidly over the period from 1970 to the mid-1980s, both in real terms and in relation to earnings. But benefit rates have tended to fall since the mid-1980s. By 2000 net benefit rates in relation to after-tax average earnings had returned to the levels of the early 1970s. It will be argued in Chapter 4, however, that government retirement benefits in New Zealand are higher in relation to average earnings than in many other countries.

Table 3.10: Average retirement benefits in nominal and real terms – 1940–1999

Year	*Average benefits*[(a)] *($ a year)*	*Consumers Price Index*[(b)]	*Adjusted average benefits*[(c)] *($ a year)*
1940	139.78	34	4,514
1945	119.84	39	3,374
1950	185.66	45	4,530
1955	291.12	62	5,156
1960	419.05	73	6,303
1965	513.90	82	6,881
1970	644.50	101	7,007
1975	1,264.23	158	8,786
1980	3,287.34	312	11,569
1985	5,966.58	548	11,955
1990	9,572.17	919	11,437
1991	10,219.43	964	11,640
1992	10,879.05	973	12,277
1993	10,835.52	986	12,066
1994	10,555.71	1,000	11,590
1995	10,807.63	1,028	11,544
1996	11,219.65	1,058	11,644
1997	11,546.28	1,085	11,685
1998	11,732.58	1,094	11,775
1999	11,843.68	1,098	11,844

Notes:

(a) For derivation, see Tables 3.8 and 3.9, and text.

(b) All groups: December 1993 = 1,000. See Statistics New Zealand (1998b), p 546. The figure shown here is for the December quarter of the preceding year.

(c) 1998/99 prices.

Source: Ministry of Social Policy (2000); Statistics New Zealand (1998b).

Private provision of retirement incomes

Not much seems to have been written on how much private provision for retirement occurs in New Zealand. Despite the importance that the Periodic Report Group and the Investment Savings and Insurance Association gave to policy about private provision, they did not provide estimates of how much of it now occurs. Obtaining better information about the extent of private provision for retirement is, in my view, a priority for any future inquiry into retirement incomes.

The interim report of the Periodic Report Group (1997a, p 160) provides estimates of personal net wealth. Persons aged 60 to 69 had a mean net worth of $140,000 and those aged 70 years and over had a mean

Table 3.11: Retirement benefit rates for a couple

Real retirement income support benefits[(a)]		*Net benefits as percentage of net average wage*[(b)]		
Date	*$ a week*	*Date*	*%*	
Apr 70	285.27			
Jul 71	300.97			
Feb 72	294.82	Jul 72	68.45[(c)]	(64.93)[(c)]
Jun 73	338.18	Aug 73	69.15	(64.78)
Feb 74	333.19	Jul 74	69.67	(64.43)
Jan 75	348.40	Jul 75	69.62	(63.89)
Jan 76	347.77	Jul 76	72.65	(65.41)
Feb 77	369.59	Aug 77	78.28	
Feb 78	359.86	Aug 78	89.45	
Feb 79	413.51	Feb 80	80.01	
Feb 80	382.55	Apr 80	80.97	
Feb 81	367.50	Mar 81	80.00	
Mar 82	399.44	Mar 82	80.00	
Mar 83	379.79	Mar 83	80.00	
Sept 84	381.80	Mar 84	80.00	
Mar 85	369.71	Mar 85	84.78	
Apr 86	374.88	Apr 86	89.54	
Apr 87	363.88	Apr 87	80.00	
Apr 88	364.76	Apr 88	80.48	
Apr 89	364.75	Apr 89	76.45	
Apr 90	359.57	Apr 90	75.87	
Apr 91	342.94	Apr 91	72.18	
Apr 92	339.61	Apr 92	69.64	
Apr 93	339.60	Apr 93	69.58	
Apr 94	339.60	Apr 94	70.29	
Apr 95	339.60	Apr 95	70.17	
Apr 96	339.60	Apr 96	71.79	
Apr 97	339.71	Apr 97	68.59	
Apr 98	339.71	Apr 98	67.45	
Apr 99	340.22	Apr 99	64.48	
Apr 2000	360.80	Apr 2000	67.73	

Notes:

(a) Benefits rates are the net (that is, after tax) rates payable to a couple. Between 1970 and 1976, the rates are those of the age benefit, an income-tested but non-taxable benefit available from age 60. During this period, universal superannuation was payable at the same rate to persons aged 65 years and over, but was taxable. A special tax rebate applied. A person could receive superannuation or the age benefit, but not both. Rates are adjusted by the Consumers Price Index and are reported in December quarter 2000 prices.

(b) Net benefits for a couple divided by aggregate ordinary time earnings for full-time and half part-time employees, adjusted for tax. New series from April 1996.

(c) Rates shown are for the age benefit up to July 1976. Rates for universal superannuation are shown in brackets. National Superannuation was introduced in February 1977.

Source: K Goodger (1997); author's calculations.

net worth of about $120,000. This compares with mean wealth of $90,000 for the population as a whole. This figure includes the wealth people have accumulated as individuals, with spouses or other family members and with business partners. About 73 percent of net worth is in houses. However, wealth is not the same thing as income.

Statistics New Zealand's *Household Economic Survey* for the year ended March 1998 indicates that investment income averaged $89 a week in households where the head was aged 65 years and over (Statistics New Zealand, 1999c, p 6). If we add to this an estimate of $24 a week per household for employed income and multiply by the estimated number of households, where the head was aged 63 years and over, then it can be estimated that income self-provided by older New Zealanders is about 1.4 percent of GDP.

An alternative, and preferable, estimate of the extent of self-provision of income during retirement is available from the *Household Expenditure Survey* using the Treasury's model, Taxmod. (A brief description of Taxmod is provided in Chapter 5, Fiscal Incidence in New Zealand, of this report.) Taxmod weights each sample record to provide results that are intended to be representative of the entire New Zealand population. As a consequence of the weighting process, Taxmod provides good estimates of the transfers received by households and the taxes paid by them.

The alternative estimate using Taxmod is that market (that is, non-government) income for households in which the member with the highest market income was aged over 65 was $1,895 million or 1.9 percent of GDP in 1997/98. This estimate is used here and also in Chapter 4 to make comparisons with Australia.[23]

However, it could be argued that it is an under-estimate because it excludes market income earned by retired households in which the member with the highest market income is aged under 65 years.

In principle, to this should be added the imputed rent that older people obtain from the ownership of dwellings. This is a non-cash item, but it is clearly important in maintaining adequate standards of living during

[23] Both estimates are based on the same *Household Economic Survey* data. The difference in estimates may be due to the different weights used. The weights used by Statistics New Zealand aim to make the sample represent the estimated population resident in private dwellings; the Taxmod weights aim to make the sample represent the entire population. The difference is likely to be most marked for the elderly population, because they are the most likely to be living in non-private dwellings. It is believed, through comparison with tax data, that the *Household Economic Survey* greatly under-reports investment income, which may also lead to an under-estimation of the private incomes of retired people. On the whole, the Taxmod estimates seem to be preferable.

retirement. Imputed rent in total is 7.2 percent of GDP (Statistics New Zealand, 1998b, p 375). Imputed rent can be attributed to households, for example using the methodology employed by Statistics New Zealand (1990), to estimate subsidies for households renting accommodation from government housing authorities at below-market rents. However, I have not made such estimates for this study.

PERSONAL SOCIAL SERVICES AND HOUSING

These are two areas of public spending that are given less emphasis in New Zealand than public spending on education, health and retirement incomes. Government spending on personal social services and health is important elsewhere, especially in northern European countries.

The Australian Institute of Health and Welfare (1999, p 8) proposes that government spending on welfare services should be divided into:

- family and child welfare services (for example, youth services and child protection);
- aged care services other than medical services (for example, accommodation for the aged);
- services for people with a disability (for example, residential institutions and support in a private house);
- other welfare services (for example, supported accommodation and services for prisoners and migrants).

Assistance to families in difficulties is now provided by the Department of Child, Youth and Family. The main agency in 1997/98 was the Children, Young Persons, and Their Families Service which provided youth justice services and care and protection services for children and young people. A second agency, the New Zealand Community Funding Agency, funded preventive services and services to families at risk. Through its programmes for families in need of support and community welfare, the Agency made grants of $67 million in 1997/98. To this should be added the relevant running costs of the Department of Social Welfare. These were $192 million in 1996/97, mainly for the Children, Young Persons, and Their Families Service.

Children's services are provided in New Zealand by the Ministry of Education and were discussed earlier in the chapter. Total government spending on early childhood education including kindergartens was $277 million in 1997/98. This amounts to $74 per head of population a year. Total spending on family and child services (including spending on families in crisis) was $142 per person a year.

Services for the aged and people with disabilities are mainly provided through the Ministry of Health. Health expenditure was discussed earlier in the chapter. Non-health expenditure by the Ministry of Health includes expenditure on rest-home subsidies, home help and provider subsidies, expenditure on community funding agencies, the IHC subsidy and Salvation Army subsidies. Non-health expenditure by the Ministry of Health was $431 million, or 0.45 percent of GDP, in 1997/98 (Ministry of Health, 1999, Appendices 5 and 6). To this should be added expenditure on employment-related disability services which is the responsibility of the Department of Work and Income. This was $36 million in 1997/98. The total amount spent on non-health services for the aged and people with disabilities equals $124 for each member of the population (or 0.48 percent of GDP).

The total amount spent on services to families and services to the aged and people with disabilities was around $726 million in 1997/98. This was 0.7 percent of GDP. (To avoid double counting, this estimate excludes spending on children's services.)

The amount of non-government contributions to the provision of welfare services has not been estimated in New Zealand but is likely to be very significant. As noted, individuals and families pay some of the costs of child care services, long-stay hospital and rest-home care and so on. In addition, families make an enormous contribution in looking after one another's children and caring for relatives with disabilities. In addition to this, Datson (1998, p 86) estimates that the value of production by the voluntary sector for national accounting purposes was $771 million in 1993 and that the true value (presumably reflecting, among other things, the value of donated services) was closer to $2 billion. But much of the activity of the voluntary sector is outside welfare services.

A comparison is provided in Table 3.12 of spending on welfare services as a percentage of GDP in New Zealand with corresponding figures for some other countries. Amounts are shown separately for families and children, and services for the aged and people with disabilities. For comparability, the New Zealand data for family and children's services include relevant expenditure by the Ministry of Education. The data for countries other than New Zealand are taken from the OECD social expenditure database and are for 1995, the latest year for which data are generally available. These data should be used with considerable caution: users of (and contributors to) the database should note that the figures given here for New Zealand are clearly incorrect. I have, therefore, used my own estimates.

It is clear that some of the variation between countries is due to differences in classification. To the extent that the data can be trusted, they indicate that New Zealand is in the middle range of countries in terms of government expenditure on welfare services.

To date, therefore, New Zealand has avoided the situation noted by Rosen (1996, p 734): "in Sweden a large fraction of women take care of the children of women who work in the public sector to care for the parents of the women who are looking after their children". Moreover (p 737):

> … child care subsidies result in a kind of cross-hauling. They cause women to work outside the home, but there is a sense in which all of it is work in someone else's home, not in the material goods sector. Women work to help each other for taxable pay needed to help finance the subsidies that induce them to work for each other in the first place, rather than remain working for themselves, 'self-employed', in the tax-sheltered, non-market household sector. Cross-hauling is the practical route that limits the efficient amount of child-care subsidies, and reveals why large subsidies are inefficient.

Although large child care subsidies may assist in promoting important values such as the economic independence of women, this comes at a high cost in terms of too large a government sector in the economy and too small a market and non-market private sector. Total output would have been higher if household services had been paid for privately and transacted through the market.

Table 3.12: Government welfare services expenditure in 1995 as a percentage of GDP

Country	*Family and children*	*Aged and disabled*
Australia[(a)]	0.21	0.35
Denmark	2.10	3.04
Finland	1.41	1.69
France	0.37	0.78
Germany	0.78	0.58
Japan	0.22	0.27
Netherlands	0.36	0.67
New Zealand[(b)]	0.55	0.48
Spain	0.08	0.26
Sweden	1.72	3.37
United Kingdom	0.48	0.68
United States of America	0.31	0.05

Notes:

(a) Commonwealth government plus State and Territory government expenditure.

(b) Data for New Zealand are for 1997/98. For comparability, data on children's services are included under "family and children".

Source: OECD (1999); author's calculation.

Before 2000, government direct spending on housing and community development was very small in New Zealand (about $45 million a year, including running costs). Most accommodation assistance was provided through the benefits system. Subsidised rents for state homes were reintroduced in 2000. By contrast, private expenditure on housing is very important – *Household Expenditure Survey* data indicate that private expenditure on housing (including repayment of housing loans, a capital item, and property maintenance) was $128.10 a week in 1997/98 (Statistics New Zealand, 1998d, Table 1). Private expenditure on housing can thus be estimated to be 7.9 percent of GDP.[24] The standard of housing in New Zealand is generally considered to be excellent, although overcrowding and sub-standard housing still exist.[25] This indicates, incidentally, that the private provision of welfare state services is, at least sometimes, successful.

BENEFITS AND TAX CREDITS

In my previous report for the New Zealand Business Roundtable (Cox, 1998, p 12), I estimated that total expenditure on income-tested benefits (including taxes on income-tested benefits) was $6,137 million in 1996/97. This total includes supplements such as the Accommodation Supplement. From this total should be deducted $532 million in family support paid to beneficiary families (which is accounted for separately). The relevant total is $5,605 million or 5.9 percent of GDP. This amount includes $844 million (0.89 percent of GDP) for periodic income maintenance payments by the then Accident Rehabilitation and Compensation Insurance Corporation (ARCIC).

I have updated this estimate to 1997/98 using the same methodology. Making an estimate of $670 million for tax on income-tested benefits and

---

24 Private expenditure on housing as reported in the *Household Economic Survey* for the year ended March 1998 is reduced by the large negative item for net capital outlay on housing. This is defined as the difference between expenditure on housing purchase and receipts from the sale of housing.

25 The Ministry of Social Policy (1999, p 63) reports that, using the Canadian national occupancy standard, Statistics New Zealand has calculated that 6 percent of New Zealand households required additional space to accommodate their occupants in 1996. Crowding is concentrated in certain areas (for example, Auckland) and tends to occur among renters, Maori and Pacific Islands people, and people on low incomes. Housing may also be unsatisfactory because it is too cold or damp.

$840 million for periodic income maintenance from ARCIC, I estimate that total expenditure on income-tested benefits was $6,038 million, or 6.1 percent of GDP, in 1997/98. This excludes expenditure in family support.

Family tax credits (such as family support and the Independent Family Tax Credit) are not a direct welfare state expenditure but reduce families' tax bills. The Treasury notes (1999, p 50) that $995 million was paid in family tax credits (including the Independent Family Tax Credit) in 1997/98. This was 1.04 percent of GDP in that year.

SUMMARY

The main points made in this chapter are as follows:

- The government is the main provider and funder of education in New Zealand. Government expenditure on education has been around 6 percent of GDP in recent years.
- Students are now required to finance a higher proportion of the cost of a tertiary education than before the 1990s.
- The high level of subsidies provided for state schools and integrated schools has discouraged the development of a genuinely independent private schools sector in New Zealand.
- The public sector dominates the funding of health care in New Zealand. By comparison with other countries, the New Zealand health system emphasises the provision of in-patient care in hospitals. Public hospitals are funded almost entirely by the government. However, the private sector makes an important contribution to the cost of pharmaceuticals and especially medical care that is provided outside hospitals.
- Public funding of health care has exceeded 6 percent of GDP in recent years. Private expenditure on health care has increased from 0.8 percent of GDP in 1979/80 to 1.8 percent of GDP in 1998/99. As a consequence, the share of health expenditure that is funded by the government has declined from 88 percent in 1979/80 to 77 percent in 1998/99.
- Public expenditure on retirement benefits has declined as a percentage of GDP from 7.7 percent in 1991/92 to 5.5 percent in 1998/99. The decline is largely due to the increase in the age of eligibility for superannuation. Self-provision of retirement income (other than

imputed rent from owner-occupied housing) is around 2 percent of gross domestic product.

- New Zealand appears to be in the middle range of countries in terms of government spending on personal social services. Direct government spending on housing and community development is low.

The estimates of the extent of government and private effort in the provision of welfare state services that have been made in this chapter are brought together in Table 3.13.

Table 3.13: Government and private funding of welfare state services 1997/98 – percent of GDP

	Public sector funding	*Private sector funding*
Education	5.8	0.9
Health	6.3	1.8
Retirement incomes	5.5	1.9 (excludes imputed rent)
Personal social services	0.7	Probably large
Housing		7.9
Benefits[(a)]	6.1	
Tax credits	1.0	
Total	25.4	

Note (a) Includes Accommodation Supplement.

Government spending on education, health and retirement incomes was 18 percent of GDP in 1980, 18.5 percent of GDP in 1990 and 17.9 percent of GDP in 1999.

These estimates exclude government finance costs, a proportion of which should arguably be allocated to the welfare state spending programmes.

4

A Comparative Perspective on the New Zealand Welfare State

INTRODUCTION

This chapter compares the New Zealand welfare state with that of other countries. There are two main reasons for undertaking such a comparison. The first reason is to obtain a better understanding of the arrangements that exist in countries where average incomes are similar to those in New Zealand.

This is useful information for those who wish to consider the strengths and weaknesses of alternatives to the present arrangements for education, health and retirement incomes.

The second reason is to gain an insight into the issues of substitutability – the extent to which private effort would be reduced if the government spends more on health, education and welfare, and the extent to which private effort would increase if the government decided to do less. This is a complex issue.

It is useful to consider retirement incomes first. There are a number of ways in which older people can support themselves. These include: income from work, government benefits, the imputed rent obtained from owner-occupied property, returns from other investments, use of past savings and transfers from relatives. If retirement incomes provided by government are generous it is likely that most private transfers will be from older to younger people.

Most people would agree that the various components of the income package are, at least to some extent, alternatives. The historical record supports this view. An important reason for introducing age pensions at the end of the nineteenth century was to make retirement possible for those who were older by the standards of the time. The historian David Thomson has noted that the sources of income for older people were much more varied a century ago than today, when government benefits predominate. He concludes (1998, page 8): "In short, welfare support for the aged a century ago was probably more mixed and variable than is the case now, with no one source standing out well above the others. There was no standard or base income assured, such as by universal superannuation: individuals put together 'income packages', in the modern jargon of welfare studies, from a range of sources. Those packages varied greatly in size and nature between rich and poor, men and women, 'old-old' and 'young-old', perhaps town and country, and we must be wary of talking of 'the colonial pattern'. A fundamental misconception of our own times should be borne in mind: we assert much too readily that our present societies are more complex and diverse than were the worlds of our forebears, when in truth our communities and private lives now are much more standardised, regular and predictable than what went before. Support for the elderly is an instance of this".

In particular, the amount of work undertaken by older people has decreased as government pension programmes have become more generous and available earlier. Börsch-Supan and Reil-Held (1998), note the coincidence of generous public pensions and high bequests in France and Germany. This suggests that substitutability between public pensions and bequests is quite important. If so, generous pensions that are being financed by distorting taxes are being offset, at least partially, by bequests.[26] It is quite possible that the net redistribution is quite small in relation to the costs that are involved.

Although there is a good deal of general evidence to indicate that the various components of the retirement income packages can substitute for each other, there is not much evidence to suggest by how much and how quickly one component of the package will increase in response to a reduction in another. This requires longitudinal income data that are generally not widely available and are expensive to collect. Moreover, because pension programmes have tended to become more generous, at least until recently, there is not much experience on which to base an assessment of the private sector response to reductions of benefit levels and increases in the age of eligibility for pensions.

The best available evidence comes from comparing how people in different countries provide for income in retirement. If substitutability is important, one might expect to find that total retirement income is roughly the same (as a percentage of GDP) in all countries, but that incomes from

[26] However, not everyone who pays high taxes is likely to receive a substantial bequest. Recent immigrants pay taxes but they are less likely than other people to inherit wealth from New Zealanders. Moreover, some people who die around the age of eligibility for New Zealand Superannuation pay high taxes during their working lives but may not receive substantial amounts in government cash benefits. In these and other ways government-mandated pension programmes result in hidden redistribution that is not always equitable.

work and property are higher in countries where governments pay benefits that are fairly low in relation to average incomes and payable subject to restrictive conditions. The evidence to be presented in this chapter suggests that this is indeed the case.

Nevertheless, interpretation of this evidence is complex. Comparing how retirement income is provided in different countries is most relevant to an assessment of substitutability in the longer term. It says nothing about how quickly private effort will respond to changed incentives. There are cultural differences between countries and it may be that some countries may generate more self-provision than others. Governments in countries that are not very successful in generating self-provision for retirement may have introduced extensive pension programmes to avoid poverty in old age. If all this is true, the observed relationship between the generosity of government pensions and self-provision of retirement incomes does not tell us very much about how the private sector would respond, even in the longer term, to smaller government pensions. A study of the consequences of reductions in benefits, where these have occurred, may help to provide additional information on these points.

The issue of substitutability arises also for health and education. As the evidence to be presented in this chapter will show, there is a great diversity in the ways in which countries finance and provide health care and education. Some countries rely heavily on private health insurance and out-of-pocket expenses to finance health care. User contributions are important in financing education, especially higher education. Although there are exceptions, it seems generally to be true that private contributions to health and education are lower (as a share of GDP) in those countries where government contributions are greater. This suggests that substitutability is important. On the other hand, some countries (such as the United States, New Zealand and Australia) place considerable emphasis on private funding to finance a mass system of higher education, which is not compulsory. These countries have high levels of both government and private funding of higher education. This example does not contradict the importance of substitutability in higher education because in the absence of private funding, government spending would have needed to be even greater to finance the high level of participation in higher education.

Despite these difficulties, it is reasonable to accept that substitutability between the public and private sectors in the provision of welfare state services is important and can occur quickly. I will report on three illustrations of this point here: see Börsch-Supan and Reil-Held (1998) for some further examples.

The first example is the comparison between New Zealand and Australia. These two countries have very different welfare states: Australia has more private provision of education, health and retirement incomes and less government provision than New Zealand. Although there are undoubtedly cultural differences between the two countries it is hard to believe that they are so significant as to account for very different welfare states. Both countries have avoided European-style social insurance and both have emphasised home ownership, which some have considered to be an alternative means of providing security in old age (Castles, 1985). Historical circumstance is an important reason for the different development of the Australian and New Zealand welfare states. One thinks, for example, of the decision in Australia, because of the outbreak of the Second World War, not to enact a system of social insurance that had actually been legislated for; the constitutional difficulties faced by the post-war Labor government when it attempted to introduce a national health service; and the unwillingness of the Catholic church to accept integration of its schools into the state school system. By contrast, New Zealand has had a comprehensive welfare state since the late 1930s. It is worth recalling that there was a period during the second half of the 1970s and early 1980s when Australia paid a pension free of income or assets test to persons aged over 70 years. Australia, it seems to me, provides a particularly relevant example to New Zealanders of what the consequences of less extensive welfare state provision by governments might be.

New Zealand's experience in raising the age of eligibility for superannuation provides a second example of the ease with which private welfare effort can sometimes substitute for government welfare effort. The age of eligibility for superannuation has been gradually increased since April 1992. Those no longer eligible for superannuation may be eligible for less generous benefits such as unemployment benefit, but the result has been substantially less generous benefits on average for 60- to 64-year-olds. The employment of 60- to 64-year-olds has increased from 24 percent of the population in this age group in the year ending March 1992 to 39 percent in the year ending March 1997 and to 42 percent in the year ending March 2000. Full-time employment of persons aged from 60 to 64 years increased from 23,000 in the March quarter 1992 to 52,500 in the December quarter 2000 (Statistics New Zealand, 1995; private communication for 2000 figure). This is a reversal of the previous trend for the employment of 60- to 64-year-olds to decline and is a most impressive achievement for a group that is often thought to be hard to employ.[27] It is reasonable to suggest that the change in trend is due in large part to the policy changes since April 1992.

The reaction of the private sector to the reduced government funding of health care in New Zealand during the early 1990s provides a third illustration of the ease that private welfare activity can substitute for government activity. Private expenditure on health increased rapidly between 1990 and 1993. In particular, expenditure financed by private health insurance increased very rapidly as people adjusted to find the right balance between spending on health insurance and out-of-pocket health expenses. More recently health insurance has run into difficulties, perhaps because of government policy changes that have made insurance less attractive.[28] The rapid growth of private spending on post-secondary education in recent years provides a further example of the ease with which private spending can substitute for government spending.

To say that the private sector can often respond quickly to changes in public sector provision does not mean that there is no role at all for government provision of welfare state services. Some people, particularly those with low incomes, have difficulty in providing for their own retirement and health care needs. Even in countries such as Australia where government expenditure on pensions is low, the lowest income groups rely almost entirely on government benefits in retirement. (In fact, government pensions in Australia and New Zealand are, by the standards of other countries, generous in relation to previous earnings for low-income earners.) People in these low-income groups might well choose to work and save more if government pensions were less extensive. However, there are always some people who cannot work, make unsuccessful investment decisions or who fail to make good use of the opportunities that are available to them. Governments should therefore provide a safety net income during retirement. In doing so, they need to strike a balance between alleviating hardship and reducing the moral hazard of discouraging individual responsibility.

---

[27] The reduction in the employment of people aged over 60 years that followed the introduction of National Superannuation in 1977 illustrates further that the labour force behaviour of older people responds to the generosity of government pension programmes.

[28] There have been large increases in the cost of health insurance in part because the policies have not been well designed to control costs. For example, the largest health insurer, Southern Cross, has only recently introduced bonuses for contributors who do not make claims.

An important question is what weight should be placed on the various components of the retirement income package. At present, New Zealand emphasises government benefits and housing at the expense of income from earnings and savings. It is useful to think of this question in terms of risk. Earnings and investments are subject to market risks, including the risk of inflation and recession. Government pension (and health care) programmes are subject to demographic and political risks. In particular, persons of working age in New Zealand face the risk that government benefits will be less generous than they now expect when they come to retire. Investments can be diversified on a world-wide basis; many New Zealand superannuation fund managers have chosen to invest a large proportion of the funds offshore. By contrast, government programmes expose retired people to the risks associated with the performance of the New Zealand economy in addition to demographic and political risks. This is because the benefits that can be provided to retired people are limited by the total production of goods and services by the New Zealand economy.

Greater diversity in the sources of retirement incomes is a reasonable response to these risks; a reduction in tax rates perhaps financed through a reduction in government spending on welfare programmes would encourage work and savings. However, greater reliance on private sources will also result in greater variation in retirement incomes. This emphasises the importance of government provision of a safety net income in retirement. More stringent benefits would need to be phased in, moreover, to prevent unfairness to existing recipients. Similar arguments can be made in favour of a diversity of funding sources for health care and education.

The plan of the rest of this chapter is as follows. The next section presents a detailed comparison of the role of private and government effort in providing welfare state services in New Zealand and Australia. The third section, Comparisons with OECD Countries, presents comparisons over a wider range of countries using OECD databases. As we will note, there are problems of accuracy and comparability arising from these databases but nevertheless some broad impressions can be drawn. Still further comparisons encompassing New Zealand, Australia, OECD and East Asian countries are presented in the fourth section, Comparisons with East Asian Countries. Finally, some conclusions are drawn.

COMPARISONS WITH AUSTRALIA

Like New Zealand, Australia has a fully developed welfare state. However, government spending on welfare state programmes is substantially less in Australia than in New Zealand. The question arises as to whether private sector spending on welfare is greater in Australia than in New Zealand to compensate for generally less available government welfare state programmes. Table 4.1 presents estimates of government and (where available) private spending on welfare state services in the two countries.

The derivation of the New Zealand data was described in Chapter 3. The figure for private spending on welfare is an under-estimate because there is important private sector funding of emergency relief and social services (Datson, 1998). I have not been able to estimate the extent of this.[29]

Table 4.1: The welfare state in New Zealand and Australia – percent of GDP

	New Zealand (1997/98)			*Australia (1997/98)*[(a)]		
	Government spending	*Private spending*	*Total*	*Government spending*	*Private spending*	*Total*
Education	5.8	0.9	6.7	4.5	1.5	6.0
Health	6.3	1.8	8.1	5.7	2.6	8.3
Retirement incomes	5.5	1.9	7.4	3.2	3.0	6.2
Benefits[(b)]	6.1		6.1	4.8		4.8
Personal social services	0.7		0.7	1.2	0.7	1.9
Housing		7.9	7.9	0.5	10.4	10.9
Tax credits[(c)]	1.0		1.0			
Total	25.4	12.5	37.9	19.9	18.2	38.1

Notes:

(a) See text for date of some estimates for Australia.

(b) Includes periodic payments from ACC for New Zealand (0.9 percent of GDP) but not the corresponding payments for Australia.

(c) Included in benefits total for Australia.

Source: Estimates for New Zealand: see Chapter 3. Estimates for Australia: see text.

[29] As described in Chapter 3, the New Zealand data are derived from household surveys and relate to household expenditure. They, therefore, exclude private expenditure on welfare services other than household expenditure. The Australian data, which are described below, are somewhat more inclusive in scope. Table 4.1 may, therefore, tend to understate the extent of New Zealand's private welfare effort relative to Australia's. The statements made in the text hold true, however, even if only household expenditure is considered for Australia.

The Australian data have been developed to be as consistent as possible with the New Zealand data. The main source for government spending is the Australian Bureau of Statistics publication on government financial estimates for 1997/98 (ABS, 1998a). This gives (page 22) general government expenditure by all Australian governments and universities, classified by purpose. Expenditure figures were extracted for education, health, social security, welfare, and housing and community development. The figure for 'social security' was divided into separate amounts for retirement incomes and benefits using information for 1997/98 from the Commonwealth government's budget papers (Commonwealth of Australia, 1998). Expenditure on social security by Australian governments other than the Commonwealth government is unimportant. Spending on service pensions and veterans' disability pensions was included. The government expenditure totals were then compared with estimates of GDP taken from the National Accounts (ABS, 1998b, p 50).

Australia's *Household Expenditure Survey* for 1998/99, the latest available, was the starting point for estimates of private expenditure on welfare state services. Estimates of expenditure on detailed items are set out in ABS (2000c). Average expenditure by all households was obtained for: total current housing costs, mortgage payments, other capital housing costs; total medical care and health expenses; education fees; housekeeping and cleaning services and household services not elsewhere classified, and child care services. These estimates were then multiplied by the estimated number of households in the population to obtain estimates of private expenditure on housing, education, health and personal social services, respectively. These estimates were then compared with GDP for 1998/99.

There are a number of problems with the *Household Expenditure Survey* data:

- The Australian data are for 1998/99, a year later than the New Zealand data with which they are being compared.
- The estimates do not include the institutional population (for example, in hospitals and nursing homes). This is particularly important for health expenditure.
- The estimate for personal social services may exclude some relevant services.

I have, therefore, used a number of supplementary estimates.[30] The Australian Institute of Health and Welfare (AIHW, 2000, p 235) publishes estimates of total government and non-government expenditure on health in 1997/98, adjusted for tax expenditures. These estimates are 5.7 percent and 2.6 percent of GDP respectively. The estimate of 2.6 percent of GDP for private expenditure on health has been used in Table 4.1.

The estimate of private expenditure on education obtained from the *Household Expenditure Survey* (1.0 percent of GDP, including expenditure on child care fees) is consistent with official statistics but is less than other more comprehensive estimates. I have chosen to use in Table 4.1 the estimates published by the OECD for 1995 in *Education at a Glance* (OECD, 1998a, pp 82–83). These estimates include private payments for student assistance (other than for students living at home), as well as private expenditure on educational institutions. The figure in Table 4.1 for private expenditure on personal social services is for 1997/98 and has been taken from the publication *Australia's Welfare 1999* (AIHW, 1999, p 13). The data are for monetary expenditure and exclude the value of contributed services to charities and services provided free of charge to relatives and neighbours. They include expenditure financed by non-government organisations and client fees.

The estimate of the amount of privately provided retirement incomes has been taken from the *Household Expenditure Survey* (ABS, 2000b, p 22). This gives the average private household income of households where the reference person (highest income earner) was aged 65 years and over as $186.95 a week in 1998/99. This figure is multiplied by the estimated total number of such households in the population to obtain an estimate of privately provided retirement incomes. This estimate is then compared with GDP. The estimate excludes the value of imputed rent from home ownership by retired people. It also excludes the amount of privately provided income in younger retired households. This is likely to be quite important in Australia.

As estimated by the method described, the private provision of retirement incomes in Australia was 2.2 percent of GDP in 1998/99. But, unlike the New Zealand data, the Australian data have not resulted from a weighting process designed to improve the estimation of taxes and

---

30 Private expenditure on health care in Australia that is within the scope of the *Household Expenditure Survey* was 2.0 percent of GDP in 1998/99. As noted in the text, private expenditure on education that is within the scope of the survey was 1.0 percent of GDP. These numbers can be compared with the estimates in Table 4.1.

transfers. The New Zealand data for market incomes reconcile closely with the corresponding National Accounts aggregates; the Australian data for market incomes are only two-thirds of the corresponding National Accounts data. The difference between the two sets of Australian data is due to differences in coverage, conceptual differences and the under-reporting of income in the *Household Expenditure Survey*.

I have increased the estimate of private provision of retirement incomes in Table 4.1 from 2.2 percent to 3.0 percent of GDP to provide an estimate that is comparable with the New Zealand estimate. Those who mistrust such estimates may prefer to compare the unadjusted estimate for Australia (2.2 percent of GDP) with the survey estimates for New Zealand before adjustment by Taxmod (1.4 percent of GDP).

The main points arising from the table are as follows:

- Total expenditure on welfare state services is about 38 percent of GDP in both countries. In New Zealand government finances two-thirds of welfare state expenditure. In Australia the corresponding figure is 52 percent.[31]
- In particular, the provision of retirement incomes is, to a much greater extent, a private responsibility in Australia.
- New Zealand spends more on benefits than Australia.
- By contrast, the Australian welfare state emphasises government spending on personal social services and housing to a greater extent than New Zealand. Some of the apparent difference in government spending on personal social services between the two countries is, however, due to differing definitions.

In summary, the results strongly suggest that the total amount of spending on welfare state services in the two countries is broadly

31 Organisation for Economic Cooperation and Development data published in *The Economist* (24 July, 1999, p 107) show that insurance premiums (for both life and non-life insurance) are a lower percentage of GDP in New Zealand than in Britain, Ireland, the United States or Australia. The average premium per capita is almost three times as high in Australia as it is in New Zealand. High benefit countries such as Germany and the Scandinavian countries tend to have low levels of insurance premiums per head of population. Although there are exceptions (for example, France), these data lend support to the idea that government benefit programmes crowd out private welfare effort. The availability of insurance against many contingencies in New Zealand that is funded on a pay-as-you-go basis is also an important factor.

similar.[32] However, private and government expenditure appear to be close substitutes for each other. People will spend less on these things themselves if governments spend more.

COMPARISONS WITH OECD COUNTRIES

In this section I supplement the detailed comparison of the New Zealand and Australian welfare states with comparisons involving a wider group of countries. These comparisons have been drawn from secondary sources – mainly OECD databases. Although great efforts have been made to standardise the data, errors and misunderstandings are always possible. There seem to be obvious errors in the data. Nevertheless, the databases do enable some general conclusions to be drawn and will, moreover, improve with greater use.

Education

The OECD database on education is perhaps the most advanced (OECD, 1998a). Data on educational expenditure are summarised in Table 4.2 (for primary and secondary education) and Table 4.3 (for tertiary education). Pre-school education is not considered here. The columns in each of the tables show for each country:

- how much money the government spends directly on educational institutions (column 1);
- how much money the government transfers to students or their families to assist them to purchase education services (column 2);

---

[32] The demographic structure of the populations of the two countries is similar. The New Zealand population structure is slightly younger than that of Australia. Twenty three percent of the New Zealand population is aged under 14 years; 62 percent is aged between 15 and 59 years; and 15 percent is aged 60 years and over. The corresponding figures for Australia are 21 percent, 63 percent and 16 percent, respectively (ABS, 2000a, p 190). As discussed below in Chapter 5, Some Comparisons, there are important differences between the household composition of the two populations. In particular, New Zealand has a higher proportion than Australia of sole parents and other family groups (households comprising a nuclear family and some others). These differences reflect, in part, differences between the ethnic composition of the two populations. For example, Maori comprised 14.5 percent of the New Zealand population at the time of the 1996 census and Pacific Islands people comprised 5.6 percent of the population. These groups form much less important components of the Australian population.

Table 4.2: Education expenditure as a percentage of GDP for primary and secondary education, by source of funds (1995)

	Direct public expenditure on educational institutions(1)	*Public subsidies (other than for student assistance)*(2)	*Private payments for educational institutions*(3)	*Total payments for educational institutions*(4)	*Other private payments*(5)	*Student assistance and other subsidies*(6)
Australia	3.2	0.03	0.47	3.7	0.29	0.29
Canada	4.0	x	0.27	4.3	*m*	0.04
Czech Republic	3.4	*n*	0.46	3.9	*m*	0.26
Denmark	4.2	*x*	0.09	4.3	0.60	0.60
Finland	4.2	*m*	*x*	4.2	0.23	0.23
France	4.1	*x*	0.33	4.4	0.15	*x*
Germany	2.9	*x*	0.91	3.8	*m*	0.11
Hungary	3.3	*n*	0.30	3.6	*m*	0.02
Ireland	3.3	*n*	0.13	3.4	*m*	0.18
Italy	3.2	0.04	*n*	3.2	*m*	*n*
Japan	2.8	*m*	0.26	3.1	*a*	*a*
Korea	3.0	*n*	0.87	3.8	*m*	*m*
Netherlands	3.0	0.10	0.10	3.2	0.26	0.19
New Zealand	3.8	0.05	*m*	*m*	*m*	0.17
Poland	3.3	*m*	*m*	*m*	*m*	*m*
Spain	3.5	*n*	0.54	4.0	0.32	0.05
Sweden	4.4	*n*	0.01	4.5	0.61	0.61
Switzerland	4.1	0.05	*m*	*m*	*m*	0.06
United Kingdom	3.8	0.03	*m*	*m*	0.03	0.03
United States	3.5	*x*	0.38	3.9	0.02	*x*

Notes:
(a) Not applicable.
(m) Not available.
(n) Negligible or zero.
(x) Included in another category.

Definitional notes:
(1) Purchases by a government agency of educational resources or payments to a government institution that has responsibility for purchasing educational services.
(2) Government transfers and other payments to students/households that are then used to purchase educational services (for example, student loans for tuition). Also includes subsidies to firms and labour organisations that operate apprenticeship programmes and interest subsidies to private financial institutions that provide student loans.
(3) Includes tuition fees and other fees, net of offsetting subsidies.
(4) Sum of columns 1, 2 and 3.
(5) Direct purchase of personal items used in education and subsidised expenditure on student living expenses.
(6) Includes subsidies for student living costs, and other subsidies such as free or reduced-price travel on public transport or family allowances that are contingent on student status.

Source: OECD (1998a, p 82).

- how much students and their families pay privately to educational institutions, excluding transfers from government (column 3);
- total expenditure on educational institutions (column 4);
- other private payments – for example, students' living expenses (column 5);
- other government subsidies – for example, for student assistance and transport of school children (column 6).

New Zealand provides details of government expenditure on education for the OECD databases. In some cases (for example government spending on primary and secondary educational institutions) these data are not easy to reconcile with budget information. New Zealand does not provide data on private spending on education.

Table 4.3: Educational expenditure as a percentage of GDP for tertiary education by source of funds (1995)

	Direct public expenditure on educational institutions(1)	*Public subsidies (other than for student assistance)*(2)	*Private payments for educational institutions*(3)	*Total payments for educational institutions*(4)	*Other private payments*(5)	*Student assistance and other subsidies*(6)
Australia	1.2	0.15	0.49	1.8	0.20	0.20
Canada	1.5	0.51	0.45	2.5	0.46	0.30
Czech Republic	0.7	*n*	0.31	1.0	*m*	0.08
Denmark	1.3	*x*	0.01	1.3	0.63	0.63
Finland	1.7	*m*	*x*	1.7	0.40	0.40
France	1.0	*x*	0.18	1.1	0.09	*x*
Germany	1.0	0.01	0.07	1.1	*m*	0.10
Hungary	0.8	*n*	0.20	1.0	*m*	0.13
Ireland	0.9	0.12	0.28	1.3	*m*	0.17
Italy	0.7	0.06	0.07	0.8	0.06	*x*
Japan	0.4	*m*	0.58	1.0	*m*	*m*
Korea	0.3	*m*	1.58	1.9	*m*	*n*
Netherlands	1.1	0.13	0.02	1.3	0.34	0.28
New Zealand	1.1	0.23	*m*	*m*	*m*	0.39
Poland	0.8	*m*	*m*	*m*	*m*	*m*
Spain	0.8	*n*	0.25	1.1	0.09	0.06
Sweden	1.6	*n*	0.11	1.7	0.59	0.59
Switzerland	1.1	0.01	*m*	*m*	*m*	0.04
United Kingdom	0.7	0.19	0.11	1.0	0.28	0.28
United States	1.1	*x*	1.24	2.4	0.11	*m*

Notes: See Table 4.2.

Source: OECD (1998a, p 83).

The data indicate that there is a wide diversity in arrangements for paying for education. For example, 23 percent of the costs of primary and secondary education are paid for privately in Germany and 22 percent in Korea. Over 10 percent of the costs of primary and secondary education are paid for privately in Spain, Australia the Czech Republic and Sweden. The countries with high private expenditure on primary and secondary education also tend to have relatively low government spending on these things.

There is an even greater diversity of arrangements for paying for tertiary education. In Korea, Japan and the United States, more than half of the costs of tertiary education are paid for privately. In another group of countries – including Canada, the Czech Republic, Australia and Spain – the proportion of costs met privately exceeds 25 percent. Many OECD countries finance around 15 to 25 percent of the costs of tertiary education privately but in Germany and Italy the percentage financed privately is less than 15 percent.

There are some countries, such as the United States and Australia, that have high levels of both private and public spending on tertiary education. As a consequence, there is greater variation between countries in public plus private expenditure on tertiary education as a share of GDP than in private expenditure by itself as a share on GDP. Since these countries have high levels of participation in tertiary education, which is not compulsory, I do not think that this counts as evidence against the substitutability of private for government spending. Indeed, a high level of private payments has been necessary in these countries to keep the costs to the taxpayers of these levels of participation in tertiary education within reason.

Health care

The analysis of health data presented in Table 4.4 is taken from OECD (1998c). As with the education data, this database is the result of sustained effort over a number of years to develop data that are consistent across countries and through time. Although there are obvious difficulties with some of these data, some generalisations can nevertheless be drawn.

First, the countries differ greatly in their arrangements for paying for health care. In the United States, more than 50 percent of all health expenditure is financed privately; in Korea almost half of health expenditure is financed privately. In Australia, Canada, Hungary, Italy

Table 4.4: Health expenditure as a percentage of GDP (1997)

	Public expenditure on health	*Private expenditure on health*	*Total expenditure on health*
Australia	5.7	2.6	8.3
Canada	6.4	2.9	9.3
Czech Republic	6.4	0.6	7.0
Denmark	6.6	1.2	7.7
Finland	5.6	1.7	7.3
France	7.8	2.1	9.9
Germany	8.0	2.4	10.4
Hungary	4.5	2.0	6.5
Iceland	6.7	1.3	8.0
Ireland	5.3	1.8	7.0
Italy	5.3	2.3	7.6
Japan	5.7	1.6	7.3
Korea	2.3	1.7	4.0
Netherlands	6.1	2.4	8.5
New Zealand	5.9	1.7	7.6
Poland	4.9	0.4	5.3
Spain	5.8	1.6	7.4
Sweden	7.2	1.4	8.6
Switzerland	7.1	3.1	10.2
United Kingdom	5.7	1.0	6.7
United States	6.5	7.5	14.0

Source: OECD (1998c).

and Switzerland, the share of private funding exceeds 30 percent. By contrast, the share of private finance is 22 percent in New Zealand, 10 percent in Denmark and Sweden, 15 percent in the United Kingdom, and less than 10 percent in Poland and the Czech Republic.

Secondly, with the notable exception of the United States, which has high levels of both government and private spending on health, countries with high private spending on health also tend to have fairly low government spending on health. This supports the view that public and private spending on health are, to a substantial extent, alternatives. The level of total health expenditure (both public and private) per capita is closely related to per capita GDP (see Ministry of Health, 2000, p 45 for further discussion about this point). The relationship between public expenditure on health and per capita GDP is less close. This tends to support the idea that private and public health expenditure are substitutable. Once again, however, the United States has unusually high health expenditure per capita in relation to GDP.

Retirement incomes

This sub-section of the chapter first presents information about retirement incomes and then investigates the extent to which government-funded and privately provided retirement incomes are alternatives.

Information about expenditure on age pensions as a share of GDP is presented in Table 4.5. Australia (because of means testing) and Iceland (because of a high retirement age) have notably low pension expenditure in relation to GDP. Other countries with pension expenditure below 5 percent of GDP include the United States, Ireland and the United Kingdom. New Zealand, at 6 percent of GDP, is in the middle range of countries. Several European countries have pension expenditure that exceeds 10 percent of GDP. The varying demographic structures of the population is, of course, also relevant in explaining differences in spending on pensions. The European countries have older age structures than the other countries.

Table 4.5: Public expenditure on age cash benefits as a share of GDP (1995)

Australia	3.1	Italy	11.0
Austria	10.4	Japan	5.5
Belgium	7.6	Netherlands	6.8
Canada	4.3	New Zealand	5.7
Denmark	7.7	Norway	5.8
Finland	8.0	Portugal	6.3
France	10.4	Spain	8.3
Germany	10.3	Sweden	8.2
Iceland	3.7	United Kingdom	6.5
Ireland	3.4	United States	5.4

Source: OECD (1999).

Expenditure on pensions depends on benefit rates and eligibility conditions such as the age of eligibility or whether or not an income or assets test is imposed. Some information on benefit rates is shown in Table 4.6. This table shows the extent to which the benefits that a person now aged 55 could expect to receive after retirement under the pension laws in that person's country that would replace the (before-tax) earnings they are now receiving. The figures shown in Table 4.6 are averages of four cases: single people earning two-thirds of average earnings; single people earning average earnings; married couples earning two-thirds of average earnings; and married couples earning average weekly earnings.

Table 4.6 shows that there is a group of countries with low replacement rates. These countries include Ireland, Australia, Switzerland and the United Kingdom. New Zealand, with a replacement rate of 60 percent, is slightly above the average. But there are several European countries with replacement rates that exceed New Zealand's. The table also shows that average replacement rates have increased sharply in most countries over the period from 1961 to 1995. Replacement rates have increased most sharply in those countries that had low replacement rates in 1961. New Zealand's replacement rates have moved from below average to above average during that period.

Table 4.6: Expected old age public pension average gross replacement rates (percent)

	1961	*1975*	*1995*
Australia	19.1	32.8	40.9
Canada	31.3	45.1	51.6
Czech Republic			53.2
Denmark	35.9	42.3	56.2
Finland	34.9	58.6	60.0
France	50.0	62.5	64.8
Germany	60.2	59.6	55.0
Hungary			54.6
Iceland			93.0
Ireland	38.6	28.9	39.7
Italy	60.0	62.0	80.0
Japan	24.6	54.1	52.1
Netherlands	32.2	48.0	45.8
New Zealand	32.0	43.0	61.3
Poland			53.7
Spain		50.0	100.0
Sweden	53.8	77.1	74.4
Switzerland	28.4	51.7	49.3
United Kingdom	33.4	33.8	49.8
United States	39.1	49.1	56.0

Notes: It is assumed that the employee starts work at age 20 and has uninterrupted work until the standard age of entitlement to public pensions is reached. The earnings profile is assumed to be flat over the working life; earnings are revalued in line with changes in average earnings. These assumptions are important for overseas social insurance programmes.

The reported rates cover basic pensions, means-tested supplements and mandatory occupational pensions only.

The taxation of earnings and benefits has not been taken into account. This is an important point: see the section Net Social Expenditure on pages 103–104 below for further discussion.

Source: Blondal and Scarpetta (1998), Table III.3, p 62.

The four individual cases from which the averages were calculated are shown, for 1995, in Table 4.7. This enables the reader to form an impression of how replacement rates vary with income during working life. New Zealand's retirement benefits, unlike those of most other countries, are not based on explicit contributions that often are a proportion of earnings. This, and the general high level of benefits, results in high pension replacement rates for low-income earners in New Zealand. For example, pensions are expected to replace 88 percent of earnings in New Zealand for a couple earning 66 percent of average earnings. This compares, for example, with 62 percent in Australia, 74 percent in Canada, 56 percent in Germany, 64 percent in the United Kingdom and 71 percent in the United States.

So far, we have simply described the differences among retirement income systems in the countries listed. The next step is to examine evidence on the importance of substitution. If people are readily willing

Table 4.7: Old age public pensions: expected gross replacement rates for a 55-year-old (1995) (percent)

	Single		*Couple*		*Average*
Percent of average earnings	*66*	*100*	*66*	*100*	
Australia	0.37	0.24	0.62	0.41	0.41
Canada	0.46	0.39	0.74	0.49	0.52
Czech Republic	0.52	0.38	0.75	0.50	0.54
Denmark	0.54	0.36	0.81	0.54	0.56
Finland	0.60	0.60	0.60	0.60	0.60
France	0.65	0.65	0.65	0.65	0.65
Germany	0.56	0.54	0.56	0.54	0.55
Hungary	0.59	0.51	0.59	0.51	0.55
Iceland	1.00	0.75	1.13	0.84	0.93
Ireland	0.36	0.24	0.59	0.39	0.40
Italy	0.80	0.80	0.80	0.80	0.80
Japan	0.54	0.44	0.62	0.49	0.52
Netherlands	0.46	0.30	0.64	0.42	0.46
New Zealand	0.59	0.39	0.88	0.58	0.61
Poland	0.59	0.48	0.59	0.48	0.54
Spain	1.00	1.00	1.00	1.00	1.00
Sweden	0.69	0.66	0.86	0.77	0.74
Switzerland	0.44	0.35	0.66	0.52	0.49
United Kingdom	0.46	0.39	0.64	0.50	0.50
United States	0.47	0.42	0.71	0.63	0.56

Notes: See Table 4.6.

Source: Blondal and Scarpetta (1998), Table A.7, p 96.

to substitute private income in retirement for government benefits, then one would expect to find that private pensions and self-provided income from work and assets during retirement are more important in the countries that do not spend much on government retirement benefits than in countries with higher government spending on retirement benefits.

Some relevant information is provided in Table 4.8. In reading this table it should be noted that France, Germany, Italy and Sweden spend a high proportion of GDP on benefits, but Australia, the United Kingdom and the United States are low-spending countries. For example, replacement rates are lower in these countries. Because it takes time for behaviour to respond to changed incentives, the sources of income of today's elderly may reflect past as well as present retirement income provision. Japan, for example, has moved from being a low-spending country to a medium-spending country in recent years. Data similar to those presented in Table 4.8 are unfortunately not available for New Zealand.[33]

Some aspects of this table require further explanation. The negative earnings figure for older Australians, for example, appears to reflect losses by farmers and other business people as well as a small sample size. Nevertheless, Table 4.8 shows that the expected relationship holds true. By and large, private transfers (for example, from occupational pension schemes) and incomes from earnings and assets are a higher proportion of total incomes in countries with low pension replacement rates (see Table 4.6).

Further evidence is presented in Table 4.9, which examines the ratio of net financial wealth to gross income for a number of groups in the population. Results are presented for the total population and for the lowest quintile of income recipients; for persons aged 55 years and

---

[33] In its post-election briefing the Ministry of Social Policy (1999) presented the following data on the proportion of income received by older New Zealanders from superannuation and social welfare benefits:

- Bottom 20 percent by income: 99.1 percent from superannuation and social welfare benefits
- Next 20 percent: 96.3 percent
- Third 20 percent: 79.9 percent
- Fourth 20 percent: 50.3 percent
- Top 20 percent: 14.0 percent

These data can be compared in a general way with Tables 4.8 and 4.11. It appears that a higher proportion of retirement incomes is obtained from government sources in New Zealand than in Australia, Britain or the United States.

67 years; and for single persons and couples. The term 'financial wealth' is used here to refer to non-housing wealth. It is measured net of debt (excluding mortgages). It should be noted that data for the lowest quintile in Australia are unreliable due to a small sample size.

The ratio of net financial wealth to income is particularly high in countries such as the United States and Australia where both pension expenditure and replacement rates are low. This suggests that, provided they have the opportunity to plan, people are able to adjust to restricted availability of government benefits by accumulating assets of their own.[34] Persons in the bottom quintile of the income distribution are less able to accumulate financial assets than those further up the income scale. This is particularly true of single people. The low financial wealth of people in the lowest quintile of the income distribution reflects their low earnings during working life and the generosity of government benefits for this group (see Table 4.6). Moreover, income and assets tests (as in Australia) may tend to discourage savings by those with low incomes during their working lives (although, by restricting benefits, incomes and assets tests may well encourage savings by higher income groups).

The adequacy of the retirement incomes that are provided in different countries using differing combinations of government and private effort is an important issue. If it were true that *total* retirement incomes tend to be low in countries with low government spending on retirement incomes, then this would tend to cast doubt on the idea that private provision for retirement is a good alternative to government retirement income provision.

[34] In addition to current retirement incomes provision, differences in savings rates between countries are likely to depend on such factors as changes in state pensions systems over people's lifetimes and tax structures.

Table 4.8: Composition of retirement incomes[a]

	Single						*Married*					
	Transfers			*Self-provided income*			*Transfers*			*Self-provided income*		
	Public	*Other*	*Total*	*Earnings*	*Assets*	*Total*	*Public*	*Other*	*Total*	*Earnings[b]*	*Assets*	*Total*
Australia	77.2	9.9	87.1	–8.5	21.4	12.9	46.5	10.9	57.4	21.0	21.6	42.6
France	68.4	–	68.4	7.1	24.6	31.6	67.2	–	67.2	9.2	23.6	32.8
Germany	81.9	4.9	86.8	4.5	8.8	13.3	70.5	5.7	76.2	12.1	11.8	23.8
Italy	48.5	–	48.5	27.2	24.3	51.5	25.6	–	25.6	45.9	28.5	74.4
Japan	52.4	4.8	57.2	25.5	17.3	42.8	48.3	2.6	50.9	32.9	16.2	49.1
Netherlands	63.3	32.5	95.8	0.2	4.0	4.2	51.3	39.1	90.5	3.8	5.7	9.5
Sweden	71.1	18.9	90.1	2.5	7.4	9.9	63.1	19.2	82.3	11.5	6.2	17.7
United Kingdom	60.7	19.7	80.4	4.7	14.9	19.6	44.8	24.4	69.2	16.8	14.0	30.8
United States	45.8	25.5	71.3	8.3	20.4	28.7	39.7	25.0	64.7	14.2	21.1	35.3

Notes:

(a) Income sources as a percentage of gross incomes of families with a head around 67 years of age.

(b) Earnings may come from younger spouses.

Source: Börsch-Supan and Reil-Held (1998), Table 7 and OECD Family Resources Data. Data are taken from household surveys conducted during the first half of the 1990s.

Table 4.9: Ratios of net financial worth to gross income

Total population

	55-years-old		*67-years-old*	
	Single people	*Couples*	*Single people*	*Couples*
Australia	2.2	2.1	6.2	5.0
France	1.9	1.5	2.1	3.7
Germany	0.7	0.5	1.2	1.2
Italy	1.8	1.3	2.8	2.8
Japan	2.8	1.7	4.0	3.8
Netherlands	0.4	0.4	1.0	0.9
Sweden	–0.1	–0.1	1.1	0.7
United Kingdom	0.9	0.7	1.4	1.3
United States	2.0	1.5	3.5	3.2

Lowest quintile of income recipients

	55-years-old		*67-years-old*	
	Single people	*Couples*	*Single people*	*Couples*
Australia	0.3	4.0	0.4	2.0
France	1.5	1.3	2.2	2.0
Germany	0.6	0.5	0.9	0.9
Italy	1.9	1.1	2.1	1.7
Japan	5.2	1.9	4.7	3.4
Netherlands	1.2	0.4	1.8	0.7
Sweden	0.0	–0.1	1.9	0.8
United Kingdom	0.4	0.9	0.7	0.8
United States	0.7	1.7	2.3	2.4

Notes: Data for Australia refer to the second lowest quintile. Income refers here to net (after-tax) income, including government benefits, except for the United States where gross income is used. Net financial wealth excludes housing assets.

Source: Disney, d'Ercole and Scherer (1998), Table 9, p 33 and OECD Family Resources Data. Data are taken from household surveys conducted during the first half of the 1990s.

Some evidence on this point is presented in Table 4.10. Single and married people seem to enjoy incomes in retirement through combinations of public programmes and private effort that replace 70 to 80 percent of their previous incomes. Replacement rates in the United States are lower than this. Replacement rates tend to be lower in low-spending countries especially in the upper quintiles of the income distribution. This suggests that the European social insurance programmes may over-provide at high income levels. Even so, the low-spending countries provide a post-retirement income that, for single people in the lowest quintile, actually exceeds the disposable income they received when working. Retirement benefits for married couples in the lowest quintile usually replace 80 to 90 percent of previous earnings even in low-spending countries. These do not seem to be unreasonably low replacement rates especially since there are some costs necessarily incurred in going to work.

The importance of the different sources of retirement income varies over the income scale. Table 4.11 provides some evidence on this point. In high public provision countries such as France, Germany and Sweden, government benefits are important at all levels of income. Even in low public provision countries, government benefits make up 80 percent or more of retirement incomes for the lowest income group. Thus, for married couples in Australia, for example, government benefits make up 80 percent or more of the incomes of those in the lowest quintile of the income distribution (and 85.6 percent for those in the second quintile) but only 7.5 percent of the incomes of those in the highest quintile. The importance of public pensions even in low-spending countries indicates that they have an important safety-net role. At higher levels of income the evidence suggests that private effort can, transitional problems aside, substitute for government pensions.

Table 4.10: Ratio of post-retirement to pre-retirement disposable incomes[1] (percent)

	Single						*Married*					
	All	*Q1[2]*	*Q2*	*Q3*	*Q4*	*Q5*	*All*	*Q1*	*Q2*	*Q3*	*Q4*	*Q5*
Australia[3]	75.8	–	101.7	98.4	75.2	64.8	72.1	–	89.9	72.2	60.2	64.4
France	89.7	104.5	100.0	93.0	84.9	85.6	78.9	91.9	85.1	81.8	80.4	73.1
Germany	76.5	96.8	86.0	77.9	73.9	69.8	83.5	87.1	84.4	82.8	79.8	84.7
Italy	61.1	84.1	75.4	72.2	69.3	61.0	79.6	103.3	82.3	79.4	81.8	74.8
Japan	86.3	97.6	84.6	78.5	71.7	99.0	75.4	75.6	69.6	66.0	69.8	87.0
Netherlands	74.7	92.5	84.1	72.0	68.7	71.9	77.3	83.3	74.2	69.3	71.5	85.9
Sweden	81.9	98.0	85.5	79.2	75.5	80.5	77.2	83.2	75.8	75.3	76.5	77.0
United Kingdom	68.4	114.1	89.3	69.4	64.2	59.0	67.9	95.4	66.8	61.6	61.2	70.1
United States	61.5	126.4	73.8	63.2	55.4	57.0	46.1	56.7	47.0	43.6	43.6	46.2

Notes:

(1) Pre-retirement income refers to disposable income of single people or families with a head around 55 years of age; post-retirement income is the disposable income of single people or families with a head aged around 67 years.

(2) Q1 refers to the lowest quintile of the income distribution; Q5 refers to the highest quintile.

(3) Data for the first quintile for Australia are not shown because they are considered to be unreliable.

Source: Börsch-Supan and Reil-Held (1998), Table 1 and OECD Family Resources Data. Data are from household surveys conducted during the first half of the 1990s.

Table 4.11: Share of public pensions in retirement incomes[1] (percent)

	Single						Married					
	All	*Q1[2]*	*Q2*	*Q3*	*Q4*	*Q5*	*All*	*Q1*	*Q2*	*Q3*	*Q4*	*Q5*
Australia [3]	77.2	–	96.4	89.6	82.9	36.6	46.5	80.6	85.6	74.8	57.6	7.5
France	68.3	93.5	89.4	84.7	77.2	52.2	67.2	90.1	83.0	77.2	73.5	51.3
Germany	81.9	92.7	92.4	87.1	83.6	71.2	70.5	90.3	86.6	84.6	78.4	49.1
Italy	48.5	88.8	75.8	65.4	49.8	28.0	25.6	35.2	49.1	42.9	29.3	13.6
Japan	52.4	70.4	73.6	65.7	71.2	33.6	48.3	67.8	76.0	66.9	54.7	26.8
Netherlands	63.3	96.3	90.7	84.6	64.0	32.8	51.3	90.4	78.8	64.8	48.6	8.2
Sweden	71.1	82.3	83.3	82.0	76.6	56.4	63.2	86.1	79.6	74.2	66.1	41.9
United Kingdom	60.8	91.8	89.3	83.5	61.4	30.8	44.8	89.7	75.9	61.1	42.3	18.8
United States	45.8	94.1	85.3	65.1	49.0	22.5	39.7	85.6	65.0	55.8	42.0	20.4

Notes:

(1) Share of public pensions and other public transfers in the gross income of single people and families with a head aged around 67 years.

(2) Quintile 1 refers to the lowest quintile of the income distribution; Q5 refers to the highest quintile.

(3) Data for the first quintile for Australia are not shown because they are considered to be unreliable due to small sample size.

Source: Börsch-Supan and Reil-Held (1998), Table 2 and OECD Family Resources Data. Data are from household surveys conducted during the first half of the 1990s.

Care of people who are aged and/or disabled

According to data presented by the Ministry of Health (Ministry of Health, 2000, pp 58–59), New Zealand governments spent about 1.5 percent of GDP on support for people with disabilities in 1997/98. This amounts to 99 percent of expenditure from all sources on disability support services that has been recorded by the Ministry of Health. However, some important sources of private funding of disability support services have been excluded from these data; this indicates that the true share of public funding of disability services is less than 99 percent. Spending on age-related disability services by governments is 0.83 percent of GDP. This includes health and non-health expenditure.

Disability support services exclude services that require continuing medical supervision. Disability support services include assessment and rehabilitation, personal care, domestic services, equipment, training, respite and relief care and behavioural support.

The provision of care for people with disabilities involves contributions from the family, the state and the market. These are, to some extent, alternatives for each other. People with disabilities and their families will wish to take advantage of services that are inexpensive and convenient to use. Subsidised institutional care, for example, will tend to 'crowd out' informal or privately provided care even though institutional care may not always be the most cost-effective from the point of view of society as a whole. There is, therefore, an argument for means testing to concentrate subsidies where they are most needed. However, means testing may encourage older people to divest themselves of assets prematurely.

Concern about the continuing availability of care by family members is one reason why governments have chosen to fund formal care. An alternative approach, however, may be to provide recognition and assistance (such as support services and respite care) to caregivers of people with disabilities. Not much is known about the extent of caring by family members of people with disabilities in New Zealand but it is likely to be very important.

According to Jacobzone (1999, p 12), countries such as France and Italy, with extensive health and pensions systems, have felt less need to provide subsidised care services for the frail elderly than countries with less extensive pensions and health programmes. People may be more willing to accept lower pensions if they are not also expected to carry the risk of a long period of dependency in old age. The provision of care services for the frail elderly may need to be reconsidered if the suggestions made later in this report for less generally available pensions and health care subsidies are taken up.

However, government expenditure on care of the frail elderly in New Zealand, at 0.8 percent of GDP, is well within the range of between 0.6 percent and 1 percent of GDP that has been identified by Jacobzone (page 12) as being typical of OECD countries. This finding is consistent with the conclusion, reached in Chapter 3, Personal Social Services and Housing above, that government spending on personal social services in New Zealand is at around the average level of OECD countries.

Net social expenditure

Willem Adema (1999) defines social expenditure to include all payments of benefits to, or subsidised services provided for, individuals during circumstances that adversely affect their welfare. This definition includes government cash and non-cash benefits, private social expenditures that are required by law (for example payment by employers of sick pay in some countries) and voluntary private contributions to subsidised or regulated pensions and health insurance programmes. Purely voluntary expenditure on unsubsidised programmes without specific regulation is excluded from this definition even when (as in the case of purchase of life insurance) it has a clear welfare purpose. He deducts direct and indirect taxation from gross expenditure to calculate net social expenditure.

Adema examines data from 13 OECD countries (including Australia but not New Zealand) and concludes that allowing for private social benefits and the impact of taxation leads to a convergence of social expenditure levels across countries. This is because private social expenditures are important in low public spending countries such as the United States. (This conclusion would be reinforced if purely voluntary private expenditures were also included.) Moreover, some countries (such as the Netherlands and the Scandinavian countries) that pay high benefits also levy substantial amounts of taxation on these benefits. The net amount of benefit paid to beneficiaries in these countries is substantially less than the gross benefit. This raises the issue of churning of income which is discussed in detail in Chapter 6.

COMPARISONS WITH EAST ASIAN COUNTRIES

East Asian countries, such as Hong Kong, Singapore, Taiwan and Korea, appear to achieve good social outcomes (in terms of education and health standards and the extent of inequality in the income distribution) even though welfare state spending in these countries is 5 to 10 percent of GDP.[35] Japan has a full range of welfare state programmes but limits government spending on them to about 15 percent of GDP. By contrast, welfare state spending in other developed countries ranges from about 20 percent of GDP (in Australia and the United States) to in excess of 40 percent of GDP in Sweden. This experience raises two very important questions: how have the East Asian countries been able to achieve such good outcomes with low levels of government spending, and to what extent can their experience be transferred to very different societies, such as New Zealand?

[35] Evidence on education outcomes is presented in Chapter 1, Reasons for Increasing Concern about the Welfare State and its Financing. For health outcomes, see, for example, OECD (1998c). The income distribution is discussed below in the section Comparisons with Other Developed Countries. See also Tanzi and Schuknecht (1995).

Description of programmes

The East Asian welfare states can be divided into two main groups (Jacobs, 1998). Hong Kong and Singapore have avoided social insurance. By contrast, Japan has implemented fully fledged social insurance. Korea and Taiwan, countries in which the Japanese example has been influential, are implementing social insurance but are doing so cautiously. The East Asian countries spend only on the core welfare state areas: government spending on unemployment benefits, assistance to families and personal social services, which are important in Australia and New Zealand, are at very low levels.

In Hong Kong education is mandatory for nine years. Some fees are charged in state schools and government-assisted schools. There is also a small private sector that is financed through fees. Fees are more important for tertiary education.

Public health care is available to all and is free. Most people use the private sector to obtain better quality service and avoid waiting lists. The state is the main provider of housing. Rents are charged, but some cross-subsidies favour poorer households.

Hong Kong has a social assistance programme. This provides a subsistence income to people who are poor whose income and assets are below certain limits and who have limited capacity to work. A small flat-rate allowance is also payable to people who are aged and to those with disabilities. Compulsory severance pay programmes that are managed by employers appear to be important in providing for occupational injury, invalidity, maternity, unemployment and old age. Hong Kong has recently introduced a compulsory superannuation programme.

In Singapore the government finances and provides ten years of compulsory education. Fees are important for higher education. The state is the major provider of housing, but rents are charged. People can freely choose private housing. The government subsidises public hospitals (although fees are charged), has a small budget for personal social services and operates a small public assistance programme.

The central welfare institution in Singapore is the Central Provident Fund (CPF). This is a quasi-public institution that manages workers' compulsory savings. There are three accounts: the Ordinary Account, the Medisave Account and the Special Account. Savings in the Ordinary Account may be used to finance housing, education, purchase of CPF insurance schemes and approved private investments. The Medisave Account covers health care expenditure. There is some scope, which the government is seeking to expand, for customer choice of health insurer.

The Special Account is for old-age income maintenance. All employees must join the CPF but the self-employed are required to contribute to Medisave only. Employers' liability programmes (for example, severance pay) are the main method of providing for invalidity, occupational injury and unemployment.

The CPF involves high net compulsory savings and is currently in the build-up stage. When it begins to mature demographically, the shift in spending patterns may be very large.

Education in Korea is compulsory for nine years. Some fees are charged. As indicated in Table 4.3, private payments – such as fees – are very important in financing tertiary education.

As noted, Korea has begun to implement social insurance. Universal health insurance was implemented in 1989 when a programme for farmers, the self-employed and employees of small firms was introduced. Coverage is employment-based and there is a large number of providers. User fees are high (see Table 4.4). The Medicaid programme pays some of the health care costs of the poor. Only indigent people who are elderly and people with disabilities without family support receive free care.

A National Pension Programme was introduced in 1988. This is an unsubsidised, defined benefit programme that is yet to be phased in to such an extent that full benefits are payable. Separate programmes exist for civil servants and school teachers. It appears that the government has established benefits at a level that is too high in relation to contributions; this is causing some concern in Korea.

There are social insurance programmes for workers' compensation and unemployment. The coverage of these programmes does not extend to the self-employed or employees of small firms. The employees of small firms are, however, protected by legal severance pay requirements.

Public assistance provides a minimum cash income and subsidies for essential goods. Middle-aged, able-bodied people do not receive cash benefits but are enrolled in public works projects.

Like Korea, Taiwan is progressively introducing social insurance. Labour insurance is compulsory for private sector employees whose enterprise employs at least five people. It provides benefits in the event of invalidity, disability, maternity, occupational injury, retirement or death. Benefits are low. There are separate schemes for farmers and more generous ones for government employees, teachers and the military.

Comprehensive national health insurance was introduced in 1995; however, user fees are important in financing health care. The government is considering the introduction of a national pensions insurance programme. This would be a funded, defined-benefit programme that would pay flat-rate benefits in return for a flat premium.

The Department of Social Welfare in Taiwan provides a variety of services and a small social assistance programme. Education is compulsory for nine years; some fees are charged. Government housing policy encourages people to purchase their own homes and flats by providing subsidised loans.

Unlike the other countries, Japan has a fully fledged social insurance programme. The structure is very complex. The main branches are health insurance (which usually includes invalidity and maternity benefits) and pension programmes (which include disability and survivor benefits). There are separate schemes for different occupational groups. The government pays a minimum pension (to which the occupational benefit is added) and subsidises health care costs for persons aged 70 years and over.

Social security also provides occupational injury insurance, family allowances, unemployment insurance, public health and public assistance.

The issue of personal social services has received increasing attention because of Japan's rapidly ageing population. The government has introduced the Gold Plan and the Angel Plan to increase the supply of personal care services for, respectively, people who are elderly and families with children. The government has recently decided to introduce long-term care insurance to cover the costs incurred in future by old people who need constant care.

Education is either provided or subsidised by the government and is compulsory at the primary and secondary education levels. Fees are low. As in other East Asian countries, privately funded after-school coaching is important in Japan. Fees are very important at the tertiary level (see Table 4.3). Housing policy encourages the provision of housing for sale for the middle class.

Comparisons with other developed countries

Summary information on social welfare expenditure in Korea, Taiwan, Hong Kong and Singapore is presented in Table 4.12. Broadly comparable information for a number of OECD countries, including New Zealand and Australia, is shown in Table 4.13.

Table 4.12: Aggregate government social welfare expenditure[a] in four East Asian countries as percent of GDP

	Korea (1995)	*Taiwan (1996)*	*Hong Kong (1995)*	*Singapore (1995)*
Education	3.73	5.00	2.63	1.78
Health care	0.24	–	1.67	1.21
Social security and welfare[b]	3.12	5.71	1.22	0.79
Housing and community development	1.56	0.38	1.40[c]	1.29
Total	**8.65**	**11.10**	**6.92**	**5.08** (6.49)[d] (10.29)[e]

Notes:
(a) General government current and capital expenditure (plus some extra-budgetary funds in Singapore).
(b) Includes some health spending for Korea and Taiwan.
(c) Includes spending by the Housing Authority.
(d) Includes social security-related CPF withdrawals.
(e) Includes social security and housing-related CPF withdrawals.
Source: Jacobs (1998), Table 15 p 48.

Table 4.13 confirms that New Zealand's welfare state is larger as a share of GDP than that of Japan, the United States and Australia but smaller than that of some European countries. The heavy emphasis that the New Zealand welfare state places on family benefits and benefits for sickness and occupational injury and disease is also apparent from this table.

Government education expenditure is lower in the Asian countries (including Japan) than in non-Asian OECD countries. Public expenditure on health care is also low in the Asian countries (except Japan). As we have noted, high levels of private expenditure on health and education compensate for low government expenditure. Social security expenditure is low in the East Asian countries both because of the limited range of contingencies for which assistance is provided and the limited amount that is spent on age pensions. Government housing programmes are quite important in Korea, Hong Kong and Singapore.

The main factors that have led to low spending on the welfare state in East Asian countries include the following:

- the choice of government policy – for example, Hong Kong and Singapore have avoided social insurance;

- the young age structure of the population, except in Japan;
- the recent introduction and absence of universal coverage of age pension programmes;
- the tendency for pension programmes to pay actuarially fair benefits;
- the absence of non-contributory, non-means-tested benefits (which are most in danger of being bid up through the political process) in Japan, Korea and Taiwan. Means tests consider the circumstances of the extended family;
- low replacement rates and time limits for benefits;
- user charges are important for health care and education;
- a low priority is placed on spending on unemployment, family benefits, personal social services and housing.

The general picture that emerges, therefore, is one of a limited and not very redistributive welfare state. Despite this, inequality of income in Japan, Korea and Taiwan does not seem to be very great. However, inequality of income in these countries is greater than in most European countries but is less than in the United States or the United Kingdom (Jacobs, 1998, p 95). In Hong Kong and Singapore the income distributions are less equal than those of the United States and the United Kingdom. Saunders and Smeeding (1998, p 14) find that rates of relative poverty among older people in Taiwan are not much different from those in the United States, Japan and Australia, in part because of the willingness of Taiwan's elderly to live with their children.

One reason why income is distributed fairly equally in Japan, Korea and Taiwan is that there is an equal distribution of work between households. This is because unemployment is low, many older people work, most young people live at home until they marry, and most retired people live with their families. Because many women stay at home and are able to look after relatives, expenditure on health care and personal social services is less than it otherwise would be.

The combination, especially in Japan, of a shift towards nuclear families, the increasing employment of women outside the home and decreased numbers of children will both increase the demand for caregivers and reduce the willingness of women to care for family members. This will require some rethinking of social policies in Japan.

It is interesting to reflect on the implications of the East Asian experience for the New Zealand welfare state. There are certainly some aspects of the New Zealand society, such as its older age structure, the

Table 4.13: Public social expenditure[a] in some OECD countries as percent of GDP – 1995

	Japan	*Korea[b]*	*France*	*Germany*	*Sweden*	*United Kingdom*	*United States*	*New Zealand[c]*	*Australia*
Education[d]	3.20	3.30	5.10	4.13	7.20	5.03	4.60	5.74	5.07
Health	5.57	1.88	7.98	8.13	5.90	5.73	6.33	5.90	5.74
Old age cash benefits	5.49	1.19	10.36	10.29	8.17	6.46	5.36	5.69	3.08
Disability cash benefits	0.31	0.10	1.07	1.09	2.42	2.64	0.89	0.72	1.25
Occupational injury and disease	0.21	0.24	0.37	0.35	0.41	0.19	0.11	0.95	–
Sickness benefits	0.06	–	0.54	0.49	1.16	0.19	0.24	1.12	0.07
Services for elderly and disabled	0.27	0.13	0.78	0.58	3.37	0.68	0.05	0.47	0.35
Benefits for survivors	0.77	0.17	1.86	0.57	0.80	0.82	0.96	0.11	0.30
Family cash benefits[e]	0.20	–	2.23	1.23	2.13	1.87	0.33	2.06	2.31
Family services	0.22	0.07	0.37	0.78	1.72	0.48	0.31	0.55	0.21
Active labour market programmes	0.13	0.08	1.31	1.36	2.40	0.45	0.20	0.71	0.84
Unemployment	0.39	–	1.79	2.37	2.30	0.89	0.35	1.14	1.29
Housing cash benefits and subsidies	–	–	0.92	1.15	1.20	1.85	0	0.61	0.21
Other	0.18	0.12	0.49	0.63	1.03	0.27	0.63	0.17	0.09
Total	**17.00**	**7.28**	**35.17**	**32.14**	**40.21**	**27.55**	**20.36**	**25.94**	**20.80**

Notes:

(a) Gross public expenditure before tax. Includes current disbursements and capital expenditure. Also includes refundable tax credits (such as Family Support in New Zealand).

(b) Note that there are discrepancies between the data for Korea shown in this table and the corresponding data in Table 4.12. I have not attempted to reconcile these differences.

(c) New Zealand data include payments by the ACC (under 'occupational injury and disease' and 'sickness benefits'). The data for health in the OECD database appear to exclude 'non-health' expenditure by the Ministry of Health; this expenditure does not appear to be included in the category 'services for the aged and disabled'. I have used the estimate for health expenditure given in Table 3.7 and have included an estimate of 0.47 of GDP for 'services for the aged and disabled'. This latter estimate is discussed in Chapter 3, Personal Social Services and Housing of this report. See also Table 3.12 for the estimates for family services.

(d) See Tables 4.2 and 4.3 for further details.

(e) Family cash benefits include family assistance (such as Family Support in New Zealand) and benefits for sole parents.

Source: OECD (1999), OECD, *Social Expenditure Database*, 1980–1996, OECD (1998a), *Education at a Glance*, author's calculations.

desire of women to work outside the home and the dominance of the nuclear family that are very different from Asian societies but that are most unlikely to be reversed. However, there are other aspects of welfare state arrangements in East Asian countries, such as avoiding non-contributory, non-means-tested benefits and excessively high replacement rates of benefits for earnings, and making greater use of user charges in health and education, which are clearly relevant in thinking about alternatives to the welfare state arrangements in New Zealand. Perhaps the most important point is the importance of a high level of employment if equitable social outcomes are to be achieved. A high level of employment is most likely to be achieved in a flexible, deregulated market in which potential employers and employees can readily make mutually satisfactory employment arrangements. However, this is a large topic that is beyond the scope of the present paper.

SUMMARY AND CONCLUSIONS

The main points are as follows:

- New Zealand spends about 25 percent of its GDP on the welfare state in total, compared with 5 to 10 percent of GDP in Hong Kong, Singapore, Korea and Taiwan, 17 percent in Japan, 20 percent in Australia and the United States, 28 percent in the United Kingdom and over 30 percent in Germany, France and Sweden.
- Public spending on education is a higher proportion of GDP in New Zealand than in Australia, Germany, the United States and the East Asian countries. These other countries rely on the private funding and provision of education to a greater extent than New Zealand. Educational outcomes in these countries are at least as good as those in New Zealand.
- Total spending on health care (both government and private) is closely related to per capita GDP: the higher per capita GDP, the greater the share of health spending in GDP. After allowing for the effect of GDP, countries with low government expenditure on health care also have high private expenditure on health care. This tends to suggest that government and private spending on health care are, to a considerable extent, alternatives. The United States, with high levels of both private and government spending on health care, is an exception to the general rule.

- Government spending on health care is broadly similar as a share of GDP in New Zealand to other OECD countries; it is higher in New Zealand than in Korea, Singapore and Hong Kong. This reflects both New Zealand's per capita GDP in relation to that of other countries and the low non-government share of total health care expenditure in New Zealand. Australia, for example, has a privately funded health care sector that is substantially larger than New Zealand's.
- Government spending on retirement incomes varies greatly between countries. New Zealand spends a lower proportion of its GDP on retirement incomes provided by government than European countries with contributory social insurance programmes. However, it spends a higher proportion of its GDP on retirement incomes programmes than Australia, which has means-tested benefits, and the East Asian countries. New Zealand's benefits are particularly generous by international standards to those who have low or interrupted earnings during their working lifetimes.
- Private provision for retirement is greatest in those countries (such as Australia) where the government provides the least extensive benefits. Indeed, incomes in retirement seem to be much the same in developed countries generally, irrespective of the mix of government and private provision. Government benefits are important in all developed countries for retired people with the lowest incomes.
- Government spending on personal social services is at a moderate level in New Zealand but government spending on housing (other than cash benefits) is low. Spending in New Zealand on unemployment benefits is higher than in the United States or Japan, but lower than in the European countries. Expenditure on family benefits (including family tax credits) is particularly high in New Zealand. The provision of sickness benefits and benefits for occupational injury and disease through the ACC is also emphasised by the New Zealand welfare state.

A number of ideas are central to the analysis presented in this chapter. These include: the diversity of funders and providers of welfare state services; the degree of substitutability between government and private welfare, especially in the long term; the risks associated with government provision and each form of private provision of welfare state services; and the vulnerability of the lowest income groups to changes in the welfare package.

New Zealand relies to an unusual extent on government provision of welfare state services and New Zealanders are, therefore, unusually exposed to political risks. There are many good reasons for seeking to move, over time, towards a more balanced provision of welfare services. Equally, there are many equity and transitional issues that need to be addressed in doing so.

Information on who gains and who loses from the welfare state is therefore presented in Chapter 5. This will assist in obtaining an understanding of the implications of changes in the extent of government provision of welfare state services.

5

Who Benefits from the Welfare State and Who Pays for it?

INTRODUCTION

The welfare state provides benefits to many households but these must be paid for either through taxation or government borrowing. Taxation reduces the standard of living of taxpayers; government borrowing reduces the standard of living of future taxpayers.[36] The equity implications of the welfare state depend both on who receives the benefits and who is required to pay for them. Information on the circumstances of both recipients and taxpayers is needed to develop an understanding of the equity consequences of the welfare state.

Assessment of the distributional implications of the welfare state

It is, unfortunately, not easy to be sure who benefits from the welfare state and by how much. This is particularly true if the longer-term and indirect consequences of government benefits are taken into account, as they should be. As I have argued in earlier chapters of this report, one consequence of a generous government pension is that privately provided retirement incomes are likely to become less important, especially in the longer term. To the extent that this measure has not been anticipated, a large increase in pensions will provide a windfall gain to existing recipients at the time the increase is introduced. (However, some of these windfall gains may be offset through increased gifts or bequests.) People who have not yet retired will experience both gains and losses. They will gain because they now need to provide less for their own retirement if they believe that governments will keep their promises. But they will lose from the higher taxes required to finance higher government benefits. The balance between these two effects is likely to be less favourable for younger people than for older ones. The value of the government benefit actually paid to the household, moreover, is likely to be a poor measure

[36] In addition, taxation imposes deadweight losses, as discussed in earlier chapters of the report.

of how much better off the household is because of the benefit. This second calculation requires an assessment of the indirect consequences of the government benefit for self-provision of retirement income and for taxation.

It is equally difficult to determine who benefits from subsidies paid to low-income working families once second round and indirect effects are taken into account. A family may decide to work less because of the availability of the subsidy. The increase in the family's money income as a result of the benefit will, therefore, be lower than the money amount of the benefit. The increased amount of leisure will also be of some value to the family. The availability of subsidies to low-income people in employment may discourage them from obtaining useful skills and knowledge.[37] As a result, their incomes may well, over the longer term, be less than they otherwise would have been. Subsidies to low-income persons in employment may also make it possible for employers to pay a lower wage than would otherwise have been necessary. If so, government assistance will provide help to groups other than the intended beneficiaries.

If government welfare provision was less extensive, many people who now live independently would choose to remain longer in higher income households, or would re-enter them, to share in the standard of living provided by the higher income. The consequences of the welfare state may be as important for personal autonomy and household size and composition as for the distribution of income.

Similar issues arise for taxation. As is well known, many people attempt to reduce the amount of tax they pay, perhaps by working or saving less than they would otherwise have done or by undertaking transactions in ways that provide tax advantages. Changes in taxation legislation may, therefore, result in changes to behaviour. To the extent this occurs, the beneficiaries from a taxation measure will be different people from those who were expected to benefit at the time the measure

---

37 Welch (1999) argues that increasing wage inequality in the United States over the period from 1967 to 1997 was due to increasing demand for highly skilled persons. Moreover, the increasing wage premium for educated persons resulted in increased completion rates for tertiary education. This evidence supports the idea that decisions to participate and continue in post-compulsory education are sensitive to the financial returns from education. The increased participation in tertiary education in New Zealand in recent years may also, in part, be a response to increase premia in earnings for skills.

was proposed. Taxes are often shifted from those who are legally required to pay them to other people. Although indirect taxes (such as the goods and services tax (GST)) are levied on the producers of goods and services, it is often argued that they are passed forward in higher prices and paid for by final customers. Personal income tax introduces a 'wedge' between the wage that is paid by an employer and the income that is received by an employee. Some employees may be able to recover some of the tax they pay through higher gross wages. This is particularly true for those people whose skills are in demand internationally and who could easily find work in Australia or other countries. Other people may find that they are worse off because of the tax (even though they may not pay it) because employment is reduced.

By introducing gaps between the rewards that are provided by markets and those that are received by individuals, the welfare state and the taxes that finance it have profound effects on the workings of markets and hence on the success of economies in meeting human needs. The welfare state absorbs around 25 percent of GDP and around 75 percent of tax revenues. The effects of the welfare state on people's economic behaviour are likely to be substantial. These second round and longer term consequences of the welfare state are very important but are often neglected in public debate because they are not obvious. But to determine accurately who gains and who loses from the welfare state (or from changes to it) once all indirect effects are taken into account is a difficult task. In the remainder of this chapter I attempt to achieve the simpler objective of working out who gains from welfare state expenditures, and who pays for them, using conventional, if reasonable, assumptions about who gains from individual expenditures and who pays particular taxes. I hope that this information will assist in a balanced understanding of the equity consequences of the welfare state, not least by providing information on who is paying for it. The analysis unfortunately does not assist our understanding of the consequences of the welfare state for economic efficiency.

Fiscal incidence study

This chapter reports on a fiscal incidence study that was undertaken in New Zealand using data from the Statistics New Zealand *Household Economic Survey* for 1997/98. Fiscal incidence studies attempt to allocate some items of government expenditure and some taxes to individual households. It is very difficult to decide how much each household benefits from expenditure such as national defence. Although most company income tax is ultimately paid by households in New Zealand it is not easy to work out how much each household pays. In practice, only the more easily allocated benefits and taxes are considered in detail in fiscal incidence studies.[38]

On the benefits side, the easily allocated benefits include the main areas of welfare state expenditure. The *Household Economic Survey* directly records which households receive cash benefits. Government expenditure on education is allocated to households within the survey on the basis of attendance at educational institutions, which is also recorded in the survey. Government expenditure on health is allocated to households on the basis of administrative data about the use of health services. The assumption is made that the benefit received by a household depends on the cost to the government of providing it, less taxes such as GST. In reality, the benefit could be less or more than this amount. Finally, the survey data are then used to provide estimates for the whole population or sub-groups of interest within it.

Payments of personal income tax by households are estimated on the basis of information about income in the survey year. Estimated income tax may well differ from actual tax payments. One reason for this is that, for business and investment income, tax payments may depend on income earned in past years as well as the current year. Payments of GST are estimated, on the assumption that the tax is passed forward to customers in higher prices, from data on household expenditure from the *Household Economic Survey*. The fiscal incidence study is discussed in more detail in the section Fiscal Incidence in New Zealand.

Fiscal incidence studies have often been thought to provide a justification for the welfare state because they show that redistribution occurs from those with high current incomes to those with low current incomes (see, for example, Statistics New Zealand, 1990, figures 20 and 21).

38 For the reasons given in the text, the statistical analysis presented in this chapter takes into account only government welfare state expenditures and household payments of direct and indirect taxation. This is also the practice in Australian studies (for example, ABS, 1996b). By contrast several New Zealand studies (including Statistics New Zealand, 1990) allocate other government expenditures – including the difference between total government income and outlays – and other taxes and government revenues even though there is no clear basis for doing so. This is done for completeness using arbitrary rules. Even here, the bulk of the effort has been made in allocating welfare state expenditures and household payments of direct and indirect taxation. Around two-thirds of total taxation is allocated in the present study.

Market incomes are incomes excluding government benefits. Because the lowest three deciles of the market income distribution are largely made up of retirees and other beneficiaries, the amount of market income received by households in these deciles is very low (Statistics New Zealand, 1999b, p 60). A government benefit such as health expenditure that is allocated fairly evenly across income groups will tend to promote equality in the income distribution after taxes and benefits because it is more equally distributed than market income. Moreover, most tax tends to be paid by people with higher incomes.

Although the equalising effect of taxes and benefits on the current income distribution provides a valid perspective, it is also a limited one. Nor does it exhaust the usefulness of fiscal incidence studies. A number of points are relevant here.

The first issue concerns the definition of income. The *Household Economic Survey* asks questions about income over the past 12 months. Although this 12-month accounting period eliminates a good deal of short-term fluctuation in incomes, it remains true that incomes fluctuate from year to year. Many students who receive a low income now can expect to earn a high income on graduation. Business people may be willing to accept a low income in the early stages of building up a business, but will hope to earn higher incomes in later years. Retired people who receive a low income now would have received a higher one when they were working. Many people experience an unusually high or an unusually low income in a particular year for many reasons. An unusually low income may be due, for example, to a period of unemployment; an unusually high one to the success of a long-term project. George Barker (1996) points to the substantial degree of mobility that exists within the New Zealand income distribution. Using income tax data he estimates that 25 percent of taxpayers in the lowest quintile of the income distribution at some time between 1980 and 1987 had moved up the income scale one year later, and 46 percent had moved up seven years later. However, many people who move up the income scale subsequently return to low-income status; see Chapter 6, Alternative Concepts of Churning for further discussion on this point.

A household's present standard of living is likely to depend as much on its longer-term income as on its current income. Households and individuals may have saved out of past income and may be able to borrow against future income. As a consequence, expenditure exceeds income for many households in the lowest income groups, and expenditure typically is less than income for households in the highest income groups. The problems arising from use of a short-term measure of income in examining fiscal incidence are discussed further in Buchanan and Hartley (2000, pp 55–59).[39]

Secondly, current market incomes exclude a great deal that can contribute to the standard of living of a household. For example, government cash benefits, government benefits in kind, imputed income from owner-occupied dwellings, gifts from other households and household production of goods and services are ignored. As Buchanan and Hartley note (p 57) a household in which someone cooks meals, makes household repairs and looks after the garden is likely to enjoy a higher standard of living than a household in which no-one does these things. Some households are better than others in getting by on a limited income; they are likely to enjoy a higher standard of living as a consequence. Some people may be willing to accept a lower income in return, for example, for interesting work, pleasant working conditions or the opportunity to live in a preferred location. These advantages contribute to a household's standard of living but are not included in measured income. Because the value of these advantages depends on subjective trade-offs made by individuals, it is not easily measurable.

Thirdly, as has been emphasised earlier in this report, market income and government benefits are, to a considerable extent, alternatives. If, for example, retirement benefits were reduced, the earnings and self-provided retirement incomes of older people would, after an adjustment period, be higher than they are now. Market income is, therefore, a somewhat artificial concept and may not provide the best starting-point for the assessment of the distributional implications of government benefits and taxation.

These difficulties are increased because market income is closely related to the income base that is used to determine access to income-tested benefits. Gross income (including government cash benefits) is closely related to the income base that is used to determine income tax payments. Some people may choose not to report some income to

---

39 Studies in other countries show typically that the distribution of income over a number of years or the lifetime is more equal than the distribution of current income. Hyslop (2000) has undertaken a study for New Zealand using the Inland Revenue Department's income tax database for 1994–97. He finds that a large fraction of income differences within his sample are transitory. He adds that "there is some reason to believe that these results may be driven by a relatively small fraction of outliers – that is, individuals who experience extremely large year-to-year changes in income. One interpretation for this is that there is a substantial amount of heterogenerity in the population with respect to income changes over the sample period".

tax authorities. Others may organise their financial affairs to reduce tax liabilities or to arrange access to benefits. It is likely that income, as recorded in the *Household Economic Survey*, reflects the income that is reported to the tax authorities, which is not always the household's true income.

One way of addressing some of these difficulties is to examine data on household expenditure as well as incomes. Although this is a useful idea there are problems with expenditure data. Household expenditure data are distorted because spending on items, such as consumer durables, is recorded in the period in which it occurs even though these items will provide benefits over a considerable period of time. Expenditure data may be distorted by unusual events such as a major illness, wedding or overseas holiday. Expenditure on items such as gambling, alcohol and tobacco is typically understated in household expenditure surveys. (For a discussion on income, expenditure and consumption measures of living standards, see Green, 2001.)

A fourth issue, which affects both income and expenditure data, is that no allowance is made for differences between the needs of households. It is fairly clear that a family of two adults and two children needs a larger income to achieve the same standard of living as a single adult who lives alone. However, it is extraordinarily difficult to determine how much more income the larger family needs. The difficulties arise at both the conceptual and the technical level. It is difficult, for example, to compare the well-being of families with and without children when differences in preferences and circumstances are the reason why some families have children and others do not. A comparison between the circumstances of families is inevitably subjective and is frequently made on the basis of limited information. In some circumstances it will be easy for observers to agree that one family is better off than another. But agreement will often not be easy.

Equivalence scales are often used to adjust household incomes for differences in household size and composition (see Statistics New Zealand, 1999b, pp 97–98). As Statistics New Zealand makes clear, the equivalence scales that are frequently used in policy discussions have been chosen because they appear intuitively reasonable to policy makers but have no clear basis in actual expenditure data. (By contrast, scales that have been estimated using household expenditure data have not been thought to be intuitively reasonable.) The Jensen scale that is used in the section Results of the Fiscal Incidence Study of this report is based on the average of a range of equivalence scales including several calculated on the basis of expenditure data.

Analysis presented in this chapter

There is no ideal answer to all of these difficulties. Nevertheless, something needs to be said about the distributional impact of the welfare state. A number of approaches are, therefore, considered in this chapter to assist in providing a balanced assessment.

First, a number of different income measures are discussed in assessing the extent to which redistribution occurs from high- to low-income earners. These are:

- market income;
- gross income before tax (market income plus government cash benefits);
- disposable income (gross income minus personal income tax);
- equivalent disposable income (disposable income adjusted by an equivalence scale);
- final income (disposable income plus in-kind government health and education benefits, minus indirect taxes); and
- household expenditure.

This analysis will permit an assessment of the extent to which conclusions about the redistributional impact of the welfare state vary if the definition of income changes.

Secondly, the effects of taxes and benefits in redistributing between households of different ages and composition are also discussed in this chapter. To what extent does the welfare state redistribute from younger to older households, or from those without children to those with children? Whereas an analysis by income group tends to focus attention on the households with the highest and lowest current incomes, the analysis by household group tends to focus attention on the average households within the relevant group. By contrast with incomes, which can fluctuate from year to year, people are likely to belong to a demographic group, such as families with children, for a number of years. The analysis by household group may, therefore, provide a better indication of the equity implications of the welfare state over a number of years than the analysis by income levels.[40] However, people are likely to belong to different household groups at various stages of their lives.

[40] Household size and composition are, to a substantial degree, matters of choice. They depend, for example, on decisions about whether to live alone or with relatives or others, and whether to have children and how many children to have. The estimated number of occupants per household in New Zealand has fallen from 2.9 in 1988 to 2.7 in 1998.

The analysis provides an indication of how the welfare state treats different types of households over the medium term rather than over their lifetimes.

Thirdly, the distributional implications of New Zealand's welfare state are compared in this chapter with those of the generally smaller Australian welfare state where assistance is more tightly targeted than it is in New Zealand. Although there are many difficulties, such a comparison is capable of providing insight into the distributional consequences of a move away from middle class welfare.

The plan of the rest of this chapter is as follows. The fiscal incidence study that was undertaken in New Zealand for 1997/98 is described below in the section Fiscal Incidence in New Zealand 1997/98. The results of the study are then presented in Results of the Fiscal Incidence Study. Comparisons of these results with previous New Zealand work and an Australian study are discussed in the section Some Comparisons. Finally, some conclusions are presented in the Summary.

FISCAL INCIDENCE IN NEW ZEALAND – 1997/98

The main data source for the incidence study is the Statistics New Zealand 1997/98 *Household Economic Survey*. This is a survey of about 3,500 households (including nearly 8,000 individuals) that is designed to be representative of the New Zealand population. The survey provides data about the incomes and socioeconomic circumstances of individuals and the expenditure of households.

Data from the *Household Economic Survey* have been supplemented by information on spending on education and health from the government budget, and administrative data on usage of education and health services. This is described below.

The data from the *Household Economic Survey* have been analysed using a mathematical model, known as Taxmod, which has been developed by the Treasury. Taxmod 'weights' each sample record to produce results that are intended to be representative of the New Zealand population. As a consequence of the weighting process, Taxmod provides good estimates of the transfers received by households and the taxes paid by them. Although people not living in private dwellings are excluded from the *Household Economic Survey* sample, Taxmod weights are designed to provide results that are representative of the population as a whole. Subsequent analyses assume implicitly that people not in private dwellings are similar (in terms of benefit receipt and tax payments) to people of the same age and sex in private dwellings. This is unlikely to be entirely accurate.

Results from Taxmod are available at the individual, family or household level. Data on individuals can be aggregated to provide information on the characteristics of households (such as age, gender, number of dependents and hours of work). Output can then be aggregated to provide results for groups within the population, such as superannuitants and families with children.

Taxmod calculates payments of direct and indirect taxation by households on the basis of the taxation laws and information about the incomes of family members and household expenditure.[41] Indirect taxes allocated in the present study primarily include GST and excise duties.

In this study I attempt to provide information about the immediate distributional consequences of government expenditure on the welfare state and the taxes that finance this expenditure. Information about the receipt of government cash benefits is available directly from the *Household Economic Survey*. As noted, payments of direct and indirect taxes by households are estimated using Taxmod.

It remains, then, to estimate the incidence of government non-cash benefits. This has been attempted in the present study for non-cash benefits in education and health. Spending on some items (such as housing) is excluded. Spending on non-cash benefits in housing was, however, not important in New Zealand in 1997/98. Income-related rents for people living in state houses have been reintroduced by the present government.

Data on government expenditure on education was taken from the budget documents (see Sutton, 1999a, for details of the procedure). Expenditure net of GST was allocated to households because this is the amount of benefit that they actually receive. Capital expenditure and expenditure to assist students was excluded from the total; information on payments to students is directly available from the *Household Economic Survey*.

The survey provides information on attendance at educational institutions by household members. (An adjustment was, however, made to obtain a realistic estimate of the number of students who attend independent schools.) Expenditure per student was calculated for each education programme by dividing the expenditure total by the relevant

[41] The amount of tax calculated by Taxmod may, therefore, differ from the amount of tax that a household actually pays.

number of students. The expenditure per student totals that result from these calculations were then allocated to households that include students.

This was done according to the following rules:

- expenditure on early childhood education: allocated to households according to the number of children enrolled;
- expenditure on schools: allocated according to the number of pupils and the year of schooling;
- expenditure on tertiary education: allocated according to the number of students, their age, the type of institution attended and whether they are full-time or part-time students;
- expenditure on parental development: allocated equally to households in the lowest quintile of the equivalent income distribution with at least one child aged 0 to 4 years;
- expenditure on youth training: allocated equally to persons who had received youth training in the 12 months preceding the survey; and
- expenditure on industry training: an amount that depends upon age and sex was allocated to persons in employment.

Information on government expenditure on health was taken from the budget documents (see Sutton 1999b) for details of the procedures). Spending on the GST was excluded from the data. The residential component for health services provided to the institutional population was excluded from health expenditures. Other health services provided to the institutional population were included because the Taxmod weighting procedure provides estimates that include this population. As noted earlier, this assumes implicitly that people in institutions are similar in relevant respects to persons of the same age and sex in private dwellings.

Information on the use of health services by households is not available from the *Household Economic Survey*. Instead, the average use of health services by individuals in a recent year, classified by age, sex and either ethnicity or eligibility for the Community Services Card (depending on the service), was obtained from administrative data. Average expenditure per head for each group of individuals was calculated by dividing government expenditure by average usage. Estimated government expenditure on health for each household was calculated by adding the expenditure attributed to each household member.

Expenditure on primary medical services, primary pharmaceutical services and laboratory and radiology services was allocated to individuals depending on their age, sex and whether or not they appeared to be eligible for a Community Services Card. (Coverage includes the immediate family members of cardholders as well as the cardholders themselves.) Separate allocators were calculated for each of these categories of government health expenditure.

Average expenditure on most other categories of health expenditure was allocated to individuals depending on their age, sex and whether they are of Maori/Pacific Islands or other ethnicity. Separate allocators were calculated for each expenditure category. This expenditure allocation process was adopted for the following expenditure categories:

- medical and surgical care in hospitals;
- mental health care;
- pregnancy and childbirth;
- dental health services;
- non-residential disability support services;
- public health services; and
- overhead expenditure, which includes clinical training and operating expenditure.

Finally, the health and education amounts that were allocated to individuals or households were pro-rated to ensure that the totals reconcile with relevant central government accounting data held in the New Zealand system of National Accounts. As a consequence of this methodology, off-budget government expenditure (for example, by the ACC) and expenditure by local government is excluded from the study.

As noted earlier, a number of income concepts can be defined once government cash and indirect benefits and direct and indirect taxes have been allocated to households.

Statistical analysis using these income concepts is developed in the rest of the chapter. In addition, it is sometimes useful to add direct and indirect taxes to calculate the total amount of these taxes paid by a household, and also to add direct and indirect benefits to calculate the total benefits received by them.

RESULTS OF THE FISCAL INCIDENCE STUDY

This section presents information on which households receive welfare state benefits and which households pay taxes in New Zealand today. Results are first presented, in sub-section (a), in which households are classified according to a number of alternative definitions of income. Results are then presented in sub-section (b) for households classified according to Statistics New Zealand's "life-stage groups" – households classified according to the age of adult household members and household composition.

Incomes

Summary information about the shares of total incomes, government benefits and taxes received by households classified according to their current market income is shown in Table 5.1.[42] Income is measured in the *Household Economic Survey* over a 12 month period. Market income excludes: capital gains or losses; fringe benefits; imputed rent from ownership of dwellings and imputed income from pension funds; production for home consumption and irregular items such as bequests, gifts and lottery wins (see Statistics New Zealand, 1999b, p 121). Income earned through companies, trusts and other entities that is not paid to individuals is unlikely to be reported in the *Household Economic Survey*. As discussed in the Introduction of this chapter, market income is an artificial concept because it ignores the government benefits that people actually receive and the taxes that they actually pay. Nevertheless, it provides a useful starting point.

Perhaps the most striking aspect of Table 5.1 is the low share of market income that is received by households in the two lowest quintiles (that is, fifths) of households by market income. The 40 percent of households with the lowest market incomes received only 6 percent of total market incomes. Persons in receipt of government cash benefits are likely to be members of the lowest and second deciles of the market income distribution – 43 percent of benefits are received by households in the lowest quintile and 35 percent are received by households in the second quintile. A significant percentage of cash benefits is also received by households in the third quintile. Although the current market incomes of superannuitants, in particular, are low, over their working lifetimes

[42] More detailed information, including the average annual amount in dollars, can be found in Table A.1 in the Appendix.

Table 5.1: Average incomes, benefits and taxes 1997/98 – households ranked by market income

	Incomes, benefits and taxes: shares received by quintiles (percent of total)					
	Lowest 20 percent	*Second quintile*	*Third quintile*	*Fourth quintile*	*Highest 20 percent*	*All households*
Market income	0.1	5.8	15.8	26.3	52.1	100
Direct taxes	4.5	6.9	13.6	23.1	52.0	100
Indirect taxes	9.1	13.7	19.2	22.8	35.2	100
Total taxes	6.0	9.2	15.5	23.0	46.3	100
Benefits	42.8	34.6	12.7	5.7	4.1	100
Education	11.5	20.1	23.1	22.0	23.3	100
Health	24.7	22.2	19.7	17.4	16.1	100
Total government social expenditure	31.7	28.5	16.6	12.1	11.1	100
Final income	9.3	12.8	16.3	22.4	39.1	100
Difference	(9.2)	(7.0)	(0.5)	(–3.9)	(–13.0)	

Notes: Figures in brackets show the difference (measured in percentage points) between the share of final income received by a group and the share of market income received by the same group. Households with negative market incomes are included.

Source: Statistics New Zealand (1998d), *Household Economic Survey*; Treasury data; author's calculations.

they are likely to have received income that reflected the experience of their generation as a whole. The current standard of living of superannuitants is likely to reflect their past incomes as well as their low current incomes.

By contrast, 32 percent of government education expenditure and 47 percent of government health expenditure is received by households in the two *lowest* quintiles of the market income distribution. These benefits, therefore, are much more likely than government cash benefits to be received by households with fairly high current market incomes.

The two *highest* quintiles of the market income distribution receive 78 percent of market incomes and pay 69 percent of taxes. They receive 23 percent of all government social expenditure but receive 45 percent of education benefits, and 34 percent of government health expenditure.

Government social expenditure for the two highest quintiles of the market income distribution equals in total about 28 percent of all direct tax payments (see Appendix Table A.1). This result indicates that the churning of income that occurs when the same household both receives government benefits and pays taxes is likely to be important in practice.

Moreover, because 73 percent of direct tax payments are made by households in the two highest quintiles of the market income distribution, it would appear to be possible to reduce tax payments by higher income households to compensate them for a reduction in the amount of government benefits received by them. These results establish that the issue of churning is worth investigating further. Of course, even within the two highest quintiles, households are likely to differ in the extent to which they pay taxes and receive government benefits. The issue of churning needs to be considered, therefore, for each individual household. This task is undertaken in Chapter 6.

Finally, Table 5.1 confirms that the distribution of final income (after allowing for tax payments and receipt of government welfare state benefits) is more nearly equal than the distribution of market income.

The effects of considering alternative definitions of income as an indicator of a household's standard of living are presented in Tables 5.2 to 5.7. Households are ranked according to:

- gross income in Tables 5.2 and 5.3 (and also Appendix Table A.2);
- disposable income in Table 5.4 and Appendix Table A.3;
- equivalent disposable income in Table 5.5;
- household final income in Table 5.6 and Appendix Table A.4; and
- household expenditure in Table 5.7.

Gross income includes (in addition to market income) receipts from government over the 12 month period considered by the *Household Expenditure Survey*. A comparison between Table 5.2 and Table 5.1 shows that the welfare state results in less apparent government redistribution from high-income to low-income households when households are ranked according to their gross rather than their market incomes. Most cash benefits, in particular, are received by households in the two lowest quintiles of the market income distribution.

The two highest quintiles of the household gross income distribution pay 75 percent of direct taxes and 70 percent of all taxes, and receive 27 percent of total government social expenditure. The benefits received by the two highest quintiles represent about 33 percent of direct tax payments.

A comparison between Tables 5.3 and 5.1 shows that, as expected, gross income is more equally distributed than household market income.

Table 5.2: Average incomes, benefits and taxes 1997/98 – households ranked by household gross income

	Incomes, benefits and taxes: shares received by quintiles (percent of total)					
	Lowest 20 percent	*Second quintile*	*Third quintile*	*Fourth quintile*	*Highest 20 percent*	*All households*
Market income	1.2	6.3	14.9	25.8	51.8	100
Direct taxes	4.1	7.4	13.5	23.1	52.0	100
Indirect taxes	9.3	13.4	18.9	23.1	35.3	100
Total taxes	5.8	9.4	15.2	23.1	46.4	100
Benefits	30.5	32.7	20.5	9.7	6.7	100
Education	9.0	18.7	26.3	23.3	22.7	100
Health	19.3	23.4	21.7	18.4	17.1	100
Total government social expenditure	23.1	27.4	22.1	14.7	12.7	100
Final Income	7.4	12.9	17.5	22.8	39.4	100
Difference	(6.2)	(6.6)	(2.6)	(–3.0)	(–12.4)	

Notes and *Source*: see Table 5.1.

Table 5.3: Average income, benefits and taxes 1997/98 – households ranked by household gross income: alternative presentation of benefits and taxes

	Incomes, benefits and taxes: shares received by quintiles (percent of total)					
	Lowest 20 percent	*Second quintile*	*Third quintile*	*Fourth quintile*	*Highest 20 percent*	*All households*
Household market Income	1.2	6.3	14.9	25.8	51.8	100
All benefits	30.5	32.7	20.5	9.7	6.7	100
Household gross income	5.9	10.6	15.8	23.2	44.5	100
Direct taxes	4.1	7.4	13.5	23.1	52.0	100
Household disposable income	6.5	11.6	16.6	23.2	42.1	100
Indirect social spending	14.2	21.1	24.0	20.8	19.9	100
Indirect taxes	9.3	13.4	18.9	23.1	35.3	100
Household final income	7.4	12.9	17.5	22.8	39.4	100
Difference	(6.2)	(6.6)	(2.6)	(–3.0)	(–12.4)	

Notes and *Source*: see Table 5.1.

Table 5.4: Average incomes, benefits and taxes 1997/98 – households ranked by household disposable income

	Incomes, benefits and taxes: shares received by quintiles (percent of total)					
	Lowest 20 percent	*Second quintile*	*Third quintile*	*Fourth quintile*	*Highest 20 percent*	*All households*
Market income	1.4	6.1	15.1	25.6	51.8	100
Direct taxes	4.2	7.6	13.8	23.0	51.5	100
Indirect taxes	9.3	13.4	18.6	23.5	35.3	100
Total taxes	5.9	9.5	15.5	23.1	46.0	100
Benefits	30.4	33.4	19.3	10.5	6.4	100
Education spending	8.7	19.5	22.4	26.2	23.1	100
Health spending	18.8	23.2	21.4	19.5	17.1	100
Total government social expenditure	22.9	28.0	20.5	16.1	12.6	100
Final Income	7.4	12.9	17.0	23.1	39.5	100
Difference	(6.0)	(6.8)	(1.9)	(–2.5)	(–12.3)	

Notes and *Source*: see Table 5.1.

Disposable income is what most people would think of as their after-tax income. Income tax (as calculated by the Treasury's model, Taxmod) is subtracted from gross income to calculate disposable income.

A comparison of Table 5.4 with Table 5.1 indicates that the effect of using disposable income in place of market income to rank households is to reduce the share of government benefits that is received by the lowest-ranked households. For example, the lowest 40 percent of households ranked by market income receive 60 percent of government welfare state benefits but the lowest 40 percent of households ranked by disposable income receive 51 percent of benefits.

Moreover, the use of disposable income to rank households increases the share of government expenditure that is received by the two highest quintiles. The two *highest* quintiles ranked by market income receive 23 percent of government expenditure and pay 75 percent of direct taxes and 69 percent of all taxes. The corresponding figures for the two highest quintiles of households ranked by disposable income are 29 percent, 75 percent and 69 percent, respectively. Government benefits received by the two highest quintiles of households ranked by disposable income equalled 35 percent of total direct tax payments in 1997/98. As a consequence of these differences, the welfare state appears to be less redistributive when households are ranked according to disposable income than when they are ranked according to market or gross income.

Equivalised disposable income is disposable income adjusted by an equivalence scale to allow for differences in the needs of a household. The scale used is the revised Jensen scale.[43]

The two lowest quintiles of households ranked by equivalised disposable income receive 9 percent of market incomes – a higher proportion than if market, gross or unadjusted disposable income is used to rank households (see Table 5.5). Government expenditure (and especially cash benefits) is heavily concentrated on the lowest two quintiles of the household equivalised disposable income distribution – although less so than when market income is used to rank households. This illustrates the close relationship between the Jensen scale and the criteria used to determine eligibility for benefits. The two highest quintiles pay 73 percent of direct taxes and 67 percent of all taxes, and receive 23 percent of total government social expenditure. The benefits received by the two highest quintiles equal about 27 percent of direct tax payments.

Table 5.5: Average incomes, benefits and taxes 1997/98 – households ranked by household equivalent disposable income

	Incomes, benefits and taxes: shares received by quintiles (percent of total)					
	Lowest 20 percent	*Second quintile*	*Third quintile*	*Fourth quintile*	*Highest 20 percent*	*All households*
Market income	1.4	7.3	16.2	25.5	49.4	100
Direct taxes	4.4	8.4	14.7	22.9	49.7	100
Indirect taxes	10.5	14.7	19.5	22.8	32.6	100
Total taxes	6.4	10.5	16.3	22.8	43.9	100
Benefits	35.0	32.3	17.0	10.2	5.5	100
Education spending	19.0	23.8	25.0	18.9	13.2	100
Health spending	21.8	27.7	19.9	17.0	13.6	100
Total government social expenditure	28.4	29.4	19.5	13.7	9.0	100
Final income	9.4	14.3	17.5	22.2	36.5	100
Difference	(8.0)	(7.0)	(1.3)	(–3.3)	(–12.9)	

Notes and *Source*: See Table 5.1.

[43] The scale is: 1 adult 1.00
1 adult with children 1.75
2 adults 1.54
2 adults and 1 child 1.86
2 adults and 2 children 2.17
For further details, see Statistics New Zealand (1990), page 15.

The results shown when households are ranked according to household final income are summarised in Table 5.6. It will be seen that the welfare state appears to be less redistributive when households are ranked by final income than when other definitions of income are used to rank households.

Table 5.6: Average incomes, benefits and taxes 1997/98 – households ranked by household final income

	Incomes, benefits and taxes: shares received by quintiles (percent of total)					
	Lowest 20 percent	*Second quintile*	*Third quintile*	*Fourth quintile*	*Highest 20 percent*	*All households*
Market income	1.9	7.6	14.7	25.0	50.7	100
Direct taxes	4.6	8.6	13.8	22.8	50.2	100
Indirect taxes	9.4	13.5	17.9	23.8	35.3	100
Total taxes	6.2	10.2	15.3	23.1	45.2	100
Benefits	28.8	28.4	22.7	12.9	7.1	100
Education spending	3.0	11.8	21.3	27.8	36.3	100
Health spending	16.5	20.5	20.9	22.1	20.1	100
Total government social expenditure	20.2	22.9	21.9	18.4	16.6	100
Final income	7.0	12.2	17.3	23.3	40.3	100
Difference	(5.1)	(4.6)	(2.6)	(–1.7)	(–10.4)	

Notes and *Source*: See Table 5.1.

The results obtained when households are ranked according to total household expenditure are presented in Table 5.7. Household expenditure is interesting here because it may be more indicative of a household's longer-term economic status than current income, which is likely to be influenced by short-term fluctuations. But, as noted earlier in the chapter, there are a number of difficulties with expenditure as measured in the *Household Economic Survey*. As with income, large families are likely to need a greater amount of expenditure than small households to achieve the same standard of living. No attempt has been made here to allow for this.

It can be seen from Table 5.7 that the two *lowest* quintiles of households ranked by household expenditure receive a higher share of market income, and pay a larger share of taxes, than the lowest quintiles of households ranked by the income measures. The two lowest quintiles ranked by expenditure receive a lower share of government social expenditure than the two lowest quintiles of families ranked by income (except for final income). The two *highest* quintiles of households ranked

Table 5.7: Average incomes, benefits and taxes 1997/98 – households ranked by total household expenditure

	Incomes, benefits and taxes: shares received by quintiles (percent of total)					
	Lowest 20 percent	*Second quintile*	*Third quintile*	*Fourth quintile*	*Highest 20 percent*	*All households*
Market income	7.5	8.5	17.4	24.3	42.4	100
Direct taxes	9.5	9.8	16.4	22.7	41.6	100
Indirect taxes	9.9	10.3	16.3	24.2	39.2	100
Total taxes	9.6	10.0	16.4	23.2	40.8	100
Benefits	28.1	29.5	19.2	15.6	7.7	100
Education spending	6.6	15.3	22.6	21.4	34.0	100
Health spending	20.1	22.6	18.6	19.6	19.3	100
Total government social expenditure	21.4	24.8	19.8	17.8	16.2	100
Final income	11.9	14.0	18.8	22.3	33.0	100
Difference	(4.4)	(5.5)	(1.4)	(–2.0)	(–9.4)	

Notes and *Source*: see Table 5.1.

by expenditure pay a lower share of taxes than the two highest quintiles of households ranked by any of the income measures. Even so, they make 64 percent of tax payments. They also receive 34 percent of all government social expenditure. The welfare state appears to be less redistributive when households are ranked according to expenditure rather than income. Although this is not shown here, expenditure is more equally distributed than income.

A summary of the preceding analysis is provided in Table 5.8. This table provides information on the share of final income received by a quintile and the share of market income received by the same quintile when households are ranked by alternative measures of income and expenditure. It will be seen that, regardless of the definition of income, the welfare state redistributes from high-income households to low-income households. However, the extent of redistribution from high-income to low-income households varies greatly on the measure used to rank households. The extent of redistribution appears greatest when households are ranked according to market income and equivalised disposable income, and least when households are ranked according to final income or expenditure.

In summary, a number of important points arise from this discussion:

- Payments of New Zealand Superannuation and benefits are largely made to those with low current market incomes. Taxes, and especially direct taxes, are largely paid by those with high current market

Table 5.8: Differences between share of final income and market income received by quintiles of households ranked by alternative measures of household income and expenditure – 1997/98

	Difference between share of final and market income (percentage points)				
	Lowest 20 percent	*Second quintile*	*Third quintile*	*Fourth quintile*	*Highest 20 percent*
Market income	9.2	7.0	0.5	–3.9	–13.0
Gross income	6.2	6.6	2.6	–3.0	–12.4
Disposable income	6.0	6.8	1.9	–2.5	–12.3
Equivalent disposable income	8.0	7.0	1.3	–3.3	–12.9
Final income	5.1	4.6	2.6	–1.7	–10.4
Expenditure	4.4	5.5	1.4	–2.0	–9.4

Source: see Table 5.1.

incomes. However, current market income as measured by the *Household Economic Survey*, is not necessarily a good measure of the standard of living of a household.

- A substantial proportion of government health and education benefits go to households with high current income. It might well be possible to provide significant reductions in income taxes (which would, in particular, benefit this group) if their access to government health and education benefits were limited.
- It has been argued that expenditure is a better measure than income of a household's standard of living over the medium term. The lowest quintile of households ranked by expenditure pay a higher share of taxes and receive a lower share of benefits than the lowest quintile of households ranked by income. The opposite is true for households in the highest quintiles. These differences support the idea that the welfare state is less redistributive over the medium term than examination of current income would indicate.[44]

[44] A difficulty in using measures of income (or expenditure) to rank households, and then observing the amount of redistribution at different income or expenditure levels, is that the distribution of income or expenditure would be different from what it now is were the amount of redistribution undertaken by government different. This is true of market income as it is of other concepts of income or expenditure (see the Introduction to this chapter for further discussion). Sceptics may doubt whether any of the distributions that have been identified is the 'true' distribution that would prevail in the absence of redistribution. They may wish to note, even so, that the apparent amount of redistribution varies greatly depending on the measure used to rank households.

Age of household members and household composition

As discussed earlier in this chapter, information about the average amounts received in benefits and paid in taxes by households of various types is important in assessing the distributional consequences of the welfare state.

Statistics New Zealand has developed a classification of households that depends on the stage of life that adult family members (and especially women) have reached. They comment (Statistics New Zealand, 1999b, p 121) on the usefulness of this classification as follows: "The reason for this grouping is that individual and household incomes vary significantly over the various stages of life, as do the number of dependants for whom the adults in the household are responsible. The analysis can be made more precise, and of increased usefulness to policy-making by grouping households into these generally more homogenous categories. Each life-stage group has enough members to permit statistical analysis of HES data, although survey errors for these groups will, of course, be larger than for all households".

In this classification, couples are of opposite sex. Children can be of any age: adult children are included as well as dependent children. Other family groups are households that include more than two adults (possibly with some of their children) with family connections between some of the household members. Non-family households are those in which none of the members of the household are related to one another. This category includes, therefore, unrelated individuals flatting together.[45]

An alternative classification of household groups has been proposed by the New Zealand Treasury. The Treasury classifies single person and multiple unit households in the same way as Statistics New Zealand. However, couples with and without children are grouped according to the number of hours worked by adult family members.

The distributional implications of New Zealand's welfare state are summarised for different types of households in Tables 5.9 and 5.10. Table 5.9 groups households according to the Statistics New Zealand classification while Table 5.10 groups households according to the alternative classification.

---

[45] These definitions of household types are those actually used by Statistics New Zealand for its 1987/88 fiscal incidence study but differ from the definitions set out on page 11 of Statistics New Zealand (1990) and page 121 of Statistics New Zealand (1999b).

The first column in each of these tables presents the share of market income (that is, income excluding government benefits) earned by each type of household. The second column shows the share of final income (income after direct and indirect taxes but including cash and in-kind government benefits) that is received by each type of household group. The third column shows the difference between the share of final income received by a group and its share of market income. A positive number in this column indicates that the welfare state redistributes toward this type of household; a negative number indicates that the welfare state redistributes away from this type of household. However, the amount of redistribution towards or away from a particular type depends on the number of households of that type as well as on how favourably they are treated by the welfare state.

Table 5.9: Percentage of market income and final income received by household groups – 1997/98: Statistics New Zealand household classification

	Market income %	*Final income* %	*Difference*[(a)] *percentage points*
Sole occupant:			
• Aged less than 40 years	2.5	2.0	–0.5
• Aged 40 to 62 years	5.5	4.2	–1.3
• Aged 63 and over	1.0	4.0	3.0
Couples without children:			
• Female aged under 40 years	9.1	6.6	–2.5
• Female aged 40 to 62 years	15.6	12.0	–3.6
• Female aged 63 and over	2.5	5.3	2.8
Couples with children:			
• Female aged under 30 years	2.8	3.2	0.4
• Female aged 30 to 34 years	5.4	5.3	–0.1
• Female aged 35 to 39 years	10.2	9.2	–1.0
• Female aged 40 to 44 years	10.0	8.5	–1.5
• Female aged 45 to 49 years	8.4	6.9	–1.5
• Female aged 50 and over	5.9	5.6	–0.3
Sole parent families:			
• Parent aged under 30 years	0.1	0.8	0.7
• Parent aged 30 and over	3.1	5.7	2.6
Other family groups:			
• With children	6.5	9.1	2.6
• Without children	5.3	5.2	–0.1
Non-family groups	6.2	6.2	0
All households	100.0	100.0	

Note: (a) Percentage of final income minus percentage of market income.

Source: see Table 5.1.

Table 5.10: Percentage of market income and final income received by household groups – 1997/98: alternative definition of household type

	Market income %	*Final income* %	*Difference*[(a)] *percentage points*
Sole occupant:			
• Aged under 40 years	2.5	2.0	–0.5
• Aged 40 to 62 years	5.5	4.2	–1.2
• Aged 63 years and over	1.0	4.0	3.0
Couples, with or without children, no market income	–0.2	1.1	1.3
Couples without children:			
• Female aged 63 years or more	2.5	4.6	2.1
• Both work under 30 hours pw	0.7	1.1	0.5
• One works under, the other over, 30 hours pw	6.5	4.7	–1.8
• Both work over 30 hours pw	17.7	12.6	–5.1
Couples with children:			
• Both work under 30 hours pw	1.6	2.9	1.3
• One works under, the other over, 30 hours pw	21.7	19.8	–1.9
• Both work over 30 hours pw	19.4	15.6	–3.8
Sole parent families:			
• Parent aged under 30 years	0.1	0.9	0.7
• Parent aged 30 years or more	3.1	5.8	2.8
Other family groups:			
• With children	6.5	9.2	2.7
• Without children	5.3	5.2	–0.1
Non-family households	6.2	6.2	0
Total	100.0	100.0	

Notes and *Source*: see Table 5.1. Households with negative market income are included.
(a) Percentage of final income minus percentage of market income.

Tables 5.9 and 5.10 show that the welfare state generally redistributes from sole person households and couples below retirement age to similar households above retirement age. Sole parents and other family groups are net gainers. Couples with children pay more in taxes than they receive in benefits. This is especially true of couples in which at least one adult works more than 30 hours a week. However, younger couples with children and those in which both adult members work less than 30 hours a week receive more in benefits than they pay in taxes.

A more detailed analysis is presented in Table 5.11. This table shows the shares of incomes and benefits received, and taxes paid, by each group

Table 5.11: Average incomes, taxes and benefits by household type – 1997/98: households classified by household composition (Statistics New Zealand household classification)

	Percent of households	*Household market income*	*Direct taxes*	*Indirect taxes*	*All taxes*	*Benefits*	*Education spending*	*Health spending*	*Total government social expenditure*	*Final income*
Households: percent of total incomes, benefits and taxes: shares received by household types (percent of total)										
Sole occupant:										
• Aged less than 40 years	4.0	2.5	2.3	2.4	2.3	1.1	0.9	0.9	1.0	2.0 (–0.5)
• Aged 40 to 62 years	6.9	5.5	5.3	4.5	5.0	2.0	0.5	2.1	1.7	4.2 (–1.3)
• Aged 63 and over	10.1	1.0	2.8	3.9	3.2	16.9	0.1	10.5	11.7	4.0 (3.0)
Couples without children:										
• Female aged under 40 years	5.4	9.1	8.4	6.7	7.8	0.3	0.9	2.2	0.8	6.6 (–2.5)
• Female aged 40 to 62 years	11.7	15.6	15.3	13.0	14.5	5.6	0.7	7.3	4.9	12.0 (–3.6)
• Female aged 63 and over	7.3	2.5	4.4	5.3	4.7	17.8	0	12.7	12.7	5.3 (2.8)
Couples with children:										
• Female aged under 30 years	3.4	2.8	2.5	2.8	2.6	2.5	4.0	5.6	3.6	3.2 (0.4)
• Female aged 30 to 34 years	4.8	5.4	4.9	5.0	4.9	2.3	8.4	6.9	4.7	5.3 (–0.1)
• Female aged 35 to 39 years	6.5	10.2	9.8	8.7	9.4	2.8	15.1	8.0	6.7	9.2 (–1.0)
• Female aged 40 to 44 years	5.8	10.0	9.6	9.7	9.6	2.5	14.1	5.6	5.8	8.5 (–1.5)
• Female aged 45 to 49 years	4.2	8.4	7.9	6.9	7.5	1.4	8.2	3.9	3.5	6.9 (–1.5)
• Female aged 50 and over	4.6	5.9	5.8	6.1	5.9	5.9	3.5	5.4	5.2	5.6 (–0.3)
Sole parent families:										
• Parent aged under 30 years	1.3	0.1	0.3	0.5	0.4	2.7	1.7	1.8	2.3	0.8 (0.7)
• Parent aged 30 and over	7.4	3.1	3.7	5.1	4.2	12.6	12.6	6.5	11.2	5.7 (2.6)
Other family groups:										
• With children	6.8	6.5	6.5	7.3	6.8	13.5	15.9	11.4	13.6	9.1 (2.6)
• Without children	3.9	5.3	5.0	5.1	5.1	5.1	4.0	4.5	4.7	5.2 (–0.1)
Non-family groups	6.0	6.2	5.4	7.0	6.0	4.8	9.4	4.7	5.8	6.2 (0)
All households	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes and *Source*: See Table 5.1.
Figures in brackets show the difference between the share of final income received by the group and the share of market income received by the same group.

within the Statistics New Zealand household classification. Information on the average amounts of incomes, benefits and taxes according to this classification of households is shown in Table A.5 in the Appendix.

Table A.5 shows, in brackets, the percentage of each type of income and benefit that is received by each household group, and the percentage of taxes that are paid by each group. The percentage of incomes received, or taxes paid, by a household group depends on the number of households in the group as well as on the average amount that is received or paid by members of the group. The numbers of households in each group are therefore shown at the foot of the table.

A number of important points arise from these tables:

- The tax system bears heavily on certain groups. Couples without children where the woman is aged less than 63 years, couples with children and other family groups make up 57 percent of households but these groups pay 74 percent of tax. Twenty nine percent of households are couples with children but they pay 40 percent of taxes. Over half the tax bill is paid by families (including sole parent families) where children are present. The large share of all taxation paid by these groups reflects the large share of total income earned by them and the heavy expenditure required to establish a home and support a family. It is not necessarily indicative of the longer-term economic status of these groups.
- Some groups receive a disproportionately large share of government social expenditure. Thirty seven percent of households are sole occupants aged 63 years and over, couples in which the woman is aged 63 years and over, sole parents or other family groups. But these groups receive 56 percent of government social expenditure.
- Couples with children receive a disproportionately large amount of some benefits. Twenty nine percent of households are couples with children but they receive 53 percent of government education expenditure and 35 percent of government health expenditure.
- Other family groups are 11 percent of all households, receive 18 percent of benefits but pay 12 percent of taxes.

In general, the direction of redistribution within the New Zealand welfare state is from couples with children and couples without children who are below retirement age to older people, sole parents and other family groups. However, couples with children and other family groups both pay substantial amounts in taxes and receive substantial amounts in benefits. The net effect of the welfare state, especially for families with children, is small in relationship to the gross amount of social expenditure they receive and taxes they pay. This, once again, points to the importance of churning of income.[46]

Some further analysis has been undertaken to obtain a better understanding of the household type 'other family groups'. Around 9.9 percent of all households belong to other family groups. About 2.4 percent of households have a head of Maori or Pacific Islands ethnicity and belong to this category. A further 7.5 percent of households have a head of other ethnicity and belong to the same category. But while the majority of households within the other family groups category do not have a Maori or Pacific Islands head, households with such a head are more likely than others to fall within the other family group category. Thus, other family groups make up 25 percent of households with Maori or Pacific Islands ethnicity but only 8 percent of households of other ethnicity. Sixteen percent of adults and 14 percent of children live in the 10 percent of households that belong to the other family groups category.

SOME COMPARISONS

In this section I compare the distribution of government benefits and taxation in New Zealand today with studies that have been undertaken in New Zealand in the past and a study that has been undertaken in Australia. These comparisons are interesting because they allow the effects of different policies and institutions to be compared. For example, the distributional consequences of Australia's smaller and more targeted welfare state can be compared with those of New Zealand's more extensive welfare state. However, as noted earlier, fiscal incidence studies are based on a series of assumptions. Because different studies make different assumptions, the results are unlikely to be strictly comparable. Provided that the results used in the studies are broadly comparable, something can be learned from these comparisons. The emphasis should be on large differences over time or across countries that would still be important if assumptions were changed. The undertaking of a fiscal incidence study that permits exact comparisons between the New Zealand and Australian welfare states is a worthwhile longer-term objective for the statistical authorities of both countries.

---

46 This paragraph summarises the general direction of redistribution within New Zealand's welfare state. It is important to note that the degree of redistribution to different households within each group will vary. For example, a sole parent who works is likely to pay more in taxes, and receive less in benefits, than one who does not.

Comparisons with previous New Zealand studies

In its recent publication, *New Zealand Now: Incomes*, Statistics New Zealand (1999b) includes a discussion of the effect of income transfers and personal income tax on the income distribution in 1982, 1986, 1991 and 1996. The Statistics New Zealand study considers, therefore, fewer benefits and taxes than the more recent study that was considered in Chapter 5, Results of the Fiscal Incidence Study.

In its study Statistics New Zealand concludes (pp 63–65) that:

> … the major net gainers from government redistribution are retired and sole parent households. It appears that sole parent households have gained more from income transfers in 1991 and 1996 than in earlier years. In general, for most household types the net negative impact of transfers less taxes has diminished. This is especially so for younger couple with children households. This is probably a result of the fall in market income for these, and sole parent households … Net recipient households have extended further up the income scale (in terms of household market income ranking) in recent years. In 1982 and 1986, income transfers on average exceeded taxes paid only for those households in the bottom three deciles. In the later periods, 1991, and 1996, households in decile four also gained on average from government's cash redistribution.

This conclusion by Statistics New Zealand points to the replacement of market income by government transfers for low-income families. In part this reflects government policies to provide additional assistance to these groups during a period of economic difficulty which in turn has resulted in high levels of unemployment. Market incomes, however, have fallen since 1986 for younger families, sole parents and other family groups but not for the population as a whole (Statistics New Zealand, 1999b, Figure 4.6, p 57). This tends to suggest that the increased availability of benefits since the mid-1980s, and the disincentives associated with benefits, may have reduced the amount of earnings received by low-income families in employment.

Comparisons with Australia

The most recent fiscal incidence study undertaken in Australia was conducted by the Australian Bureau of Statistics for 1993/94 (ABS, 1996b).[47] This study used *Household Expenditure Survey* data and public

---

[47] A *Household Expenditure Survey* was conducted in Australia in 1998/99. Results from this survey are being released progressively – see for example ABS (2000b). A statistical incidence study based on the results of this survey will be published in mid-2001.

finance data to allocate to households Commonwealth, State and local government expenditure on social security and welfare, health and education and some housing expenditure. Cash benefits, including education assistance, were directly allocated on the basis of responses to the *Household Expenditure Survey* questionnaire. Indirect (that is, non-cash) education benefits were estimated for each type of education using public expenditure data and then dividing the expenditure totals by the numbers of attendees to obtain average expenditure per attendee. These amounts were then allocated to households using information from the *Household Expenditure Survey* on attendance. Higher Education Contribution Scheme (HECS) charges were deducted from student benefits for higher education.

Health benefits were allocated separately for hospital care, medical clinics, pharmaceuticals and other health benefits. Instead of allocating benefits according to actual use of health services (such that benefits would increase with ill-health), members of the *Household Expenditure Survey* population were allocated benefits according to the average utilisation for their age, sex and state or territory of residence. Expenditure on institutional services was allocated on the basis of hospital utilisation. However, nursing home expenditures were not included because such expenditures are likely to be outside the scope of the survey. Expenditure on non-institutional care was allocated on the basis of visits to doctors. Expenditure on pharmaceuticals, medical aids and appliances was allocated according to eligibility for concessions and survey data on usage. Other health benefits (such as public health and research) were allocated on a per capita basis for each state.

Housing benefits were allocated to households who were renting accommodation from government housing authorities on the basis of the rent subsidy they received. Government outlays on social security and welfare (other than cash benefits) were allocated on the basis of receipt of cash benefits. Differing average amounts were calculated for the main benefit types. Child care benefits were, however, calculated on the basis of household income and the probability that the children were attending eligible child care.

Direct taxes that were allocated in the fiscal incidence study included personal income tax and the Medicare levy. These were allocated to households on the basis of information on incomes that was provided in the *Household Expenditure Survey*. Indirect taxes were calculated by applying intermediate and final tax rates, derived from the 1989–90 Input-Output tables, to household expenditure. Because household expenditure does not account for the full amount of production and consumption recorded in the Input-Output tables only a proportion of indirect taxes was allocated to households. In fact, only 36 percent of total indirect taxes were allocated in the study. This discrepancy arises for a number of reasons:

- indirect taxes on final consumption expenditure accounted for only 47 percent of total indirect taxes in 1993/94;
- people in institutions were excluded from the *Household Expenditure Survey*;
- expenditure on items such as alcohol and tobacco was understated in the survey; and
- there were tax increases between 1989/90 (the year to which the Input-Output tables relate) and 1993/94 (the year of the *Household Expenditure Survey*).

The Australian study presented income data in terms of quintiles of households. Households were divided into three broad groups (single families, multiple families and households with only unrelated persons present, including sole person households). Additional categories were formed according to:

- the number of dependent children;
- the presence of non-dependent children and non-family individuals;
- the number of unrelated persons; and
- whether there is a one-parent family within the household.

This classification is similar to the one used for the New Zealand study. There are, however, some differences that are noted below.

It appears that the New Zealand and Australian studies are sufficiently close in their objectives and methods to make it useful to compare the results. Both allocate the main welfare state expenditures and taxes to households. Both use the cost of a benefit to government as a measure of the value of this expenditure. Both studies impute income tax payments by households based on the incomes of household members. Expenditure on non-cash benefits is calculated by dividing an expenditure total by administrative or survey data on the number of occasions of service to obtain an average cost per service. This is then multiplied by the number of services to obtain the benefit for each individual. These amounts are then added to obtain the total benefit for each household.

Although the two studies adopt broadly similar approaches, there are also differences between them that need to be considered in any comparison. These include the following:

- The New Zealand results include households with negative market incomes. The Australian study also includes them but sets the incomes of households with negative market incomes at zero when calculating tax payments. Inclusion of households with negative market incomes is likely to reduce slightly the share of income received by the lowest quintile of the income distribution; the effect is not large.
- The New Zealand data are for 1997/98 but the Australian data are for 1993/94. The Australian data, therefore, do not take account of policy changes that took place between 1993/94 and 1997/98.
- The Australian data are for the expenditure and taxation of Commonwealth, State and local government but the New Zealand data are for central government only.
- The New Zealand government expenditure data exclude capital expenditure. The Australian expenditure data appear to include capital expenditure.
- The Australian expenditure data are for cash benefits and indirect benefits in education, health, housing (including rent rebates in public housing) and social security and welfare (including care of the aged, disabled and children). By contrast, the New Zealand data are for indirect benefits in education and health only. As noted earlier, spending on child care in New Zealand is (mainly) included as part of education spending, and spending on the care of the aged and people with disabilities is included as part of the 'non-health' spending of the Ministry of Health. Spending on people in institutions is excluded from the Australian study. It is included (apart from the residential component of health services) for the New Zealand study. Spending on housing subsidies is included under cash benefits in New Zealand. On the whole it seems that the benefits allocated to households are broadly comparable between the two studies.
- Both studies allocate about 93 to 94 percent of personal income tax to households; some taxpayers in both New Zealand and Australia are outside the scope of household economic surveys. About 57 percent of indirect taxes were allocated in the New Zealand study but only 36 percent of indirect taxes were allocated in the Australian study. This

> largely reflects the different indirect tax systems of the two countries. If an adjustment were made to reduce the share of indirect taxes allocated in New Zealand to the Australian level, the share of total taxes paid by the lowest two quintiles of the disposable income distribution would fall from 16 to 15 percent.[48]

In summary, the two studies appear to be broadly comparable. There are, however, also important differences between them in the details. This indicates that emphasis should be placed on large differences between the overall results of the studies that may indicate where further investigation would be useful. In particular, I restrict analysis to discussion of the differences in the percentage shares of incomes, benefits and taxes that are received or paid by population groups.

Information on the distribution of government benefits and taxation in Australia by gross income quintile is presented in Table 5.12. In Table 5.13, I present some comparative information on the shares of market income and benefits received, and taxes paid, by the two lowest quintiles of the gross income distribution.

It can be seen from Table 5.13 that the two lowest quintiles of the income distribution pay a higher proportion of taxes in New Zealand than Australia. In New Zealand, personal income tax is levied from the first dollar of income and benefits are 'grossed up' to include an income tax component. By contrast, the Australian system of tax thresholds and rebates limits the extent to which individuals are both beneficiaries and taxpayers. Under the New Zealand system a higher proportion of personal income tax payments is attributable to those with low current incomes.

The two lowest quintiles of the current income distribution receive a higher share of government social expenditure in Australia than New Zealand. This is particularly true for cash benefits. The tightly targeted nature of the Australian age pension system directs expenditure to those with low current incomes. Moreover, the less extensive system of assistance for persons in employment in Australia also limits (by comparison with New Zealand) the leakage of benefits and family assistance to households in the higher quintiles of the current income distribution. The differences between the Australian and New Zealand

[48] As noted earlier, sample observations in the New Zealand study are weighted to ensure that the results closely approximate taxation receipts and government cash payments. The Australian data are not so weighted.

Table 5.12: Average incomes, benefits and taxes, Australia – 1993/94: households ranked by gross income

	Incomes, benefits and taxes: average weekly value (AUS$)					
	Lowest 20 percent	*Second quintile*	*Third quintile*	*Fourth quintile*	*Highest 20 percent*	
Market income	13.48	168.00	503.51	860.00	1,586.18	626.43
	(0.4)	(5.4)	(16.1)	(27.5)	(50.6)	(100)
Direct taxes	2.06	18.01	80.33	171.19	412.86	136.99
	(0.3)	(2.6)	(11.7)	(25.0)	(60.3)	(100)
Indirect taxes	28.90	43.17	58.96	73.81	96.60	60.28
	(9.6)	(14.3)	(19.6)	(24.5)	(32.1)	(100)
Total taxes	30.96	61.18	139.29	245.00	509.46	197.27
	(3.1)	(6.2)	(14.1)	(24.8)	(51.7)	(100)
Direct benefits	138.17	185.90	88.76	49.07	22.59	96.79
	(28.6)	(38.4)	(18.3)	(10.1)	(4.7)	(100)
Indirect education	17.11	42.75	62.70	67.36	71.15	52.19
benefits	(6.6)	(16.4)	(24.0)	(25.8)	(27.3)	(100)
Indirect health benefits	56.63	71.90	58.55	55.25	55.35	59.51
	(19.0)	(24.2)	(19.7)	(18.6)	(18.6)	(100)
Other Indirect Benefits[(a)]	38.79	42.12	19.36	11.12	4.96	23.25
	(33.4)	(36.2)	(16.7)	(9.6)	(4.3)	(100)
Total government	250.70	342.67	229.37	182.80	154.05	231.74
benefits	(21.6)	(29.6)	(19.8)	(15.8)	(13.3)	(100)
Final income	233.22	449.50	593.59	797.79	1,230.77	660.91
	(7.1)	(13.6)	(18.0)	(24.1)	(37.2)	(100)

Notes: Figures in brackets give the corresponding entry as a percentage of the row total.
(a) Housing benefits and social security and welfare benefits.

Source: ABS (1996b), Table 1.

arrangements are, however, likely to be reduced as a consequence of changes to the Australian pension and benefit arrangements made in conjunction with the introduction of a goods and services tax. Education benefits, however, are more concentrated on lower income groups in New Zealand than Australia. This reflects the greater emphasis on user pays in higher education in recent years. Despite differences in the shares of market income received by low-income households in the two countries, the share of final income received by these households is similar.

The effect of government benefits and taxation in redistributing income between households of differing ages and composition is investigated in Table 5.13 and 5.14. To enable comparisons to be drawn between the two studies, data from the New Zealand study have been re-analysed using

Table 5.13: Percentages of income and benefits received and taxes paid by households in the lowest two quintiles of the income distribution – New Zealand and Australia

	New Zealand[a] (percent)	*Australia[b] (percent)*
Market income	7.5	5.8
Direct tax	11.5	2.9
Indirect tax	22.7	23.9
Total tax	15.2	9.3
Cash benefits[c]	63.2	67.0
Education benefits	27.7	23.0
Health benefits	42.7	43.2
Other indirect benefits[d]	–	69.7
Total government benefits	50.5	51.2
Final income	20.3	20.7

Notes:
(a) Gross Income Distribution. Data are for 1997/98.
(b) Gross Income Distribution. Data are for 1993/94.
(c) Includes cash education benefits.
(d) Housing and social security and welfare indirect benefits. Included in health and education for New Zealand.

Source: See text.

the household classification that was developed for the Australian study. The main differences between the two classifications of household type are as follows:

- The Australian classification distinguishes between dependent and non-dependent children; the Statistics New Zealand classification does not make this distinction. Children can be of any age in both classifications.
- The Statistics New Zealand classification defines other family groups to be households that include a nuclear family as well as members of the extended family such as grandparents, uncles, aunts, nieces and nephews. The Australian classification shows data separately for other couples and other one-parent families.
- There are differences in age ranges between the two classifications of household type.

Detailed data using the Australian classification of household type are presented in the Appendix, Table A.6.

The results of this analysis are presented in Tables 5.14 and 5.15. The first of these tables compares the overall distributional impact of the Australia and New Zealand welfare states. Table 5.15 provides more detailed information about the demographic composition of the population, and the percentage shares of benefits and taxes that are received by different types of families in the two countries.

Information on the difference between the share of final income and the share of market income that is received by a particular group is shown in Table 5.14. Although this is a useful indication of the overall impact of the welfare state, it is quite complex to interpret. The amount redistributed to or from a group depends on the size of the group as well as on

Table 5.14: Differences between shares of final and market income, by household composition – New Zealand and Australia

	Difference between share of final and market income (percentage points)	
	New Zealand	*Australia*
Sole occupant:		
• Aged less than 35 years	–0.3	–0.7
• Aged 35 to 61 years	–1.4	–0.6
• Aged 62 years or more	3.1	3.0
Couples without children:		
• Female aged less than 35 years	–2.1	–2.5
• Female aged 35 to 61 years	–4.1	–2.2
• Female aged 62 years or more	2.9	3.5
Couples with dependent children only:		
• Female aged under 25 years	0.1	0.1
• Female aged 25 to 34 years	0.2	0.2
• Female aged 35 to 44 years	–2.0	–0.8
• Females 45 years or more	–0.6	–0.5
Couples with dependent and non-dependent children	–0.4	–0.7
Couples with non-dependent children only	–1.2	–1.5
Sole parent families:		
• Parent aged under 35 years	1.4	1.2
• Parent aged 35 years and over	1.6	1.4
Other sole parent families	0.2	0.3
Other family households	2.5	0.2
Non-family households	0	–0.4

Source: New Zealand: Statistics New Zealand, *Household Economic Survey*; Treasury data; author's calculations. Australia: ABS (1996b); author's calculations.

Table 5.15: Percentage of taxes paid and benefits received, by household composition – New Zealand and Australia

	Percent of all households		*Percent of all benefits*		*Percent of all taxes*	
	New Zealand	*Australia*	*New Zealand*	*Australia*	*New Zealand*	*Australia*
Sole occupant:						
• Aged less than 35 years	2.8	4.5	0.8	1.3	1.6	3.2
• Aged between 35 and 61 years	7.8	8.5	1.9	3.9	5.6	5.6
• Aged 62 years or more	10.4	8.8	11.8	9.7	3.3	1.3
Couples without children:						
• Female aged less than 35 years	4.6	6.4	0.8	1.8	6.5	8.9
• Female aged between 35 and 61 years	12.0	11.6	4.4	6.3	15.5	12.6
• Female aged 62 years or more	7.9	7.9	13.2	12.8	5.1	2.8
Couples with dependent children only:						
• Females aged under 25 years	0.6	0.4	0.7	0.6	0.4	0.2
• Females aged between 25 and 34 years	7.5	8.0	7.6	8.9	7.1	8.4
• Female aged between 35 and 44 years	10.3	10.8	10.8	13.2	16.1	15.5
• Female aged 45 years or more	3.1	4.4	3.0	5.5	4.6	6.8
Couples with dependent and non-dependent children	2.3	3.2	2.8	4.2	3.9	6.1
Couples with non-dependent children only	5.4	7.2	4.7	6.8	7.9	11.0
Sole parent families with dependent children only:						
• Parent aged under 35 years	2.5	2.0	4.6	3.8	0.8	0.5
• Parent aged 35 years and over	3.6	3.1	6.0	5.2	1.6	1.3
Other sole parent families	2.6	1.5	2.8	2.3	2.2	1.6
Other family households	10.7	2.0	18.3	3.3	11.8	2.9
Non-family households	6.0	9.7	5.8	10.2	6.0	11.1
Total	100	100	100	100	100	100

Source: See Table 5.12.

government policy. Moreover, the difference between the share of final and market income received by a group provides a measure of the relative, rather than the absolute, amount of redistribution to the group since it depends on the treatment of groups other than the one that is being considered. In reading these tables it should be noted that New Zealand redistributes a greater share of GDP through the welfare state than does Australia.

It can be seen from Table 5.14 that the New Zealand welfare state emphasises redistribution to other family groups to a greater extent than the Australian welfare state. But there is a greater degree of redistribution away from couples with children in the New Zealand welfare state than in the Australian welfare state.

As shown in Table 5.15, there are important differences between the two countries in the demographic structure of their populations. In particular, New Zealand has a higher proportion of sole parents and other family groups than Australia and a lower proportion of couples with children and non-family groups.

The main points arising from Table 5.15 include the following:

- A much higher percentage of government benefits are received by other family households in New Zealand. New Zealand also allocates a significantly higher percentage of total benefits to sole parent households.
- The percentage of total benefits paid to retirees is slightly higher in New Zealand.
- Retirees and sole parents pay a higher percentage of the tax bill in New Zealand than Australia. This reflects differences between the tax systems of the two countries.
- A lower share of government benefits is paid to couples with children in New Zealand than Australia. They also pay a lower share of taxes. Much assistance to families with children is paid through the tax system in New Zealand.[49] However, payment of a considerable proportion of tax credits (for people in receipt of benefits) is made through the Department of Work and Income.

In reading these results it should be noted that the amounts of government welfare state benefits and redistribution are a higher percentage of GDP in New Zealand than Australia. For example, couples with children in New Zealand pay higher taxes (as a percentage of, say, per capita GDP) than similar families in Australia. As noted earlier, this

[49] The New Zealand income tax system taxes income from the first dollar but offsets the effect of this for those with low incomes through Low Income Rebate, Family Support and the Guaranteed Minimum Family Income. As a consequence, many people both pay substantial amounts in taxes and receive substantial amounts in benefit. By contrast, the Australian tax threshold limits the amount of tax paid by those earning low incomes. The Australian arrangements are less well-targeted than New Zealand's and exert upward pressure on tax rates. But they are more economical in the use of tax revenues and involve less churning of income.

partly reflects differences in the proportion of total taxes that has been allocated to households in the New Zealand and Australian studies. It also reflects higher government spending as a percentage of GDP in New Zealand.

According to the 1997/98 *Household Economic Survey*, couples with dependent children only in New Zealand received benefits that equalled 59 percent of GDP per capita, and paid taxes equal to 95 percent of GDP per capita. By contrast, according to the 1993/94 *Household Economic Survey*, couples with dependent children only in Australia received benefits that equalled 57 percent of GDP per capita, and paid taxes that equalled 53 percent of GDP per capita. I estimate that the average taxes paid by Australian couples with children would increase to 60 percent of GDP per capita if an adjustment were made to the data to ensure that the same proportion of indirect taxes was allocated to households in Australia as is allocated to households in New Zealand. On balance, it appears that couples with children are treated less generously by the New Zealand welfare state than by the Australian welfare state.

SUMMARY

The main points made in this chapter include the following:

- The consequences of the welfare state for equity depend both on who receives benefits and who pays for them.
- This chapter emphasises the immediate effect of government benefits and taxation in influencing the standard of living of various types of household. Nevertheless, the second round and longer-term consequences of government benefits and their financing are very important. Over the longer term, people are likely to respond to the availability of government benefits by reducing the amount of income they receive from work and investments.
- Despite many difficulties, fiscal incidence studies provide the best available basis for assessing the immediate consequences for equity of the welfare state and its financing.
- This chapter reports on a fiscal incidence study that is based on the 1997/98 *Household Economic Survey*, administrative data on benefit receipt and the Treasury's taxation model (Taxmod).
- Benefits and superannuation are largely received by people with a low current market income. By contrast, education and health expenditures are more evenly spread throughout the income distribution. Tax payments are largely made by those with high current market incomes.

- The welfare state redistributes from high-income to low-income households. However, the extent of redistribution between income classes varies substantially depending on which income measure is chosen to rank households.
- Incomes fluctuate from year to year and over a person's lifetime, and not everyone with a low current market income in a particular year is disadvantaged. Indeed, the conclusion that the welfare state redistributes from households with high incomes to those with low current incomes could well be modified substantially if data were available on household income over a number of years or a person's income over their lifetime.
- The general direction of redistribution in the New Zealand welfare state is from younger couples without children and couples with children to older people, sole parents and other family groups. However, couples with children and other family groups both pay substantial amounts in tax on average and receive substantial amounts in benefits.
- Australia has been more successful than New Zealand in restricting cash assistance to the lowest quintiles of the current income distribution. This is because of the means testing of age pensions and a less extensive system of benefits for low income persons in employment.
- The Australian welfare state appears to treat couples with children more generously than the relatively larger New Zealand welfare state.
- In summary, the welfare state has both favourable and unfavourable consequences for equity. This is a relevant factor in deciding how extensive a welfare state a country should have. Because New Zealand's welfare state is larger than Australia's in relation to GDP, both the favourable and the unfavourable consequences for equity are larger in New Zealand than in Australia.

6

An Analysis of Churning of Income

INTRODUCTION

The term 'churning' refers to situations where a government provides a benefit to a person or group and meets the cost of doing so by imposing a loss on the same person or group. In its broadest sense, churning includes many situations that are common in modern, democratic societies. For example, the payment of welfare state benefits to many households is offset to a large extent by payment of taxation by the same households. Taxation concessions for groups such as families with children are likely to be paid for to a considerable extent by the beneficiaries through an increase in some other element of taxation. Employment protection policies may benefit some employees but these gains are likely to be offset by reduced employment of others. Industrial policies are likely to proliferate resulting in a largely self-cancelling series of interventions that provide little net advantage to any sector.

Why does churning occur?

It may appear paradoxical that the government would provide a benefit to a group only to take it away through another intervention. However, such an outcome can easily be understood as the result of the competition for votes that is the basis of democratic politics (see de Jasay, 1985, pp 187–249 for further discussion of this point). The benefits provided by government programmes are immediate and clear, and are often directed to a small group. By contrast, the costs of government programmes are uncertain in their incidence, diffuse and slow in arriving. It takes only a moderate degree of wishful thinking, or ignorance or uncertainty about who ultimately pays for them, to make government programmes attractive to many people. As de Jasay noted (p 241): "false, consciousness, systematic error, a degree of producer – consumer schizophrenia and some free-riding bias in group action in favour of extending gains (and never mind that after every other group has extracted its gains, the first group's share in the resulting total of costs will have wiped out its gain) – all these deviations may suffice to offset, up to some point, the inconveniences and costs of churning and still produce political benefits on balance".

Another reason why people are willing to accept churning of income over the medium to long term is to reduce the burden involved in supporting and caring for children and older people. If the government did not provide pensions and health care for older people, it would be necessary for adult children to do more for their parents. The welfare state promotes the autonomy of both parties by enabling older people to live independently of their adult children. This provides benefits to both parents and children but can easily lead to a large and excessively costly welfare state.[50] However, personal independence can also be promoted through work and savings.

Beyond some point, the adverse effects of churning (in terms of the amount of government influence over previously mutually acceptable private agreements and the adverse consequences this has for economic prosperity and growth) will become increasingly obvious. Even the beneficiaries may come to understand that redistribution provides surprisingly small net benefits. There are likely to be demands, particularly during times of crisis, to roll back the state. But these will be opposed by those people who have come to depend on government benefits and find it hard to imagine how they can manage without them.

Churning may occur even if governments wish to direct assistance to those who need it most. This may be because the government does not have sufficient information about people's circumstances or may face administrative or political difficulties in targeting assistance carefully.

Because of uncertainty about who ultimately pays for government benefits and taxation it is very difficult to estimate the full extent of churning. This chapter attempts the easier task of assessing the extent to which receipt of welfare state benefits is offset by payment of direct and indirect taxes by the same household. This, obviously, is a partial analysis. Even within the government's budget there are disbursements other than welfare state expenditures that provide benefits to households, and taxes other than direct and indirect taxes. Nevertheless, the welfare state area is one of considerable interest in its own right and one where it is possible

---

50 Cross hauling, in which people work (for example, in child care) to help each other earn the taxable pay that induces them to work for each other in the first place, is another example of churning. See Chapter 3, Personal Social Services and Housing above for further discussion on this point.

to say something about the incidence of government spending and taxing on the basis of assumptions that are simple in principle although complex to apply in practice.

Churning of income in this narrower sense is important in New Zealand. The 40 percent of households with the highest current incomes both pay a high proportion of taxes and, because they include a large proportion of families with children, receive substantial amounts in health and education benefits. The scope to adopt policies that reduce both the benefits received and the taxes paid by such households would appear to be considerable. Such policies would reduce the adverse effects of taxation that were discussed earlier in this report.

Alternative concepts of churning

There are a number of concepts of churning that can be distinguished depending on the time period that is considered.

The first concept, which is emphasised in the statistical analysis that I describe later in this chapter, is simultaneous churning. This refers to a situation where a household receives benefits *at the same time* as it pays a substantial amount in taxes. Incomes are, in practice, measured over a 12-month period for the *Household Economic Survey*. A number of households that move from working to pensioner or beneficiary status (or the reverse) during the survey year will, therefore, be recorded as paying taxes on earnings and receiving benefits during the year. In reality, tax payments were made and benefits received sequentially rather than simultaneously. However, the *Household Economic Survey* largely records simultaneous churning.

There is a good deal of mobility in the New Zealand income distribution. For example, George Barker (1996) records that 25 percent of taxpayers in the lowest quintile of the income distribution had moved up the income scale one year later, and 46 percent had moved up seven years later. A study of the duration of benefit receipt that has been undertaken by the Treasury and the Department of Social Welfare shows that many spells on benefits are of short duration (see Cox 1998, pp 26–27 for further discussion). According to the study, around 10 percent of spells on benefits are for three years or longer. But 75 percent of the unemployment and sickness beneficiaries, 41 percent of the domestic purposes beneficiaries, 17 percent of the widows beneficiaries and 16 percent of the invalids beneficiaries in the study left benefits during the first year of receipt. Nearly 50 percent of New Zealand's working age population received benefits during the four-and-a-half year period preceding the study.[51]

These findings suggest that it would be useful to develop an indicator of medium-term churning. This would measure the extent to which those who receive benefits from government during a five-year period also pay taxes during that period. A large amount of information would be required to estimate this measure of the extent of churning; it would be necessary to relate information on receipt of government benefits to taxation payments over a number of years. Longitudinal data of this type are expensive to collect and require considerable care in so doing. For example, the standard of living for people is likely to depend on the income of the household to which they belong. Because many people will live in several households during a five-year period, it is necessary, if individuals are to be credited with the correct income, to match them with the correct household throughout the period. Similar difficulties arise because the total amount of benefits received or taxes paid by all members of a household are likely to be more relevant than those received or paid by a particular individual. Nevertheless, as the Treasury/Department of Social Welfare study referred to above indicates, there is considerable interest in obtaining such data. They are not available for this report. The extent of medium-term churning of income through the welfare state is likely to be significantly greater than the extent of simultaneous churning.

As noted elsewhere in this report, retired people in New Zealand benefit from substantial government expenditure on health and superannuation. However, their current incomes and tax payments are very low. But the low current incomes of superannuitants are not an accurate measure of their economic status. Over their lifetimes, superannuitants have received roughly the average income for their generation and have acquired assets (such as houses and consumer durables) that make their standard of living in retirement more comfortable than it would be otherwise. Because of small household size, retirees need lower income (or expenditure) to support a given standard

---

51 The Ministry of Social Policy points out that this analysis may under-estimate the extent to which former beneficiaries return to benefits. Analysis of benefit duration data, for example, shows that 64 percent of people moving off the unemployment benefit within two-and-a-half years of 1993 returned to the benefit system within two-and-a-half years of leaving. See Wilson (1999) for further discussion.

of living than a household that includes children or young adults. Moreover, persons of high socioeconomic status are disproportionately likely to survive to be superannuitants.

The high level of home ownership among older people points to the importance of lifetime churning. As retirement approaches, households move from high income, high taxpaying status to low income (but often asset rich) and benefit receiving status.

Data from the 1996 Census of Housing indicates that 48,879 out of 116,076 households with incomes between $10,001 and $15,000 owned their houses and did not make mortgage payments. This represents 42 percent of these low-income households. By contrast, 26 percent of households with household incomes over $70,000 owned their homes and did not make mortgage payments. As noted in Chapter 3, Private Provision of Retirement Incomes, persons aged 60 to 69 had a mean net worth of $140,000 and persons aged 70 years and over had a mean net worth of about $120,000. This compares with mean net worth of about $90,000 for the population as a whole.

These points indicate that the idea of lifetime churning is likely to be of interest. The extent of lifetime churning could be measured by estimating the amounts of government benefits received and taxes paid over a lifetime by groups defined according to year of birth or socio-economic status. Some illustrative calculations of this type have been made (notably by David Thompson, 1991) that indicate that the balance between benefits received and taxes paid is less favourable for those who were born later than for those who were born earlier. But it would require a great effort in data collection to make careful estimates of the extent of churning over an extended period, let alone a lifetime. In fact, data limitations restrict us to studying only simultaneous churning at this stage.

Reasons for concern about churning

There are a number of reasons for being concerned about the extent of churning. These objections to churning hold strongest when receipt of benefits and payment of taxes occurs simultaneously, but also hold true to a reduced extent when churning occurs over a longer period of time.

First, the net benefit to a household is likely to be small or even zero if the government pays it a benefit but requires a similar amount to be contributed through taxation. Many households, moreover, would, in the absence of government subsidy, spend a similar amount as the government now spends on their behalf on health, education or provision for retirement. To the extent that this is true, the main effect of the government subsidy is to extend the scope of government decision making and to reduce the extent to which households are able to make decisions about the education, health care or retirement incomes of their members. The substitution of government for private effort is undesirable because it reduces the diversity of social arrangements and the scope for experimentation, leads to the problems of government-owned monopoly, including excessive costs and lack of responsiveness, and requires decisions to be made by ministers and officials on the basis of very limited information.

Secondly, the replacement of decision making by households with decision making by governments involves the substitution of tax finance for recovery of costs through market prices. As a consequence, the disincentive effects of taxation come into play; direct and indirect taxes both create disincentives to earn extra income. A reduction in taxation would make it easier for families to improve their circumstances through their own efforts. Middle and higher income earners will be required to pay for health, education or retirement incomes either directly from their pockets or through taxation. Although the situation may be different for low-income earners, the equity advantages from financing through taxation the education and health care of persons living in middle-to-upper income households are not likely to be great.

Churning involves a redistribution of resources through government that does nothing for equity. Because the disincentive effects of taxation come into play, society is unambiguously worse off as a result of churning.

Thirdly, the definitions of churning outlined above draw attention to the alternatives to taxation finance that are available. Where simultaneous churning occurs, replacement of government-provided and financed health and education by private alternatives should be considered. Replacement of tax-financed government benefits by government-provided loans or loan guarantees may be reasonable where churning occurs over a number of years. This approach, until recently, was increasingly being followed for student assistance. The idea of churning of income over the lifetime draws attention to the many ways in which people can provide themselves with an income during retirement. These include purchasing a home, occupational superannuation and other investments. As noted earlier in this report, there are good reasons to believe that generous government-provided retirement incomes programmes, as in New Zealand, reduce the extent of private saving for retirement, especially through savings media other than home ownership.

Some countries, such as the Netherlands and the Scandinavian countries, that provide generous benefits also withdraw a large proportion of these benefits through taxation. As will be demonstrated later in this chapter, the same is true, although to a lesser extent, for New Zealand. As a consequence, the difference between the net benefits received by beneficiaries in high benefit, high taxation countries (such as Sweden and the Netherlands) and low benefit, low taxation countries (such as the United States and Australia) is much less than inspection of the gross expenditure data would suggest. However, the churning of income and, hence, tax rates is likely to be particularly great in the high benefit, high tax countries. Although the taxation of benefits reduces the amount that has to be financed by taxpayers who are not beneficiaries, it generally reduces the incentives for beneficiaries to find work or increase income from investments.[52]

Finally, although taxation is now at historically high levels, writers such as Tanzi (2000) have argued that some current economic developments are likely to weaken the ability of governments to raise large amounts through taxation in the future. These developments include the increasing internationalisation of economic activity, the growth of electronic commerce, the increasing importance of trade within multinational companies and the greater mobility of capital and certain types of skilled labour. New Zealand is likely to be affected by these developments even though it is located at some distance from the main centres of economic activity in the world.

If taxation becomes increasingly hard to levy, the ability of governments to achieve their social objectives through tax-financed government expenditure will be reduced. Tax receipts will become an increasingly scarce resource that must be used more carefully, especially to provide a safety net income for those who would not otherwise be provided for. Moreover, government will need to consider whether they can achieve their social objectives by other means, including through tax

52 Adema (1999, Table 7) notes that gross public social expenditure in 1995 was 20.3 percent of GDP in Australia and 17.1 percent in the United States. By contrast, gross public social expenditure was 37.6 percent of GDP in Denmark and 36.4 percent in Sweden. The figures for net direct public social expenditure (which allows for direct and indirect taxation) were 18.4 percent of GDP, 15.9 percent, 23.5 percent and 25.4 percent, respectively. The figures converge further once allowance is made for private contributions to government-subsidised or regulated social programmes.

concessions or by regulation, without having unacceptably large adverse consequences for prosperity and economic growth.

The increasing scarcity of tax dollars suggests that churning – situations where the same person or household both pays taxes and receives government benefits – should be avoided wherever possible. This report illustrates the importance of churning and attempts to identify policy options that are capable of being implemented in the New Zealand context that will reduce the extent of churning.

RESULTS FOR THE WHOLE POPULATION

In this section I present estimates of the extent of simultaneous churning of income in New Zealand. To do this it is first necessary to develop a definition of churning that is capable of being applied to the data. I have used the following definition of churning: 'the amount of government spending on education, health, superannuation, benefits and family assistance that is directed towards the highest and second highest quintiles of taxpayers'. This definition includes the main areas of government social expenditure. Although most churning occurs within education and health, income support payments to households that simultaneously pay high taxes are also important.

The analysis presented in this chapter is based on the 'fiscal incidence study' that was described in Chapter 5. However, results are presented in this chapter for households ranked according to the amount of tax they pay and not the amount of income they receive. This is because I wish to investigate in this chapter the extent to which households that pay large amounts in tax also receive substantial amounts in government benefits. The New Zealand tax system provides a fairly close relationship between personal income and taxes paid because few tax deductions or rebates are available. Because all households pay at least some indirect tax, each quintile of the distribution of households by tax payments includes 20 percent of households. Households in the second highest and highest quintiles of taxpayers each paid more than $17,803 in direct and indirect tax payments in 1997/98. This is slightly less than the average total tax payment of $18,773 in that year. However, the average figure is greatly influenced by the very large tax payments made by some households.

The amount of government social expenditure received by households in the three highest quintiles of taxpayers is used here as an alternative measure of churning. Most working households are within these quintiles. The lowest quintile of the taxable income distribution is largely populated by superannuitants and beneficiaries; the second quintile includes many superannuitants and beneficiaries as well as some working people. Any household in the three highest quintiles of taxpayers in 1997/98 would have paid at least $11,112 in tax.

As defined in this report, churning occurs at the level of the individual household. It is the household that receives benefits and that pays taxes. However, it is both practical (for reasons of confidentiality and statistical significance) and convenient to present results of an aggregate level. The difficulty here is that, just because a group of households both pays taxes and receives benefits, this does not necessarily imply that individual households within the group both pay taxes and receive benefits. Different households within the group might pay the taxes and receive the benefits.

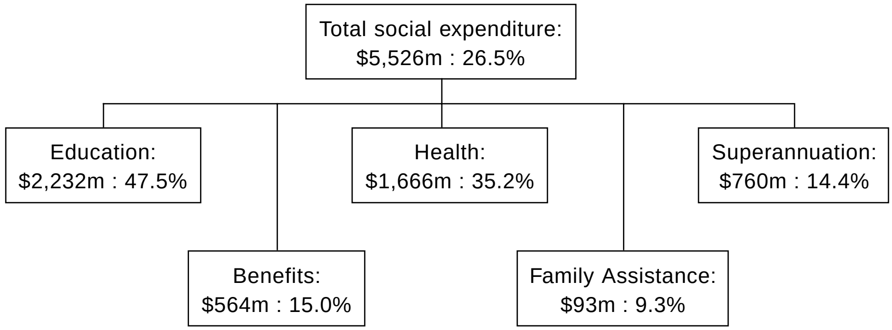
The analysis reported in this chapter attempts to resolve this difficulty as follows:

- The sample is first divided according to the amount of tax paid by the household. The amount of tax will therefore be fairly similar for each household within each of the groups.
- Attention is then focused on the total amount of government subsidy received by each group. This is an estimate that is obtained by summing amounts of subsidy received by each relevant household in the sample. However, the amount of subsidy received by households within the group will vary.
- Finally, the sample is further subdivided by demographic group. Given the assumptions underlying the fiscal incidence study, this results in groups that are fairly homogeneous in terms of benefit receipt.

The main results are presented in Table 6.1. This shows that 26.5 percent of total government social expenditure was paid to households in the two highest quintiles of taxpayers. This amounted to $5,526 million in 1997/98.

The amount of $5,526 million in 1997/98 in churned benefits was made up of $2,232 million in education payments (including student assistance), $1,666 million in health payments, $760 million in superannuation payments, $564 million in income-tested benefits and $93 million in family assistance. These figures correspond to 47.5 percent of education payments, 35.2 percent of health payments, 14.4 percent of superannuation payments, 15 percent of benefits and 9.3 percent of family assistance payments. The low extent of simultaneous churning of income support payments is obvious from Table 6.1.

Table 6.1: Amount of government social expenditure for households in the two highest quintiles of taxpaying households – 1997/98



Note: Total social expenditure includes spending on accommodation supplement, which is excluded here from benefits.

Source: *Household Economic Survey*, Statistics New Zealand (1998d); Treasury data; author's calculations.

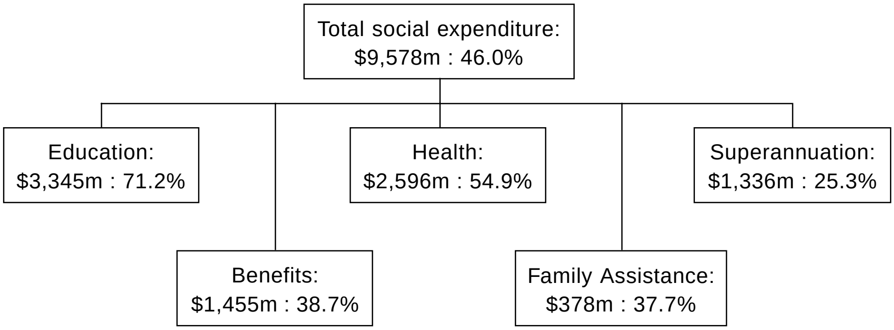
Education, health and superannuation payments made to the two highest quintiles of taxpayers in 1997/98 equalled 18 percent of all taxes and 27 percent of direct tax payments. If allowance is also made for income-tested benefits and family assistance that are received by the two highest quintiles of taxpayers, these figures increase to 21 percent and 32 percent, respectively. The amount of churned education, health and superannuation expenditure equalled 4.7 percent of GDP in 1997/98. If benefits and family assistance are also included, this figure increases to 5.6 percent of GDP.

In Chapter 5, I estimated that, depending on the definition of income, around 23 to 35 percent of government social expenditure is directed to households in the two highest quintiles of the 'income distribution'.[53] These estimates are consistent with the estimate, presented in Table 6.1, that 26.5 percent of social expenditure is directed to the two highest quintiles of 'taxpaying households'.

I also estimate that the two highest quintiles of taxpayers paid 68 percent of all taxes and 72 percent of direct taxes. There would appear to be considerable scope for simultaneous reduction in government benefits paid to higher income households and the amount of taxes they

53 The estimates for concepts of income other than final income are in the narrower range of 23 to 29 percent of GDP.

Table 6.2: Amount of government social expenditure for households in the three highest quintiles of taxpaying households – 1997/98



Note: Total social expenditure includes spending on the accommodation supplement, which is excluded here from benefits.

Source: See Table 6.1.

pay. However, even within the highest quintiles of taxpayers, households differ considerably in the amount of taxes they pay and the amount of government benefits they receive. This issue, which is discussed in detail later in this chapter, must also be considered in any revisions to social policy.

An estimate of the percentage of government assistance that is provided to the *three* highest quintiles of taxpayers is provided in Table 6.2. This group received $9,578 million in government social expenditure in 1997/98. This was 46 percent of all such assistance. Seventy one percent of education assistance, 54.9 percent of health assistance and 25.3 percent of superannuation assistance was provided to this broader group which also received 38.7 percent of income-tested benefits and 37.7 percent of family assistance. The amount of $9,578 million in churned expenditure equalled 37 percent of all tax payments or 56 percent of direct tax payments. The three highest quintiles paid 87 percent of direct taxes and 84 percent of all taxes. This illustrates the scope for tax reductions to compensate for reductions in government assistance to this group.

The next stage in the analysis is presented in Table 6.3. This table shows results for education and health expenditure (the two main programmes where churning occurs) and also for total government social expenditure. The table gives the percentage of households belonging to groups defined by membership of quintiles of taxes paid and quintiles of receipt of the relevant items of social expenditure. Quintiles of the distribution of education payments are used for the education section of the table; quintiles of health receipts for the health section; and quintiles of receipts of all social expenditure are used for the all government social expenditure section. The same household may, therefore, be recorded in different groups in each section of Table 6.3.

All households pay at least some indirect tax. The sum of each of the columns (quintiles of taxpayers) in Table 6.3 is 20 percent. The method of allocating health expenditure ensures that all households are recorded as having received at least some health expenditure. The sum of each of the rows in the health and all social expenditure sections of the table is, therefore, also 20 percent of households. However, many households receive no education payments. In the relevant part of Table 6.3 households receiving no education payments are separately recorded; households receiving some education benefits are then split into quintiles.

Table 6.3: Households classified by membership of quintiles of taxes paid and social benefits received – 1997/98 – percentage of households

Education	*Lowest tax quintile*	*Second tax quintile*	*Third tax quintile*	*Fourth tax quintile*	*Highest tax quintile*
(a) Education subsidies					
No subsidy	13.4	9.3	3.4	1.6	1.4
Lowest 20 percent	0.7	1.9	3.6	4.2	3.8
Second quintile	0.6	1.4	3.7	4.6	4.0
Third quintile	2.0	2.7	3.1	3.0	3.3
Fourth quintile	1.7	2.2	3.1	3.3	3.8
Highest 20 percent	1.6	2.5	3.0	3.3	3.6
(b) Health subsidies					
Lowest 20 percent	3.3	3.8	4.7	4.7	3.5
Second quintile	1.9	3.1	4.8	5.0	5.1
Third quintile	5.4	2.3	2.5	3.9	6.0
Fourth quintile	4.8	4.5	3.6	3.7	3.4
Highest 20 percent	4.5	6.4	4.3	2.7	2.0
(c) All government social policy expenditure					
Lowest 20 percent	0.7	2.5	5.3	6.4	5.1
Second quintile	1.4	2.4	4.2	5.0	7.0
Third quintile	4.8	2.6	3.3	4.2	5.0
Fourth quintile	8.0	4.8	2.9	2.2	2.1
Highest 20 percent	5.1	7.6	4.3	2.2	0.8

Source: See Table 6.1.

This table provides an indication of the extent to which the amount of a government benefit that a household receives varies with the amount of taxes it pays. If those with high tax payments are more likely to be receiving a particular benefit than those with low tax payments, then a higher proportion of households will be found in the bottom right hand corner of the table than in the bottom left hand corner. (For education payments, the 'none' row requires separate consideration.) Equally, if a particular benefit tends to be paid to those who pay little or nothing in tax, one might expect to find more households in the bottom left hand corner of the table than in the bottom right hand corner.

The education section of Table 6.3 shows that around 30 percent of households received no education subsidies in 1997/98. But the proportion of households receiving no education subsidy falls as tax payments increase; 93 percent of households in the highest quintile of taxpayers received an education subsidy. In general, the amount of subsidy received by households that receive any such subsidy increases as tax payments increase.

The amounts of education payments received by households vary significantly. The median amount of subsidy received by the lowest quintile of households receiving education subsidies was $16 in 1997/98; the median point of the highest quintile was $11,994.

As noted, the methods of allocation adopted in the study ensure that all households are credited with at least some government health expenditure. This is because the amount of subsidy credited to a household does not vary with its actual usage of health services but is an average amount that depends on the age, sex and ethnicity of household members and whether they are eligible for a Community Services Card. This average subsidy amount can be thought of as being similar in some ways to an insurance premium.

Because it understates the extent to which, other things being equal, the usage of health services varies with income, this "insurance approach" may well understate the extent to which churning of government health subsidies occurs (see Danzon, 1991, page 24, for further discussion). Better-off households are well able to take advantage of preventive health measures and obtain good access to personal health care services when they need them. It is certainly true that private expenditure on health increases with income. However, private expenditure on health may not be a good indicator of how much government health subsidy a household receives. Unfortunately, the administrative data now available do not enable the usage of health services by households in different income groups to be distinguished. This issue, however, is surely worthy of further investigation. Data from the health supplement to the 1995/96 *Household Economic Survey* could be used to obtain a better picture of health service usage by income. But it would be difficult to translate this into dollar amounts.

The amount of health subsidy that is credited to households varies greatly. The median point of the lowest quintile of health subsidies was $1,293 in 1997/98; the median point of the highest quintile was $5,906. The amount of health subsidy received by a household varies inversely with the amount paid in taxes – older people who are likely to be credited with high health expenses are concentrated in the lower quintiles of taxpayers. Nevertheless, 30 percent of households in the two highest quintiles of recipients of health subsidies were also in the two highest quintiles of taxpayers.

The median amount of all government social policy expenditure varies from $1,474 (bottom quintile) to $30,541 (top quintile). Social policy expenditure and especially cash benefits tend to be directed towards those households that pay the least amount of tax. Nevertheless, 18 percent of households in the two highest quintiles of receipt of social expenditure were also in the two highest quintiles of taxpayers.

In summary, the analysis undertaken in Table 6.3 demonstrates the great diversity of circumstances of households in general and of those in the two highest quintiles. This is an issue that needs to be considered in designing social policies.

RESULTS FOR DEMOGRAPHIC GROUPS

Overview

This section of the report supplements the results for the whole New Zealand population that were presented above in the section Results for the Whole Population with results for particular demographic groups. This analysis is interesting for two main reasons. First, it may pinpoint demographic groups for whom churning of income is particularly likely to occur. Secondly, there is likely to be less variation within demographic groups (for example, in terms of benefits received or taxes paid) than for the population as a whole. Estimates of the amounts of benefits received or taxes paid by these fairly homogeneous groups may, therefore, be particularly useful in understanding the distributional consequences of existing and possible alternative policies.

There are, however, some difficulties that need to be considered. Problems of statistical insignificance (and, indeed, confidentiality) are likely to arise when the sample is subdivided. Government expenditure has, moreover, been allocated to households on the basis of assumptions about how much subsidy they are likely to receive. If, for example, it appears that all households of a particular detailed type receive a similar amount of government subsidy, this may reflect the assumptions made for the study as much as the reality of the situation.

To minimise these dangers, a simplified classification of whether households pay high, medium or low taxes, or receive high, medium or low benefits, is used in this section. A less detailed classification of demographic groups than the one that was used in Chapter 5 is also presented here.

Households are considered to be high, medium or low taxpayers depending on whether they pay less than 50 percent of the median amount of total tax, between 50 and 150 percent of the median amount, or more than 150 percent of the median amount, respectively. A similar classification is used for recipients of government subsidies. Households are first divided into those that receive no subsidy (where relevant) and those that do. Recipients of subsidy are then divided into low, medium and high groups depending on whether they receive less than 50 percent of the median subsidy for those that receive a subsidy, between 50 and 150 percent of the median subsidy, or more than 150 percent of the median subsidy.[54]

The classification of household types that is used in this part of the analysis is as follows:

- Younger couples with children: These households comprise two parents, including a woman aged under 40 years, and at least one child aged under 18 years. This is a different (and more restrictive) definition of a child than the one used in Chapter 5.
- Older couples with children: These households comprise two parents, including a woman aged 40 years and over, and at least one child aged under 18 years.

[54] Note that the use of the household as the basis for analysis groups together some individuals who do not belong to the same family. The purpose of this analysis is to examine the extent to which the same household both receives government benefits and pays taxes. No attempt has therefore been made to adjust benefits and taxes for differences in households' needs.

- Sole parents with children: These households comprise a sole parent and at least one child aged under 18 years.
- Households that include young adults: These are households in which everyone is aged at least 18 years and under 62 years, and which include at least one person aged under 30 years.
- Other adult households: These are households in which no one is aged under 30 years but everyone is aged under 62 years.
- Sole person retirees: These are households comprising a sole person who is aged 62 years or over.
- Retiree couples: These are households in which everyone is aged 62 years or over or that are headed by a couple in which the woman is aged 62 years or over.
- Other retirees: These are households in which everyone is aged at least 18 years and in which at least one person is aged 62 years or over and is without a spouse.

A bridge is provided in Table 6.4 between the results for the whole population that were described on page 162 in Results for the Whole Population and the detailed results for particular demographic groups that are discussed later in this section. Because of sample size problems, Statistics New Zealand regulations prevent the publication of estimates for small groups (such as other retirees). For this reason, the entries may not add to the totals shown in the tables.

It will be seen from Table 6.4 that 32 percent of households are high taxpayers. This is, therefore, a more restrictive definition of a high tax paying household than the definition used in Results for the Whole Population. (In the same section all households that are members of the second highest or highest quintile of households by taxation payment were considered to be high tax paying households.) Around 21 percent of government social expenditure is received by households that pay in excess of 150 percent of the median amount of taxation. This compares with the estimate, shown in Table 6.1, that 26.5 percent of social expenditure is received by households in the second highest and highest quintile of taxpayers.

Estimates of the amount of government subsidy received by each demographic group, and the number of households in each group, are presented in Table 6.4. These estimates are then further divided according to whether the household is in the low, medium or high tax paying category.

Table 6.4: Government social expenditure by taxation category and demographic group – 1997/98

	Taxation group			
	Low	*Medium*	*High*	*Total*
Younger couples with children:				
Total subsidy ($m)	429	2,300	1,034	3,762
Number of households	14,680	124,413	87,530	226,623
Older couples with children:				
Total subsidy ($m)	224	1075	1,209	2,508
Number of households	6,577	54,333	81,744	142,654
Sole parents with children:				
Total subsidy ($m)	1,777	2,014	271	4,061
Number of households	61,576	70,683	12,048	144,307
Households with young adults:				
Total subsidy ($m)	159	979	915	2,054
Number of households	14,466	94,624	115,690	224,780
Other adults only households				
Total subsidy ($m)	609	1,016	381	2,005
Number of households	51,804	181,591	115,181	348,576
Sole person retirees:				
Total subsidy ($m)	2,060	355	some	2,453
Number of households	117,793	23,141	some	143,645
Retiree couples:				
Total subsidy ($m)	1,075	1,982	410	3,467
Number of households	40,525	73,586	15,496	129,607
Other retirees:				
Total subsidy ($m)	some	267	some	521
Number of households	some	12,933	some	24,012
Total population:				
Total subsidy ($m)	6,440	9,988	4,403	20,831
Number of households	311,495	635,304	437,405	1,384,204

Notes and *Source*: See Table 6.1.

Around 23 percent of households were in the low tax paying category in 1997/98. They received 31 percent of government social expenditure. Forty six percent of households were in the medium tax paying category; they received 48 percent of government social expenditure. As noted, 32 percent of households were in the high tax paying group and they received 21 percent of government social expenditure.

Government social expenditure for high tax paying households is heavily concentrated on families with children and, to a lesser extent, households where young adults are present. Couples with children comprised 39 percent of households in the high tax group, but received 51 percent of government social expenditure benefits that were received by this group. Households with young adults present comprised 26 percent of households in the high tax group and received 21 percent of relevant government social expenditures. By contrast, sole parents and retirees comprised 71 percent of households in the low tax group and received 76 percent of the relevant social expenditure that was received by the low tax group.

Table 6.5: Government social expenditure and tax payments by taxation category and demographic group – 1997/98

	All households		*High taxation households*	
	Benefits	*Taxes*	*Benefits*	*Taxes*
Younger couples with children:				
Amount received or paid ($m)	3,762	4,916	1,034	3,105
Percent of column total	18	19	23	19
Older couples with children:				
Amount received or paid ($m)	2,508	4,240	1,209	3,416
Percent of column total	12	16	27	21
Sole parents with children:				
Amount received or paid ($m)	4,061	1,486	271	359
Percent of column total	19	6	6	2
Households with young adults:				
Amount received or paid ($m)	2,054	5,509	915	4,058
Percent of column total	10	21	21	25
Other adults only households:				
Amount received or paid ($m)	2,005	7,040	381	4,292
Percent of column total	10	27	9	27
Sole person retirees:				
Amount received or paid ($m)	2,453	864	37	102
Percent of column total	12	3	1	1
Retiree couples:				
Amount received or paid ($m)	3,467	1,578	410	563
Percent of column total	17	6	9	3
Other retirees:				
Amount received or paid ($m)	521	352	147	183
Percent of column total	3	1	3	1
Total ($m):				
Amount received or paid ($m)	20,831	25,985	4,403	16,076
Percent of column total	100	100	100	100

Notes and *Source*: See Table 6.1.

Table 6.5 is another summary table. This table shows the amount of taxes paid and benefits received by each of the demographic groups. Results are shown for all households and those in the high tax group. The high tax group comprised 32 percent of households; this group paid 62 percent of direct and indirect taxation in 1997/98.

The groups most likely to experience churning of income are younger and older couples with children under 18 years of age and households with young adults present. Each of these groups received more than 10 percent of all benefits and paid more than 10 percent of all taxes paid by the high taxation group. Moreover, around 40 percent of the total tax bill was paid by couples and sole parents with children under 18 years; this figure is arguably an under-estimate since it excludes families who are supporting a student (or, indeed, a young person who is looking for work) who is over the age of 18 years. Around 62 percent of the total tax bill was paid by families with children plus households with a young adult present who is aged under 30 years.

As noted earlier, couples with children received 51 percent of the government social expenditure that was received by the high taxation group of households; households with young adults received an additional 21 percent of government social benefits that were received by this group. Table 6.5 shows that these groups paid 40 percent and 25 percent, respectively, of taxes paid by the high taxation group of households.

Information about the extent of churning for individual government expenditure programmes is shown in Tables 6.6 and 6.7. Table 6.6 shows that education and health benefits comprised over 70 percent of government social expenditure received by high taxation households in

Table 6.6: All households: government social expenditure and direct and indirect taxation classified by taxation group of households ($m) – 1997/98

	Taxation group			
	Low	*Medium*	*High*	*Total*
Education	665	2,206	1,824	4,695
Health	1,153	2,237	1,341	4,731
New Zealand Superannuation	2,453	2,212	624	5,289
Benefits	1,842	2,719	553	5,114
Family Support	328	613	61	1,002
Total social expenditure	6,440	9,988	4,403	20,831
Taxation	1,542	8,367	16,076	25,985
Number of households	311,495	635,304	437,405	1,384,204

Source: See Table 6.1.

Table 6.7: Taxation groups for all households: percentage of total government social expenditure, direct and indirect taxes and household numbers within each group – 1997/98

	Taxation group			
	Low %	*Medium* %	*High* %	*Total* %
Education	14.2	47.0	38.8	100
Health	24.4	47.3	28.3	100
New Zealand Superannuation	46.4	41.8	11.8	100
Benefits	36.0	53.2	10.8	100
Family Support	32.7	61.2	6.1	100
Total social expenditure	30.9	47.9	21.1	100
Taxation	5.9	32.2	61.9	100
Number of households	22.5	45.9	31.6	100

Source: See Table 6.1.

1997/98. But it is interesting to note that over $1,200 million in income support payments were made to households that paid more than 150 percent of the median amount of taxation. Table 6.7 shows that 39 percent of education benefits and 28 percent of health benefits were received by high taxation households.

The receipt of substantial amounts of government social expenditure (and especially education and health benefits) by groups that at the same time pay high taxes indicates that there is scope for policies to reduce the amount of churning of income. It is reasonable to argue that the 46 percent of couples with children that have current incomes high enough to be part of the high taxation group do not need government subsidies or could manage well with a reduced subsidy. Lower tax rates would assist families to replace reduced government benefits by increased private incomes. Nevertheless, the high proportion of churned benefits that are received by families with children is an issue that needs to be considered in the design of future social policy.[55]

There are a number of possible approaches to this issue. One approach is to give people time to adjust by introducing changes gradually. Another is to supplement reductions in taxes by government subsidies which,

[55] This analysis points to the direction in which I think it would be desirable for policy to move. There are many issues to be considered in devising policies that, starting from the present situation in New Zealand, will move in this direction. These issues are discussed in Chapter 7. For example, means testing access to government health and education subsidies would give rise to disincentive effects over the range of incomes where assistance is phased out.

while encouraging greater competition and choice in the provision of services, are directed to families with children. Subsidies to private schools that vary with the number of children attending the school are one example of such a policy. A third possibility is to take a broader view of churning. Much government expenditure that is directed towards sole parents and superannuitants would be included if a longer-term view of churning was taken. Revised policies for superannuitants and sole parents (for example, a reduction in benefits in relation to earnings) would provide scope for reductions in taxation that would be of particular benefit to families with children. Thus, although this chapter reports on the extent of simultaneous receipt of benefits and payment of taxes by households, a broader view of the scope for reductions in government expenditure is preferable.

Detailed results

Results for each of the demographic groups that were defined earlier are presented in Tables B.1 to B.8 in the Appendix. There are two tables for each group. The first table shows the amount of each type of government expenditure that is provided to the group and also the amount of tax that is paid by the group. These figures are then further divided to show the amounts of government benefits received, and taxes paid, by households in the low, medium and high tax categories.

The second table in each pair of tables shows the percentage of households in the relevant demographic group that are in the low, medium and high tax categories, the amount of social expenditure received, and the amount of taxation paid by each category. This analysis is undertaken separately for each item of government social expenditure

The main points arising from these tables are as follows:

- Younger couples with children aged under 18 years (Appendix Tables B.1(a) and B.1(b)). These households receive a greater share of education and health subsidies and family support than their share of the population, and are likely to be in the medium-to-high tax paying groups. Younger couples with children were 16.4 percent of households in 1997/98. Nineteen percent of all taxes were paid by this group and 18 percent of government social expenditure was received by them.
- Older couples with children aged under 18 years (Tables B.2(a) and B.2(b)). These households receive a greater than proportionate share of education and health subsidies and family support. More than half of these households are high taxpayers. Older families with children

were 10 percent of all households in 1997/98. Twelve percent of government social expenditure was received by these households and 16 percent of taxes were paid by them.

- Sole parents with children aged under 18 years (Tables B.3(a) and B.3(b)) are likely to be low-to-medium tax payers. These households receive a greater than proportionate share of education and health subsidies and also income-tested benefits and family support. Comprising 10.4 percent of households in 1997/98, sole parents received 19.5 percent of government social expenditure and paid 5.7 percent of taxes.
- Households with young adults (Tables B.4(a) and B.4(b)) are likely to be in the medium and high taxation groups. These households receive a greater than proportionate share of education subsidies. Households with young adults present comprised 16 percent of all households in 1997/98, received 10 percent of government social expenditure and paid 21 percent of total tax.
- Other adult households (Tables B.5(a) and B.5(b)) are likely to be in the medium and high tax paying categories; however a few of these households are in the low tax category. These households receive a lower than proportionate share of all types of social expenditure. Other adult households made up 25 percent of all households in 1997/98. They received 10 percent of government social expenditure and made 27.1 percent of tax payments.
- Almost all sole person retiree households (Tables B.6(a) and B.6(b)) are within the low tax paying category. They receive a greater than proportionate share of superannuation and health subsidies.[56] Sole person retirees comprised 10 percent of households in 1997/98. They received 12 percent of government social expenditure but paid 3 percent of taxes.
- Retiree couples are likely to be low-to-medium taxpayers: see Tables B.7(a) and B.7(b). They receive a greater than proportionate share of health and superannuation subsidies. Retiree couples made up 9 percent of all households in 1997/98, received 17 percent of government social expenditure but paid 6 percent of taxes.

[56] Note that the analysis excludes some government health spending for people in institutions, which is likely to be particularly important for the elderly. See Chapter 5, Fiscal Incidence in New Zealand for further discussion.

- Other retiree households are considered in Tables B.8(a) and B.8(b). These are households in which all members are aged over 18 years, and in which at least one person is aged over 62 years and does not have a spouse. Other retirees comprise 2 percent of all households in 1997/98, paid 1.4 percent of taxes and received 2.5 percent of government social expenditure.

In conclusion, three demographic groups – younger couples with children, older couples with children and households with young adults – pay 56 percent of all taxes. These groups comprise 43 percent of all households but 65 percent of households in the high tax group. These groups receive 40 percent of government social expenditure and 72 percent of social expenditure that is received by the high tax group. It is these groups that are affected by simultaneous churning especially of government education and health benefits. By contrast, sole parents and retirees make up 32 percent of all households and 6 percent of households in the high tax range. They receive 50 percent of government social expenditure and pay 16.5 percent of taxes.

SUMMARY

The main points made in this chapter include the following:

- Churning refers to a situation where a household receives government benefits but also pays a substantial amount in taxation.
- The churning of income is worrying because it suggests that some government benefits are unnecessary. Unnecessary government benefits substitute for private effort that would otherwise have occurred, displace higher priority government expenditure and worsen the disincentive effects of taxation.
- Churning involves a redistribution of resources through government that does nothing for equity. Because the disincentive effects of taxation come into play, society is unambiguously worse off as a result of churning.
- There are a number of possible definitions of churning. Simultaneous churning refers to receipt of benefits and payment of taxes by a household in the same year – this is relevant for much education and health expenditure. Short-term churning refers to the extent to which a household receives benefits and pays taxes over a number of years. This is relevant to much expenditure on benefits. Lifetime churning refers to the extent to which, over a lifetime, a household both receives benefits such as superannuation and pays taxes.

- Data limitations require us to consider only simultaneous churning in this report. The alternative concepts of churning are of assistance in considering alternatives to the existing government programmes.
- The total amount of government social expenditure for tax paying households in the two highest quintiles was equivalent to $5,526 million or 5.6 percent of GDP in 1997/98. This amount was made up of $2,232 million in education benefits, $1,666 million in health benefits and $1,417 million in income support payments.
- Twenty seven percent of government social expenditure benefited taxpayers in the two highest quintiles of taxpayers in 1997/98. This provides one measure of the extent of churning. Forty eight percent of government education expenditure, 35 percent of health expenditure and 14 percent of superannuation expenditure benefited households in the two highest quintiles of taxpayers. In addition, 15 percent of income-tested benefits and 9 percent of family assistance benefited households in the two highest quintiles of tax paying households.
- Government expenditure on education, in particular, appears to increase with current household income. The assumptions made in undertaking the fiscal incidence study may under-estimate the extent to which government health expenditure increases with current household income. Although households with low current incomes tend to have the highest health subsidies, nevertheless 30 percent of households in the two highest quintiles of recipients of health subsidies were also in the two highest quintiles of taxpayers.
- Three demographic groups within the population are particularly likely to be affected by churning. These groups are younger couples with children, older couples with children and households that include young adults. These groups comprised 43 percent of households in 1997/98 but 65 percent of households that paid more than 150 percent of the median amount of taxation. They paid 56 percent of all taxes and benefited from 40 percent of government social expenditure, including 75 percent of education and 46 percent of health spending.
- By contrast, sole parents and retirees made up 32 percent of all households and 6 percent of households that paid high taxes. They receive 50 percent of government social expenditure and paid 16.5 percent of taxes.

- Around 60 percent of government benefits that are paid to high taxpayers go to families with children. Education and health subsidies are mainly involved.
- Policy changes should not be limited to restricting the amount of education and health subsidies that are received by higher income households. Changes to superannuation and other benefits are also required. These measures would provide scope for substantial reductions in taxation that would especially favour households with children and young adults.

7

Some Thoughts on Policy

INTRODUCTION

It is generally agreed that policies relating to the core welfare state services – the main topic of this report – are some of the hardest for governments to change. This is not surprising: education, health care and income in retirement are important to almost everyone. People have come to expect that governments will fund the core welfare state services for everyone and that what the government provides will be adequate for almost everyone. The high taxation and inflation of recent decades have made it difficult for people to provide these services for themselves. For example, the current generation of older New Zealanders may well feel that they have had no alternative but to rely on the government to provide them with an income in their retirement; in any event, self-provision of retirement income is (as we have seen) at a low level in New Zealand. Having assured older people that the government will provide for their security, it may appear to be a breach of faith for governments to withdraw large amounts of assistance from older New Zealanders.

However, continuation of existing social policies is not a very attractive long-term option for New Zealand. Existing policies lock New Zealanders into a high level of dependence on government, certainly so by the standards of other English-speaking and Asian countries.

The disadvantages of a high level of dependence on government include:

- the disincentive effects of taxation;
- poor quality services, shortages, rationing of services and queuing;
- unnecessary costs arising from government monopoly provision;
- heavy exposure to political risks arising from possible future policy changes;
- inter-generational inequities; and
- the heavy burden that taxation places, in particular, on families with children.

All these difficulties are likely to worsen with the ageing of the population. Moreover, a high proportion of welfare state services are received by households that are simultaneously paying large amounts in tax. Families with children are likely to find themselves in this situation. If the taxes paid and benefits received by these families were reduced simultaneously, they would find it worthwhile to purchase superior private alternatives to government-provided welfare services. In addition, the overall cost to the community of funding and providing welfare services would be reduced.

Reform of the core welfare state is both necessary and difficult. Hayek (1960) has commented as follows on the issues that are involved (p 295):

> Yet, even if we approach the problem of provision for old age, as we ought to, in full awareness of the special responsibility which governments have incurred, we can but question whether the damage done to one generation (which, in the last resort, shares the responsibility) can justify the imposition upon a nation of a permanent system under which the normal source of income above a certain age is a politically determined pension paid out of current taxation. The whole Western world is tending toward this system, which is bound to produce problems that will dominate future policy to an extent yet uncomprehended by most. In our efforts to remedy one ill, we may well saddle future generations with a burden greater than they will be willing to bear, so tying their hands that, after many attempts to extricate themselves, they will probably in the end do so by an even greater breach of faith than we have committed.

This chapter considers whether it is possible for governments to reduce the extent of their involvement in the provision of welfare state services without causing great unfairness. Although initial losses to some groups may be unavoidable, care can be taken to ensure that the burden of adjustment is fairly shared. In particular, the reduced impediments to market transactions arising from lower taxation will greatly assist families to adjust to reduced availability of government services. Lower taxation, less and more flexible regulation and greater reliance on the market are all likely, once the transition has been negotiated, to improve the standard of living of most people and, in particular, education, health and retirement incomes.

The plan of this chapter is as follows:

- The section Two Possible Goals for Social Policy discusses what would be required to achieve two possible policy objectives that have been discussed earlier in this report: to reduce welfare state spending to the Australian level (about 20 percent of GDP) or the level in Hong Kong or Singapore (about 10 percent of GDP). This section sets out an ambitious policy agenda; the rest of the chapter considers the issues that would need to be addressed in implementing this agenda.

- The section Some Recent Contributions to the Policy Debate discusses important recent contributions to the New Zealand debate, including by David Green. In particular, the New Zealand Business Roundtable (NZBR) has recently published a book of essays in which several authors set out their views about the difficulties that would be involved in implementing Green's ideas. These essays are discussed in this section and some conclusions are drawn.
- New Zealand has had some considerable recent successes in reducing welfare state spending but other initiatives have been less successful. Recent policy changes are discussed in the section Recent Policy Changes in New Zealand.
- Important constraints on policy change are discussed in the section Some Important Constraints on Choice of Policy. Policy changes are most likely to be successful if they are thought to be fair by the general public. In addition, the public is more likely to use private alternatives to welfare state services if the costs of doing so are not excessive. The implications of these constraints are also discussed in this same section.
- Finally, conclusions about possible policy strategies are provided in the section Policy Strategies. Some strategies that are capable of implementation over the next few years are then presented in the section Some Immediate Priorities.

TWO POSSIBLE GOALS FOR SOCIAL POLICY

At various stages in this report I have suggested that New Zealand should consider introducing social policies that are similar to those in Australia. Australia spends about 20 percent of GDP on the welfare state and New Zealand spends about 25 percent of GDP. Adoption of Australian social policies would provide scope for worthwhile reductions in taxation without seeming to threaten the quality of social outcomes in New Zealand.[57] Although there are important transitional difficulties to be considered, it is likely that policies that are operating successfully in Australia would be broadly acceptable in New Zealand.

[57] Evidence in support of this statement comes from better education outcomes in general in Australia (see Chapter 1), greater availability of general practitioners and specialists in Australia (see Chapter 3), and longer life expectancy and lower perinatal mortality in Australia. Of course, social outcomes reflect economic factors and cultural differences between countries, and depend on much more than the amount of government spending on social services.

The relatively low level of government spending on welfare state services in Australia reflects its history of private provision of these services as well as the government policies that currently exist. Thus, the introduction in New Zealand of policies that are similar to those in Australia would not necessarily lead immediately to the same level of welfare state spending as a share of GDP. Even so, some worthwhile gains would be made.

The following changes would need to occur to remove the main differences between New Zealand and Australian social policies in the core welfare state areas:

- Allow age pensions for a couple to fall to 40 to 50 percent of average earnings. This policy does not require reductions in benefits but can be introduced progressively by increasing pensions in line with prices rather than earnings.[58] This change could be limited to the next generation of retirees.
- Introduce an income test and an assets test for age pensions.
- Increase further the proportion of the cost of tertiary tuition that is paid by students or their families to above 25 percent. (In addition, students may receive student allowances and loans or loan guarantees.)
- Introduce voucher-type programmes for health insurance and primary and secondary education in which the government pays subsidies to providers that depend on the number of insured people or school students that they attract. New Zealand already pays subsidies to private schools but these are less generous than in Australia where over 50 percent of the costs of private schools are paid by government (Commonwealth of Australia, Budget Paper No 1, 1998–99, p 4–39). The rules governing the establishment of new private schools may be more restrictive in New Zealand than in Australia. The New Zealand government also subsidises integrated schools, but the extent to which these schools are independent of the government system is questionable.
- Increase pharmaceutical charges, which appear to be low in New Zealand.

[58] The Consumers Price Index growth rate may overstate inflation, for example because insufficient allowance is made in compiling the Consumers Price Index for improvements in the quality of goods and services. (It is sometimes argued that, for this reason, an inflation rate of 0 to 3 percent a year represents effective price stability.) If this argument is valid, a Consumers Price Index adjustment will more than compensate those on an age pension for inflation.

By contrast, Australian governments spend a higher proportion of GDP than New Zealand on personal social services such as care of the aged and children. Total spending on health care (both private and public) is higher in Australia than New Zealand; this reflects Australia's higher GDP per capita.

Spending on benefits and family support is about 2 percent of GDP higher in New Zealand than in Australia. These items of expenditure were discussed in my earlier report for the NZBR, *Towards Personal Independence and Prosperity* (Cox, 1998). Adoption of Australian policies (except for personal social services) might, therefore, be expected to reduce social spending in New Zealand over a number of years to around 18 percent of GDP. The reductions would come from spending on age pensions (about 3 percent of GDP), benefits and family support (2 percent of GDP) and education and health (1 percent of GDP each).

These are worthwhile gains. However, Australian policies are not ideal. Moreover, the NZBR has suggested in other publications (for example, *Moving Into the Fast Lane*; NZBR, 1996) that total government spending should be reduced to not more than 20 percent of GDP. This would require spending on the welfare state to be reduced to around 10 to 12 percent of GDP. This is the level of spending that now prevails in East Asian countries other than Japan.

The following additional policies would need to be implemented to achieve this more ambitious objective:

- An increase in the age of eligibility for the age pensions to 67 years or 70 years.[59] This policy is not inconsistent with developments in other countries; the United States government has announced that it will increase the pensionable age to reach 67 by 2027. Denmark, Iceland and Norway already have a statutory retirement age of 67 years.
- Very substantial progress would need to be made towards financing health care privately.
- A large reduction in spending on benefits would be needed. As noted in Cox (1998), New Zealand has a generous benefits system. The strategies available to the government to make the benefits system less generous include: a reduction in benefits in relation to earnings; a requirement for beneficiaries to work whenever possible; and time limits for some benefits.

[59] People who are unable to work would continue to receive assistance, for example through the invalid's benefit.

- Finally, the very extensive system of support for low-income working families in New Zealand would need to be wound back. This is an important subject that deserves a report of its own.[60]

These policies, if introduced carefully, would result in a large reduction in government spending and, hence, tax rates. Equally, there are likely to be difficulties in introducing them. The next section of the chapter reviews some aspects of the policy debate about welfare state services to provide information on policy proposals that have been advanced in New Zealand and the difficulties in implementing them that have been foreseen to date.

SOME RECENT CONTRIBUTIONS TO THE POLICY DEBATE

Over the past decade the NZBR has published two particularly important contributions to the debate about welfare state services. These contributions are interesting for our present purposes because the authors have discussed the advantages and disadvantages of large shifts in responsibility for providing welfare state services from the public to the private sector, and have considered implementation issues in some detail.

Patricia Danzon

In her report on options for health care in New Zealand, Patricia Danzon (1991) compared four options for changes to the existing arrangements. The options are:

- Corporatisation of the delivery of health care services, which, however, would continue to be funded from taxation. This approach would (at

[60] The issue of the extent and nature of assistance to be provided by governments to low-income working families is a complex one. Such assistance provides incentives for beneficiaries to increase their hours of work (and for those in low-paying employment not to reduce their hours of work) and may be successful in reducing the extent of benefit dependency. On the other hand, such assistance may discourage low-income working people from improving their circumstances by working harder or longer or by acquiring new skills. There are also equity arguments in favour of redistributing towards low-income working families. There are two points that are particularly worth noting at this stage. First, New Zealand (and Australia) already have an extensive system, by international standards, of assistance to low-income working families. Secondly, the need for incentives to work will be less to the extent that the benefit system requires work as a condition for receiving benefits.

least in principle) impose some commercial disciplines on public providers of health services but would fail to achieve the efficiency gains available from competitive markets in insurance and medical care.

- A pure voluntary system in which individuals would be allowed to purchase whatever health insurance and medical care they wish. Any redistribution of income by government would be through general taxation and social welfare policies. Individuals would also be able to redistribute income (and medical services) privately through charitable activities. The problem here is that charitable effort may be insufficient (for example, because of free riding) to provide the minimum level of medical care that the public wishes to be provided to all persons.
- A system in which voluntary private insurance is supplemented by a government-provided safety net of free medical care for those who choose not to insure. The difficulty here is that the availability of free medical care would tend to reduce the extent of voluntary insurance.
- A system in which compulsory private insurance is supported by targeted subsidies to ensure that low-income people are able to purchase health insurance. These subsidies could be provided, and compulsory insurance enforced, through the income tax system.

Danzon appears to favour the fourth of these options. However, I believe that she under-estimates the difficulties arising from income-tested subsidies for health care. This is because she considered, quite reasonably, policies for health care in isolation from other assistance available to persons and families with low incomes. However, income-tested assistance for health would need to co-exist with income tests for benefits, housing, family benefits, student assistance, subsidised child care and so on. The combined effect of these income tests and the taxation system is to create a general climate of disincentive to earn extra income, especially for low-income families. Although it may well be possible to improve on the existing arrangements, these problems are, to a large extent, unavoidable if society wishes to redistribute towards those with little or no market income.

It is, therefore, worth considering policies that move in the same general direction as proposed by Danzon, but which attempt to redistribute a lesser amount of income. For example, the recipients of subsidised medical care might be expected to pay some fees. An alternative approach has been suggested by Schwartz (1999). A market in health care would be introduced gradually by requiring individuals and families to pay the first few hundred dollars of their health care bills each year before government assistance became available. This deductible amount would then be increased progressively, and would be payable by the low-income population as well as the general population. In addition, the government would make available (or guarantee repayment of) loans to those who would otherwise have difficulty in repaying the deductible amount. This policy approach is particularly appropriate in the (quite common) circumstance where a period of low income is temporary. Loans taken out during a temporary period of low income can be repaid when prosperity returns. On the other hand, some limit may have to be placed on the total loans incurred by those people for whom low income persists. Medical care with small user charges would need to be maintained for this group only.

The idea of the deductible amount is similar in principle to the 'global stop loss' that was adopted by the New Zealand government as part of the 1991 health changes but never implemented. It would be worth reconsidering whether it is now practical to introduce the 'global stop loss'. Users could be given the responsibility to demonstrate that medical expenses in a given year exceed the deductible amount.

There are, therefore, a number of approaches to the issue of how to introduce a market for health care but at the same time ensure that those with low incomes have access to health care. Each has advantages and disadvantages; there is no ideal solution. The best policy available is likely to involve a mixture of strategies rather than exclusive reliance on one of them.

David Green

Another very important contribution to the debate about policy options has been made in the recent book by David Green (Green, 1996). Green's book discusses many issues, including policy options to reduce the state's involvement in providing middle class welfare. For example, he argues for:

- greater reliance on private health insurance;
- tax credits on an age-related basis to make health insurance affordable;
- private provision of health and education services (for schools, by independent educational trusts);

- finance of primary and secondary education by parents, and finance of tertiary education by students and parents;
- education tax credits to ensure that all parents can educate their children;
- an increase in the age of eligibility for pensions; and
- reduced taxation of pension funds in line with reduced taxation rates generally.

As noted earlier, these measures or something like them, would be needed if the government were to reduce significantly the extent of its involvement in providing welfare state services for the middle class. It is fortunate, therefore, that the NZBR has published a volume of essays in which commentators from various points of view discuss Green's book (James, 1998). This enables us to consider some of the objections that are likely to be made to attempts to introduce his ideas or similar proposals. It is interesting that much of the criticism is about Green's proposals for health care and schools. These are the areas for which Green makes his most novel proposals. By contrast, for tertiary education and pensions, Green argues for the extension of policies that have already been introduced, or recently applied, in New Zealand.

The points made by the commentators include the following:

- David Green places too high a value on liberty, and he does not sufficiently consider other important values; for example, ensuring that everyone has good access to health and education services, achieving value for money from public expenditure, and building communities.
- He places too much faith in the ability of people to choose wisely if they are granted greater freedom and under-estimates the risk of adverse outcomes arising from market, as opposed to political, decision making.
- He under-estimates the difficulties that are likely to arise in practice because government funding or provision of health care and education for the disadvantaged would need to co-exist with private funding and provision of these services for the rest of the population. There would be a need to define a core of basic health services that would be available to those who could not afford to pay for health care themselves. Defining the core would be controversial. Means testing

is needed to establish who does and who does not have access to subsidised services. There are, as I have argued, problems with means testing. There may be attempts to shift costs from one sector to another. For example, people who pay for private health insurance may (if this choice is available) decide to move to the free government health system as they get older and the costs of insurance increase.

- David Green's recommendations do not sufficiently recognise choices that are now available to New Zealanders including the ability to establish a new school and attract government funding for it.

The first two points raise issues that were extensively discussed by David Green in his book. These criticisms have, therefore, survived his careful attempt to answer them in advance. This, I think, demonstrates the resilience of the expectation that governments will provide welfare state services.

It is, however, unlikely that collectivised and universal solutions would provide better value for money in health and education than if people pay for these things themselves. This is because ministers and officials are required to make decisions on the basis of far less information about the circumstances and preferences of people than they themselves possess. I am not aware of evidence that universal programmes are more likely to promote access by the disadvantaged to health and education than resources that are directed to those with particular difficulties. In contrast, the replacement of universal family assistance with assistance targeted to low-income families has resulted in a large increase in the assistance available to this group. And, while there are undoubtedly market risks arising from the private provision of education, health and retirement incomes, there are also political risks arising from government provision of these services. The political risks have been understated in the New Zealand debate, at least until recently.

I have considerable sympathy for the view that practical difficulties are likely to arise from trying to run a government-provided or funded service for the disadvantaged in conjunction with user pays arrangements for the bulk of the population. Difficult decisions need to be made and no perfect solution exists. It is unlikely to be desirable to avoid means testing altogether.

In summary, the recent New Zealand debate has identified reasons why further transfer of responsibility for welfare state services to the private sector is, in principle, desirable. But, it has also highlighted some of the difficulties that would need to be addressed in any transfer of responsibility, and the strong support for continued government provision of welfare state services that exists among some sections of the community.

RECENT POLICY CHANGES IN NEW ZEALAND

As discussed in Chapter 3 of this report, the general trend until 2000 has been towards lower spending on middle class welfare as a share of GDP for New Zealand. Although New Zealand governments have been generally successful in reducing government expenditure on welfare state services, some changes have been controversial and governments have subsequently decided to reverse them. This record of mixed success is not unusual for governments that attempt to reform the welfare state. In a book discussing the social policies of the Reagan and Thatcher administrations Pierson (1994) argues that mature social programmes are hard to change because of opposition from those who benefit from them. Change was only possible, Pierson argues, when the supporters of a programme were divided, could be compensated or where governments were able to disguise what they were doing.

These arguments make the success of New Zealand governments in reducing government expenditure on welfare state services seem all the more impressive. It is useful, therefore, to review the recent history of social policy in New Zealand and to consider the reasons why some reforms have been more successful than others.

The main successes include the following. The age of eligibility for superannuation has increased. The reduction in superannuation benefits in relation to earnings that has occurred since the mid 1980s has also been broadly accepted by New Zealanders.[61] On the other hand the National government's decision to link changes in superannuation payments to prices rather than earnings unless superannuation for a married couple fell below 60 percent of net average weekly earnings was reversed in 2000 by the Labour-Alliance government. User fees are now quite important in financing tertiary education but not primary and secondary education. Patient charges are now quite important in financing general practitioner services but hospital services and the purchase of pharmaceuticals are paid for largely by taxpayers. Universal payments to all families with

---

[61] As a consequence of these changes, superannuation payments have declined from 7.2 percent of GDP in 1991 to 5.5 percent of GDP in 1999. The employment of persons aged 60 to 64 has increased significantly in recent years.

children have been replaced by more generous payments that are directed to low-income families with children.

By contrast, other policy measures have subsequently been reversed. For example, the income tax surcharge on the non-superannuation income of superannuitants with higher incomes that was introduced in 1984 was removed on 1 April, 1998. Decisions taken in the 1991 budget to require people who use public hospital in-patient and out-patient services to pay fees, and for the parents of some children aged under six years to pay fees for using general practitioner services, have been subsequently reversed. The means test that previously governed access to subsidised rest-home care is to be eased.

Means testing

The recent history of New Zealand has demonstrated both the importance of, and difficulties with, means testing. This is an important subject that is worth considering here in some detail.

It is reasonable to suggest that payments to the aged and to families should be means tested to direct necessarily limited funds to those who need them most. Similarly, a natural way to encourage the development of private alternatives to government services is to introduce a charge for use of the government service. To make it easy to continue to use the service, low-income earners may be exempted from the charge, required to pay a reduced charge or assisted through transfers. Some form of means test is required to distinguish between those who pay the full charge and those who pay the reduced charge.

Although the increased emphasis on means testing has been desirable on balance, it leads to problems. The main problems concern incentives, complexity and perceived unfairness.

The incentives point arises because low-income working families in particular are faced by a considerable number of separate but overlapping means tests – for pensions, accommodation assistance, family support, subsidised child care and tertiary education allowances. On top of all this, income tax applies. As a consequence, the amount of the extra income that is retained if an additional dollar is earned is low over a wide range of earned income. Additional GST is also paid when the additional income is spent. Although it is unlikely that many low-income families are aware of the precise details, the multiple and overlapping income tests generate a climate of opinion where many such families believe that there is little to be gained by working longer and harder, and acquiring new skills. I believe that the poor incentives facing low-income families is a serious problem in New Zealand. The problem is less serious for the retired who are less likely to be faced with multiple, overlapping income tests.[62]

The problem of disincentives arises as a result of redistribution to those with low incomes regardless of whether redistribution occurs through cash benefits or the provision of services below cost. If the benefit is provided universally, the disincentive effects will arise from high taxation. If the benefit is means tested, tax rates will be lower but the income test itself will lead to disincentive effects. The general climate of poor incentives in New Zealand is, perhaps, an indication that the limits of redistribution are being reached. However, the concentration of disincentive effects on low-income working families through income testing is thought to be unfair by many people.

Means testing is likely to generate complexity: different groups will pay differing amounts for the same service; and the amounts of cash payments will vary greatly depending on people's circumstances. Considerable efforts need to be made by service providers, governments and beneficiaries to ensure that the correct procedures are applied.

Situations where groups in slightly different circumstances receive very different treatment are often thought to be unfair. Such situations can easily arise from means testing, which is intended to draw distinctions between potential recipients. For example, people with incomes just below a means test cut-off will receive assistance but those with slightly higher incomes will not. This is often resented, particularly if the benefit is substantial.

Income testing for health services

All these points are illustrated by the recent history of income testing for health services in New Zealand. In the 1991 budget the government announced increased charges for general practitioner services and for pharmaceuticals. It also introduced small user charges for in-patient and out-patient services in public hospitals. At the same time a new income testing regime was introduced (see Stocks, 1993, for a detailed description).

---

[62] The decline in real terms in average personal market incomes in New Zealand between 1982 and 1991 has made these problems harder to deal with than they would otherwise have been (see Statistics New Zealand, 1999b, pp 29–34). Growth in market incomes resumed between 1991 and 1996.

The original intention of the government in 1991 was to develop a unified income test in which the total assistance available to a family (whether from benefit, family, housing, education or health assistance) would be calculated and abated away on the basis of private income or whatever other factors were thought to be relevant. As part of this system an expenditure limit on the amount to be paid by the family for chargeable health services ('stop loss') was to be determined. These arrangements would not overcome the general disincentive problems that are noted above, but would replace the worst features of the present system by providing for abatement of benefit at a constant rate as private income increases. Unfortunately, these arrangements were unable to be implemented at the time.[63]

Use was, therefore, made of cruder income-testing mechanisms. A Community Services Card was introduced. The population was divided into three groups: Group 1 included beneficiaries and those families receiving the maximum amount of family support; Group 2 included families receiving a reduced amount of family support; and Group 3 made up the rest of the population. Groups 1 and 2 both received a Community Services Card; Group 3 did not. Group 2 had to pay higher charges than Group 1 but less than Group 3. Before 1991, reduced health charges had only been available to beneficiaries; after 1991 such assistance was also available to low-income families (Stocks, 1993, p 61).

The new arrangements for health benefits were modified almost as soon as they were introduced. For example:

- in-patient charges in public hospitals were removed on 1 April, 1993;
- user charges were reduced on 1 July, 1993 to provide increased assistance to low-income families and to reduce the sharp jump in charges where eligibility for the card expired;
- after February 1994 most Group 2 cardholders received benefits at the Group 1 level, although a few families lost eligibility for any card; and
- special assistance for high users was made easier to obtain in July 1993 and February 1994.

These changes were partly made to reduce complexity but mainly to deal with what were thought to be unfair situations. For example, the sharp cut-off where eligibility for a card ceased and the level of income at which the cut-off applied, the relative treatment of sole-parent and two-parent

[63] This was for administrative reasons. The idea may be worth further consideration; it has recently been revived in Australia (see Lambert and Keating, 1998).

families, and beneficiary and working families, and the difficulty of taking advantage of the special arrangements for frequent users of health services were all considered to be unfair. User charges for hospital services were unpopular and the government made little effort to argue for their benefits.

The revised arrangements for income-testing health benefits that were introduced in the 1991 budget have resulted in both successes and failures. They have enabled a reduction in government funding of health care. As a consequence, the private sector has grown in importance. The growth in private spending on health has slowed in recent years, however, because some of the earlier decisions have been reversed wholly or in part. In the process, assistance previously provided to beneficiaries has been extended to low-income working families. The additional assistance will undoubtedly benefit low-income families in the short term, but in the longer term will make it harder for such families to improve their circumstances through their own efforts.

Means testing, in summary, is a complex matter. It offers considerable advantages in terms of directing assistance to those who need it most, but there are drawbacks and limitations. There are, therefore, limits to the extent of reliance that can be placed on means testing. But the problems of introducing additional means tests are less for the retired population than for the working population. The introduction of further means testing should not be ruled out even for the working population. However, alternative strategies for encouraging the development of privately financed and produced health and education, but at the same time ensuring access to those services by those with low incomes, need to be considered. This issue is discussed further in this chapter in the section Policy Strategies.

Reasons for success

It is useful to consider the reasons why some policies to reduce the extent of government provision of welfare state services have been successful but others have been less so. Why, for example, has income-tested assistance to families been accepted but the superannuation surcharge removed? Why has it been easier to transfer responsibility for paying for tertiary education to the private sector than school education or health care? Why are charges for visits to general practitioners generally accepted while charges for hospital services were vigorously opposed? Why has there been so little opposition to the increase in the age of eligibility for superannuation? These are not easy questions to answer. It is certainly not true that change is impossible because of opposition. Some changes may have appeared difficult because they were inconsistent with New Zealand's long history of free school education and hospital care. (Mass participation in tertiary education is a more recent development.) But New Zealand also had a long history of universal family assistance. No doubt the accidents of politics were important. Some policies, for technical reasons and because of opposition from groups such as health professionals, proved harder to implement than was originally expected. Incremental changes appear to have been more successful than ambitious attempts to restructure programmes.

The views of the public about the role that the government should play in providing education, health care and retirement incomes have also been important. Although attitudes in New Zealand often seem to favour continued government provision, this may well change in the light of experience and further information about the costs, consequences and distributional implications of government programmes. It may be that people will strongly support alternatives to government provision only when they see them working successfully in the New Zealand context. This points to the importance of providing alternatives to the present arrangements. If the initiatives are successful they will survive and prosper; if not, little will be lost, if there is dissatisfaction with some aspects of the present arrangements, from trying alternatives. Finally, the views of the public about the fairness of particular policy changes have also been important. Objection has been made not so much to transfer of responsibility for welfare state services in general but to the consequences of particular policy changes that disadvantaged certain groups. This is an important and often neglected topic and is taken up in the next section.

SOME IMPORTANT CONSTRAINTS ON CHOICE OF POLICY

This section considers three important constraints on choice of policy. Policies that the public thinks are fair are more likely to be adopted than those that are considered to be unfair.[64] Secondly, where choices are available, people are unlikely to make decisions that disadvantage them financially. Finally, changes to the welfare state must be politically sustainable as well as justified on economic and social grounds.

---

[64] The economic approach to political behaviour suggests that policy changes are most likely to be made when they are not opposed by the majority of the decision maker's constituency and are consistent with the personal policy preferences of the decision maker.

Fairness

According to Zajac (1995) the choice of policy has largely been governed by considerations of fairness. Because it has been thought unfair for one group to receive assistance while another in only slightly dissimilar circumstances does not, concerns about fairness have tended to increase spending on the welfare state. Equally, however, arguments about fairness are relevant to the transfer of responsibility for education, health care and retirement incomes to the private sector. Is it reasonable, for example, for the very wealthy to receive superannuation payments or family assistance that is financed through taxation that is paid in part by those with low to average incomes? Although a reduction in government provision of middle class welfare may well, in conjunction with the associated reductions in taxation, improve fairness on balance, whether or not individual measures promote fairness also needs to be considered.

It is perhaps easier for people to point to specific instances of unfairness than to define clearly what is meant by being fair. Nevertheless, the following points appear to be relevant:

- It is important to provide a minimum safety net income and to ensure that everyone has access to health and education services.
- Existing beneficiaries such as superannuitants and those close to retirement may have few alternative actual or potential sources of income and need to be treated carefully in changing to new arrangements. By contrast, future recipients have other options, including continuing to work. In addition, it could be argued that existing recipients have been encouraged by past governments to believe that government would provide all their retirement income needs.
- The burden of change should be shared between generations. Measures that impose too great a burden of change on, for example, the existing working generation are unlikely to be acceptable. Under recent proposals to introduce compulsory funded superannuation, the present working generation would have been required both to pay for their own future pensions and, through taxation, to pay the pensions of the current retired generation. This was thought to be unfair. To avoid these difficulties the burden of adjustment should be shared more widely, including by the current retired generation.
- It is more acceptable to withdraw government assistance from beneficiaries who have high levels of non-benefit income than from those who have not. Australia, for example, has abolished the pension

that was, during the late 1970s and early 1980s, paid free of income test to persons aged over 70 years, and now pays pensions subject to tests on incomes and assets.

- It is fair to phase in revised benefit arrangements. This gives people time to adjust to changed circumstances.
- People can be introduced to the idea of non-government provision of education and health services by enabling them to choose these services as alternatives to the present arrangements, which could continue in approximately their present form. Although there are difficulties that need to be considered (see below), it is fair to provide people with additional choices.
- User pays arrangements, including the payment by users of prices that are determined in markets by the interaction of supply and demand, are often considered to be fair. They ensure that the costs of providing a service are recovered from those who benefit from the service, and that those who benefit more pay more.

Although equity is often taken to refer to the distribution of income, in reality far more is involved. The extent to which societies provide members with opportunities to contribute to the well-being of society, including through work, is also relevant. For example, Sen (1999, pp 39–40) argues "that there is plenty of evidence to suggest that unemployment has many far reaching negative effects on well-being and freedom, other than through the loss of income, including psychological harm; loss of work motivation, skill and self confidence; increase in ailments and morbidity (and even mortality rates); disruption of family relations and social life; and accentuation of racial tensions and gender asymmetries". European welfare states with high levels of unemployment would rate poorly against these criteria even if they have more nearly equal income distributions that English-speaking or East Asian countries.

These ideas about fairness are not necessarily consistent with each other. Moreover, it may be entirely reasonable for governments to adopt policies that are inconsistent with one or another idea about fairness if another important objective is thereby achieved. But the implementation of policy is likely to be easier if policy works with, rather than against, ideas about fairness.

Private provision and the welfare state

A further important issue concerning choice of policy strategy was emphasised by Danzon (1991). She argued that people are less likely to choose an alternative that is available to them it if is financially disadvantageous to do so. For example, "public health insurance or free care creates moral hazard with respect to private provision. This undermines the efficiency of an approach that relies on voluntary private provision by those who can afford to pay, and a free safety net intended for those who cannot provide for themselves" (p 71).

Danzon explains this point further by reference to United States experience as follows:

> A public subsidy to bad debt undermines the incentives of hospitals to attempt to collect from patients. This in turn undermines the incentives of patients to purchase insurance or provide other means for financial responsibility. Further, there is a growing unwillingness of those that do buy insurance to subsidise the care of those that do not because some of the latter can afford to pay. Ultimately, the costs of free care and bad debt must be met from tax revenues or from higher charges to paying patients. This involves arbitrary redistribution with no clear basis in equity. Resistance to this inequitable and inefficient means of providing a medical care safety net is fuelling the demand for increased government intervention to assure some form of universal health insurance in the United States.

This argument illustrates that there are limits to the extent to which voluntary self-provision of welfare state services can co-exist, over the long term, with provision of services free of charge by the government. But, as we have seen, supplying the option to choose a non-government provider of education and health services is a good way to introduce competition to areas where it has previously been absent. Faced with these difficulties, there are a number of alternatives available to a government. For example:

- Free services can be limited to certain groups in the population. User charges would be paid by the rest. However, as noted earlier, there are difficulties with means testing especially for the working population.
- The non-government alternative can be subsidised by the government. The same amount of subsidy could be provided through programmes to those who purchase privately provided education and health care and those who participate in government programmes. This approach maximises the scope for competition and freedom of choice but may not, by itself, result in a substantial reduction in government spending. An alternative idea is to provide a lower, but still substantial subsidy to users of the non-government service. This is effectively the policy of the present Australian Commonwealth government towards health

insurance and school education. This approach is likely to lead to long-term savings in government expenditure to the extent that viable private sector funding of health care and education services develops.

- Users of government services can be exposed to market decision making at least to some extent. Tertiary students have been expected to pay some of the costs of their education. As discussed earlier, users of government-provided health services could be required to pay a deductible amount before benefits are paid. This would enable market disciplines to apply to routine and discretionary health expenditure but would ensure that the care required for a major illness could be afforded. The amount of the charges could be increased as people become familiar with the new arrangements. In practice, a combination of these approaches would be used.

The political economy of reform of the welfare state

The disadvantages that some people experience as a result of restructuring the welfare state are immediate and obvious; the benefits from restructuring are often diffuse and slow in arriving. Moreover, a large percentage of the population either benefits from the welfare state or is employed in providing welfare state services. Some writers have suggested that a 'blocking coalition' of beneficiaries and employees may prevent substantial reform of the welfare state. This blocking coalition seems to have been a factor delaying reform of the welfare state in some European countries; see Alesina (1999) for further discussion on this point.

The aspects of the welfare state that are emphasised by the blocking coalition argument are undoubtedly relevant to New Zealand and help to explain why governments will be careful in making changes to welfare state arrangements. But it would be wrong, I believe, to suggest that further reform is politically impossible or very difficult. A number of points are relevant in making this assessment:

- Although there have been recent reversals, New Zealand has, on balance, been successful in reducing the extent of middle class welfare over the past 20 years.
- Increasing dissatisfaction with the quality of government-provided services may encourage a search for alternatives. As noted in Chapter 1, Effectiveness of Programmes, some overseas countries seem to do better than New Zealand in certain aspects of education and

health services. The amount of government pension that New Zealand will be able to pay will depend on future economic performance. Some investors would be able to achieve a better balance between risk and reward if they were able to invest overseas some of the notional contributions that they are making through taxation towards their retirement.

- Other countries, including Australia, have been successful in making changes that have reduced the extent of middle class welfare below the level now existing in New Zealand.
- Particularly over the longer term, people's economic interests are more complex than the blocking coalition argument suggests. People may weigh the advantages to them of lower taxes (including, in some cases, a greater chance of obtaining employment in the private sector) against those of increased spending on welfare state services.
- Some people will consider what they believe is in the country's economic and social interest, as well as what is in their personal interest, in making voting decisions.

Alesina (1999, p 225) argues that there is evidence that governments of OECD countries that engage in fiscal adjustments are typically not punished by the voters.[65] "In addition, fiscal contractions based on cuts in transfers and public wages appear to be electorally rewarded! These results are very different from the standard perception that reductions in deficits are politically costly. One interpretation is that the constituencies that benefit the most from an overextended public sector and welfare system have enough influence to block any welfare reform and fiscal adjustment; however, the governments that 'bite the bullet' and take the risk are not punished at the ballot box, at least not systematically." Much will depend, of course, on the circumstances in which changes are made, and the understanding and acceptance of the public of the reasons for making changes.

POLICY STRATEGIES

This chapter has discussed what needs to be done further to transfer responsibility for education, health and retirement incomes from the government to the private sector. It has also discussed some of the difficulties that need to be addressed in making such transfers.

---

[65] He refers, among other studies, to Alesina, Perotti and Tavares (1998).

New Zealand has been quite successful in reducing some elements of middle class welfare during recent years. For reasons that were discussed in Chapter 1, which include the continuing ageing of the population after about 2010, increasing concern about the adverse consequences of high tax rates and doubts about the effectiveness of many social programmes, there are likely to be further changes to welfare state policies in the years ahead. One possibility for policy makers in New Zealand is to introduce some of the better aspects of Australian social policy such as a means-tested age pension and more privately financed and provided health care and education. A more ambitious policy would be to introduce the policies that were recommended by David Green in his 1996 book. These policies are 'first best' because they are likely to result in better social outcomes but will also minimise tax rates and hence produce stronger economic growth. A danger to be avoided is that hardship may result because of sudden policy changes in response to a crisis. This, and the desirability of giving people a clear understanding of the arrangements that will apply in future, suggest that early policy change is desirable.

There are a number of strategies that governments may wish to consider for the gradual transfer of responsibility for education, health care and retirement incomes to the private sector. These strategies do not lead immediately to the 'first best' policy but make some progress possible now, and further progress possible at a later date. Because they avoid imposing large reductions in the incomes of beneficiaries with little non-government income, these strategies are likely to be consistent with the public's views about fairness.

The first point to make here is that policy can be changed incrementally. This preserves the situation of existing beneficiaries while ensuring that new beneficiaries are subject to the amended rules. An incremental approach, moreover, allows policy makers to observe the consequences of the changes they make and, if necessary, modify the policy approach in the light of experience. For example, the New Zealand government increased the age of eligibility for superannuation by six months each year. The phasing-in of a higher age of eligibility did not affect pre-existing beneficiaries and avoided sharp differences in the treatment of people who were born only a short time apart. A new, lower rate of New Zealand Superannuation could be introduced for those who qualify for the benefit after a certain date in the future. New arrangements for student fees or student loans can be introduced only for those who start their studies after a certain date. Benefits can be allowed to fall in terms of average earnings by increasing them only in line with inflation when earnings grow in real terms. People can gradually be introduced to paying for health care by requiring them to pay a modest deductible amount before qualifying for government benefits for health care. This approach also protects those people with large health care costs.

Secondly, while an incremental approach to policy change can be followed, it is equally desirable (as noted by Savage, 1998) to make changes in a wide range of policy areas. This will result in seemingly equitable treatment of the various affected groups in the population and ensures that the favourable consequences of policy changes (for example, scope for reductions in tax rates) appear at an early stage.

Thirdly, an important objective for policy in the early stages is to establish privately provided and funded health care and education as viable alternatives to the services provided by government. People are likely to welcome the introduction of a new alternative, such as a privately provided health or education service, if the existing government service continues to be available on roughly the same basis as previously. In the longer term, however, the availability of government-provided services that are available, either free of charge or at reduced charges, will limit the growth of the non-government alternative.

Fourthly, there is no perfect solution to the difficult problem of how to establish a market for health care and education while ensuring that persons with low incomes have access to these services. Even so, there are arrangements for paying for health care and education that are better than the present ones. These are likely to involve a mix of measures: some fees, even for those with low incomes, some means testing, and the use of scholarships and loans to enable those in temporary poverty to pay for education and health care.

Fifthly, changes to middle class welfare will need to be seen in the context of changes that are simultaneously likely to occur to the benefits system. An important reason for extending benefits to working people with fairly low incomes (for example, in the 1991 and 1998 budgets) has been to avoid disincentives that might discourage beneficiaries from working. But, because benefits are paid only to low-income earners, some people may be discouraged from earning more (at least over a range) because they would pay additional tax and lose some benefits. This, in particular, reduces incentives to learn new skills. During the last few years there has been an increasing tendency to require beneficiaries to work (or undertake an activity relating to work) as a condition of receiving benefits. But there is less need to provide 'incentives' to work if some work is 'required' as a condition of receiving benefits.[66] It may, therefore, be possible to wind back New Zealand's extensive system of benefits for low-income working families over the next few years. This is particularly likely to be possible if earnings grow in real terms. The proportion of the population that pays charges for health care will increase automatically if this is done.

David Henderson has noted in his recent book (Henderson, 1999) that market liberal ideas are held by only a small percentage of the population and that majority opinion supports government intervention to address social and economic problems. This is an important point because it would be unreasonable to expect that governments in democratic countries would persist with policies that the public, having experienced them in practice, finds hard to accept. (Many successful policies, such as privatisation of government-owned enterprises, have not been especially popular before implementation but have been accepted once they are in place.) It is true, certainly, that government provision of education, health and retirement incomes is popular in New Zealand. Even so, some transfers of responsibility for providing these services to the private sector have been successfully achieved in recent years. Growing concern about the problems of the existing arrangements, better understanding of – and better information about – the advantages and disadvantages of government provision of welfare state services, and learning from successful examples of transfer of responsibility to the private sector, are all likely to lead to a reduction in government provision of middle class welfare in the years ahead.

SOME IMMEDIATE PRIORITIES

In this section I suggest some measures to increase the role of the private sector in providing welfare state services that can easily be adopted by New Zealand governments over the next few years.

These proposals are incremental in nature but may provide the key that makes further welfare reform possible. They retain a role for government provision, especially for the disadvantaged. The proposals are based on policies that already apply in Australia. Although there are

---

66 The present New Zealand government is reducing the extent of work testing for benefits. This is a retrograde step.

difficulties that would need to be addressed in the transition, I expect that these proposals, once in operation, would be acceptable to New Zealanders.[67]

These proposals focus on the most difficult policy areas to change. In addition, some policy directions that continued until recently in New Zealand (for example, to increase the proportion of the costs of tertiary education that are paid by students, to increase pensions in line with changes in prices and not earnings, and to increase the age of eligibility for superannuation) should be resumed.

Education

The first suggestion is to increase the scope for choice in school education by increasing the proportion of the cost of education at independent schools that is subsidised by government from below 40 percent (the level that was achieved in 1997/98) to 50 percent or more. The requirements imposed on the establishment of new schools should be reviewed to ensure that they are not unnecessarily restrictive. The main reason for making these changes is to improve the quality of education by expanding choice. But these changes will lead to a reduction in government spending on education to the extent that they will encourage a shift from the public to the private sector of education. At present, only around 25,000 children (out of a total school population of 724,000) attend independent schools.

Health insurance

The second suggestion is that the government should pay a subsidy to offset some of the costs incurred by persons who choose to purchase health insurance that meets or exceeds a minimum standard. Health insurance could be taken out to cover any fees permitted to be charged by public hospitals as well as fees charged by private hospitals. Competition between secondary and tertiary, as well as primary, health care providers would therefore be encouraged.

---

[67] For the sake of clarity I should point out that this discussion is intended to be illustrative of options which, in my view, are both worthy of consideration and capable of fairly easy implementation in New Zealand. Of course, each of the options has disadvantages as well as advantages and provides dangers as well as opportunities. However, a full analysis of policy options is outside the scope of this paper. New Zealand may well be able to improve on Australian policies, including by considering experience in other countries.

This proposal is a modified version of the idea that health insurance subsidies should be transferable between government and private insurers that was advanced by the government in 1991 but never implemented. Implementation of the 1991 proposal would require the correct subsidy to be calculated for each household. As was discussed in Chapter 3, a good deal is known about the average health costs of various groups within the population. Even so, these costs vary greatly and the factors that were discussed in Chapter 3 (such as age, sex, ethnicity and socioeconomic status) account for only a small part of the variation. There is a danger, therefore, that reimbursement schedules based on this information about average health costs may over-compensate some health insurance funds and disadvantage others. This problem is, perhaps, most likely to occur if different health funds recruit disproportionately heavily from different ethnic or socioeconomic groups within the population.

These problems will, however, be reduced if the aim of policy (at least in the first instance) is simply to offset the costs of health insurance to some extent. The intention is to encourage people to take out health insurance, but it is not expected that everyone will do so. A subsidy in the form of a proportional reduction in the cost of health insurance may be acceptable in the first instance. This is similar to the arrangement that now exists in Australia. The subsidy can then be further developed and, if desired, increased in the light of subsequent experience.

Successful implementation of this policy may well require changes to the nature of health insurance in New Zealand. Because private health insurers would compete with each other and government-provided health insurance, they would be encouraged to strike an acceptable balance between premiums and the services provided to people when they are ill. Private insurance policies under competitive conditions are likely to include mechanisms to reduce costs, for example deductibles, co-insurance and reduced premiums for policy holders who do not claim in the previous year. They may even have some of the restrictions typical of government health programmes, for example restricted entitlements, preferred providers, negotiated fees, limited drug lists and ownership of some health facilities. However, the resemblance between government and private health insurance is superficial. Whereas decisions about government health insurance are taken on the basis of limited information by ministers and officials, those about private insurance are guided, through a competitive process, to meet people's needs at least cost. In practice a diversity of health insurance is likely to be offered by a competitive market.

There are a number of objections to the idea of greater competition in health insurance which, I think, deserve less weight than they are sometimes given in the New Zealand policy debate.

- It has been argued that it is necessary to define core health services that would be made available to people who choose not to move from public to private health insurance once competition is introduced. As New Zealand experience has shown, it is difficult and controversial to define explicitly core and non-core health services. However, the core could be defined in the first instance to include all those services that the government now subsidises. Governments could then decide whether to add new services to the list on a case-by-case basis.
- It is sometimes argued that geographical constraints limit the extent to which choice between health providers is possible outside the major cities in New Zealand. Competition between hospitals, for example, may be impossible over large parts of the country. This should not, in my view, prevent the introduction of competition between facilities where it is practicable. Where it is not practicable, consideration should be given to developing competition within the existing facility. For example, although everyone should be provided with the same standard of medical care, a higher standard of accommodation in hospitals might be made available to those who wish to pay for it. In addition, people living on the boundaries of regions may have two or more providers to choose from. Entry into previously uncontested markets may occur unless it is prohibited by legislation. If entry is possible, the threat of entry will impose some restraint on the behaviour of incumbent providers.
- It has been argued that it would be undesirable for many members of a minority group to choose a particular non-government health insurer. Since the proposal outlined above includes voluntary opting out and a partial subsidy for private health insurance, the likelihood of this occurring may not be great.

Retirement incomes

The third suggestion for immediate or short-term action by the New Zealand government is the introduction of income and assets tests for age pensions. These might be based on the Australian income and assets tests that work as follows (Centrelink, 2001; amounts as at February 2001):

- Pensions are calculated under both the income and assets tests. The lower rate is the one that is paid.

- Under the incomes test, full pensions are paid to single pensioners who earn up to AU$53.00 a week and couples who earn up to AU$94.00 a week (combined). These amounts are increased by AU$12.30 a week per child where there are children. Income includes deemed, rather than actual, income from financial investments in addition to earnings.
- Pensions both for single persons and couples (combined) are reduced by 40 cents in the dollar above these limits.
- Part pensions are payable to single people who earn less than AU$552.90 a week and to couples who earn less than AU$923.50 a week. These amounts are increased by AU$12.30 a week per child where there are children and are also higher where rent assistance is payable.
- Under the assets test full pensions are payable to single homeowners with assets (excluding the family home and some other assets) with a net market value up to AU$133,250 and to couples with assets up to AU$189,500. Higher limits apply to non-homeowners. Full pensions are payable to single persons with assets up to AU$228,750 and couples with assets up to AU$285,000.
- Assets above these limits reduce pensions by AU$1.50 a week for every AU$1,000 above the limits.
- Part pensions are payable to single homeowners with assets less than AU$266,750 and to couples with assets less than AU$411,000. The limits for non-homeowners are AU$362,250 (single persons) and AU$506,500 (couples). These limits are increased where rent assistance is paid with the pension.

An assets test is desirable because people's ability to support themselves independently of government depends on the assets owned by family members as well as their incomes. A person with substantial assets but little income from non-government sources would have some capacity of self-support.

Government benefits that are paid to older people with substantial assets may be used by them to leave a larger estate to their heirs rather than to support their current living standards. This may not be a high priority for government expenditure.

Determining the parameters necessarily involves an element of compromise. To minimise expenditure and to direct government assistance to those in need, the parameters should be chosen to withdraw assistance rapidly as a person's or a couple's income increases. But an income test that is too severe might well be considered to be unfair because retired people with slightly different private incomes might well receive considerably different pensions. Moreover, if the income test parameters are chosen to encourage, for example, part-time work, they may well discourage other forms of self-reliance including full-time work and the accumulation of financial assets to provide income in retirement.

One possibility worth considering would be to introduce an income test that reduces pensions by 40 percent of any private income above a low threshold. This would be supplemented by an assets test along Australian lines. As noted in Chapter 3, private income in retirement is about 1.9 percent of GDP. In addition, as discussed in Chapter 6, around $760 million in superannuation benefits was paid in 1997/98 to households in the two highest quintiles of the income distribution. An income test of the type described above might save $500 million a year or more in government expenditure. A more accurate estimate can be made on the basis of detailed information about the incomes of retired people. (By contrast, abolition of the superannuation surcharge is estimated to have resulted in a reduction in revenue of $200 million a year. Note, that this estimate, which is based on the *Household Economic Survey*, is lower than the Treasury estimate that was quoted in Chapter 3, Government Expenditure.)

An income or assets test for superannuation payments can be introduced incrementally. This can be done by exempting existing recipients or (as was done in Australia during the late 1970s and early 1980s) by paying increases in superannuation payments subject to income or assets tests. These measures would protect existing superannuitants but at the cost of reduced fiscal savings in the early years.

Taxation

A final possibility for short-term action arises from the opportunity to reduce taxation that may arise over the next few years if economic conditions are favourable. As noted in Chapter 6 of this report, families with children both receive large amounts in government benefits and pay large amounts in taxation. Measures to require people to pay a larger proportion of the costs of financing education, health care and retirement incomes may tend to disadvantage families unless care is taken. Moreover, as noted by the Ministry of Social Policy in its post-election briefing (Ministry of Social Policy, 1999, p 43), improving the economic position of many families is a major consideration in both social and economic policy in New Zealand.

The introduction of tax credits for families with dependent children should be considered to offset any adverse effect on these families from requiring them to take greater responsibility towards funding welfare services. These tax credits might be a certain amount per child or might be based on spending on the purchase of education or health insurance. The introduction of tax credits is unlikely to be of much benefit to families unless there is a reduction in the overall level of taxation. If the level of taxation is unchanged, some tax would need to be increased to compensate for revenue lost through tax credits. Families with children will pay a substantial proportion of the increase in taxation. This will reduce the amount of the net benefit to them from introducing tax credits.

New Zealand's targeted system of assistance for families has reduced the fiscal costs of redistributing towards low-income families. But high effective marginal tax rates over wide ranges of income have resulted from targeting. It may be that the limits of targeting have been reached and that any further assistance to families should take the form of tax credits that are available to all families.

The proposal to introduce tax credits for families is not intended to be of particular benefit to low-income families. New Zealand already provides much assistance to low-income families. The idea is to provide additional help to families in recognition that they would, in future, be required to take greater responsibility for education and health care.

As noted, many families with children pay substantial amounts in taxation and would benefit from reductions in tax rates. Reductions in tax rates will also lower the adverse economic effects of taxation. The introduction of tax credits for children would result, however, in a substantial change to the current simple, largely individually based structure of income tax. This change is certainly not something to be undertaken lightly. New Zealand's income tax structure, which is almost unique, limits greatly the extent to which income tax can be used to benefit particular groups. It may be much harder to resist claims for special treatment in future if an exception is made even for families with children. It may be that measures to require families and individuals to contribute more to the costs of education and health could be phased in so that, in combination with income growth and general tax reductions, families were not made worse off. There would be less need for tax credits for children if this strategy were adopted. The weight to be given to reductions in tax rates as opposed to the introduction of tax credits for families is an issue that requires careful consideration.

SUMMARY AND CONCLUSIONS

The main points in this chapter are as follows:

- Reform of the core welfare state is both necessary and difficult. Continuing existing social policies, which lock New Zealanders into a high level of dependence on government, is not an attractive long-term strategy for New Zealand. Lower taxation, less and more flexible regulation and greater reliance on the market are all likely, once the transition has been negotiated, to improve the standard of living of most people and, in particular, education, health and retirement incomes.
- The following changes would need to be made in New Zealand to remove the main differences between New Zealand and Australian social policies:
  - allow the pension for a couple to fall to 40 to 50 percent of average earnings by increasing pensions in line with prices rather than earnings;
  - introduce an income and assets test for age pensions;
  - increase further the proportion of the cost of a tertiary education that is paid by students or their families
  - provide subsidies to offset partially the cost of private school education and health insurance.
- Further savings would be made if the government increased the age of eligibility for the age pensions, reduced spending on benefits and wound back over time New Zealand's extensive system of support for low- to middle-income working families.
- A reduction in taxes that is financed by a reduction in middle class welfare can confidently be expected to lead to greater work effort and higher market incomes for those who are affected by these changes. The reduced impediments to market transactions arising from lower taxation will assist families to adjust to reduced availability of government services.
- Despite some reversals, New Zealand has been generally successful in reducing government spending on middle class welfare in recent years. However, there have been difficulties with income testing and some health changes.

- Although further transfer of responsibility for welfare services to the private sector would, in principle, be desirable, the recent policy debate in New Zealand has also highlighted difficulties that would need to be addressed in any such transfer of responsibility.
- Further policy changes should work with, rather than against, the public's view about fairness. This points to the importance of making incremental changes across a wide range of areas.
- The immediate objective should be to establish privately provided education, health care and retirement incomes as a viable alternative to government provision, where feasible.
- One way to move towards this objective would be to introduce in New Zealand social policies that are similar to those that already exist in Australia. For example, subsidies to privately provided education and health care could be increased, pensions could be allowed to fall in relation to earnings, and incomes and assets tests could be applied to pensions. These policies are a step in the right direction in themselves and would open up possibilities for further change.
- Better arrangements for paying education and health care are likely to involve a combination of increased fees for service, some means testing, increased subsidies to private providers and scholarships or loans to assist those in temporary poverty.
- A reduction in taxation is needed in New Zealand. In reducing taxation, a balance needs to be struck between lower tax rates and the introduction of tax credits to benefit families with children. The introduction of tax credits would be a departure from New Zealand's simple income tax structure. However, this change may be necessary if families with children are to be asked to pay more for health and education and undesirable distributional consequences are to be avoided.

8

CONCLUDING COMMENTS

Views differ about which roles government and the private sector should have in providing welfare state services. One reason for this is that there are differences in opinion about the characteristics of a good society and the values that members of such a society would hold.

Reports published by the NZBR, including this one, belong to the classical liberal tradition. According to this tradition the freedom to exercise choice responsibly, whether to advance the interests of oneself and one's family or to assist others, or to work with others towards a shared goal, is valuable in itself. The motives, preferences and circumstances of people vary greatly, and outsiders, such as government agencies, are not well placed to decide what is good for them. Although liberals recognise that some people, if given the opportunity, will make poor decisions, on the whole they are optimistic that people, if given freedom, will make good choices.[68] In addition, the choices that people make will improve if they are given more opportunities to act responsibly. For reasons that have been discussed in this report I believe that greater reliance on private effort in providing welfare state services will assist in improving economic and social outcomes in New Zealand. Even if this is not so, I would argue that the opportunity to advance society by one's own individual efforts is valuable in itself.

The French political philosopher, Bertrand de Jouvenal (1952, pp 64–65) wrote as follows on the consequences of denying people the opportunity to make important choices about the direction of their lives:

> If leftism is unwilling to take account of productive consumption in its treatment of personal incomes, it is not out of indifference to formative expenditure, but because this is regarded as henceforth the State's business. There is no sympathy for the father who spends vast sums on his son's education, and they are not accepted as costs deductible from taxable income, because the father need not, and some would say should not, bear this expenditure. The State will see to it that the boy gets the education, if state auditors so decide. The expense, and the decision, are to be taken out of private

[68] Even if some people make what to observers appear to be poor choices, it is by no means certain that government agencies would, in practice, make better decisions on their behalf. The record of government decision making has been poor in many fields of human activity, including the nurture of children.

> hands. It does not matter that personal incomes are so amputated as to become incapable of bearing constructive costs. They need not do so, and more precisely they are not meant to. Let the income recipient spare himself the trouble, thus recuperating net income to squander; the public authority will fulfill such of these individual purposes as are found worthy.
>
> This attitude tends to turn personal income into a sum made up of the means of physical support plus pocket money. The citizen thereby loses a fundamental social responsibility: that of contributing in his private capacity to the advancement of his dependents and his surroundings. He is encouraged to become something like a maintenance man. Insofar as he adopts this attitude, equalisation of incomes becomes justified. If surplus over mere cost of physical needs is to be spent at the races, why indeed should one have a greater surplus than the other?
>
> While heads of families must perforce cease to provide accomplished and useful members of society and are shorn of their power to advance society by their individual efforts, the State assumes full responsibility. How does it discharge it, and at what cost?
>
> It does not see to everything, and, for instance, fails to build up homes which are an education in themselves. It does, however, spend a lot of money, and in the process it destroys the incomes of the upper and middle classes without building up those of the working classes.

An alternative view about what constitutes a good society has been put forward in a recently published volume edited by Jonathon Boston, Paul Dalziel and Susan St John (Boston, Dalziel and St John, 1999). Although the authors of this volume consider that they are responding to arguments advanced, among others, by the NZBR, they make a number of points that the NZBR has also made. According to Dalziel and St John (p 78) "because taxation reduces personal incentives for effort, economic efficiency suggests that individuals should not be taxed to provide goods and services that should have been purchased in the private sector". Dalziel (p 68) appears to accept that a reduction in taxes that is financed by a reduction in transfer payments or services that provide income-equivalent benefits to taxpayers will tend to increase hours of work and, by implication, the level of output. He considers, however, that the consequences for equity of such a change would be undesirable. I will return to this point later.

St John (p 296) doubts whether a generous universal pension for older people can co-exist for long with a user-pays, targeted environment for the population of working age. Boston notes (p 214) that there is a case for more equal funding of private and public providers of tertiary education than has occurred in the past. He argues that subsidies to tertiary education largely involve revenue recycling (churning of income) within middle- to upper-income families, who pay the taxes. To the extent that this is true, he argues, the regressive redistributional impact of these subsidies is less than it appears to be at first sight. But, subsidies are pointless if they merely involve revenue recycling.

These authors also note, quite correctly, that attempts to increase reliance on means testing and increase the importance of the market in providing health care have given rise to difficulties.

Although they argue that there are instances where governments can provide services more efficiently than by private effort, the main point made by these authors is that there are important non-economic values that are advanced by the welfare state, and that it is worth paying what may, in their view, be a small economic price to advance these values. For example, Boston argues (p 38): "from a social democratic viewpoint, providing a safety net for society's less advantaged citizens is certainly insufficient to achieve a just society, especially in a relatively affluent country like New Zealand. Social justice, it can be argued, requires not only that individuals and families are able to subsist, but also that they are able to live in dignity and participate in society and culture. Additionally, it requires a commitment to specific egalitarianism and social equality, including gender and racial equity. This is not to suggest that all inequalities are unjustified; but that those that are unjust should, wherever possible, be reduced, if not eliminated". Moreover, Dalziel and St John argue (p 86): "from a social-democratic point of view, however, there are certain basic services – health care, retirement income, income support for workers suffering unemployment or illness, compensation for personal injury – that should be available to all citizens and are therefore well-suited to tax financed social insurance schemes. Such schemes are a mechanism, for example, for reducing the economic sacrifices incurred by people involved in full-time family care. They provide access to services such as hospital care or superannuation that might otherwise be unaffordable or would increase economic dependency on income-earning partners". The importance of the welfare state to these authors, therefore, is that it provides a sphere of activity in which non-economic values, such as equality and financial independence from spouses or partners, can be advanced.

There are a number of points that should be made about these arguments. First, the welfare state does not offer a free lunch in terms of non-economic values. Although the welfare state makes it easier to achieve some non-economic values it simultaneously makes it harder to achieve others. This is a relevant factor in deciding how much government welfare a country should have.

Bertrand de Jouvenal provides (pp 68–69) the following examples of the adverse consequences of welfare programmes and, especially, the high taxes that finance them. Although his discussion may appear to be exaggerated it would be unreasonable to deny that he has a point.

> But the individual's value to society does not lie exclusively in the professional services he renders. It would be a sorry society in which men gave nothing to their contemporaries over and above the services for which they are rewarded and which enter into the computation of national income. That would be no society at all. Often enough one has a frightening vision of such a society, when one sees in some suburban train tired men travelling back from the day's toil to the small house in which they will shut themselves up to eat and sleep until they travel back to the factory or to the office. At those moments one treasures what is left of society: warm hospitality, leisured and far-ranging conversation, friendly advice, voluntary and unrewarded services. Culture and civilisation, indeed the very existence of society, depend on such voluntary, unrewarded activities. They are time – and resource – consuming and costly. There seems to be little awareness among us that they have entered upon a precipitous decline …
>
> Surely it is a most undesirable division of social labour which sets apart a class of public managers as against a mass of passive citizens who then are not truly citizens. Yet what else can happen if mere citizens are left no margin of resources to expend on public activity and at the same time come up against the competition of professionals …
>
> The stripping of incomes goes so far that even hospitality tends to be discouraged. As a result of the State's assumption that consumption is asocial it tends to become so. The age of socialism turns out to be that in which men are most shut into their individual lives, most confined to their several paths.

The second point that should be made in response to Boston, Dalziel and St John is in relation to their argument that the adverse economic consequences of additional welfare programmes that are financed by taxation are not very great. This is not, at first sight, an unreasonable position to take. The adverse effects of the welfare state are complex and often slow to appear because they depend on changes in values and customs. Nevertheless, I believe that the weight of the evidence suggests that the adverse consequences of the welfare state are more serious than these authors allow. This issue is discussed in detail in Chapter 1 of this report.

Thirdly, Boston, Dalziel and St John accept too readily that an increase in social spending will promote the values of equality and social harmony which they believe are so important. This is uncertain especially over the longer term; the adverse consequences of welfare programmes need to be considered. To the extent that welfare programmes impede the working of markets, they are likely to promote social exclusion rather than inclusion. This can be seen most clearly in those European countries that combine large welfare programmes, high taxation and extensive regulation with high unemployment. As has been noted by St John, New Zealand's retirement incomes policies are more likely to result in social disharmony than social harmony.

A fourth point relates to the argument that the distributional implications of a reduction in tax rates are undesirable. Dalziel analyses the distributional consequences of the 1996 and 1998 tax reductions (pp 71–73) and concludes that "for every dollar of extra expenditure or forgone revenue in the programme, 40 cents is going to non-family households, 31 cents is going to families in the top two income quintiles and only 29 cents is going to the target group of low and middle income families". There were, in Dalziel's view, better options available to government in the mid-1990s, including restoration of a universal family benefit or increases in family support.

The main objective in reducing taxes is not to assist one group or another but to give people greater freedom to live their lives in the way they choose. Even so, couples with children were among the main beneficiaries of the 1996 and 1998 tax cuts that were analysed by Dalziel. Couples with children constituted 29 percent of all households (see Table 5.9 of this study) but received 46 percent of the benefits of the tax reductions. Moreover, as discussed in Chapter 6, couples with children tend to have relatively high incomes. Forty six percent of couples with children are within the high taxation group of households and couples with children comprise 39 percent of all households within this group (see Table 6.4). Dalziel's results are not surprising. Any measure that assists couples with children in general (including a universal family payment) will provide around half the benefit to families in the two highest quintiles of the income distribution.

Many families in the second-highest and highest quintiles of the current income distribution correctly would not consider themselves to be wealthy. Indeed, many of these families are likely to find themselves in the lowest quintiles of the current income distribution once they retire. As discussed in Chapter 5, the taxation required to finance the welfare state presses heavily on couples with children. It is ironic that the welfare state now distributes income away from this group whose needs are high in relation to their current incomes. The opposition of many couples with children to further increases in taxation is easy to understand.

In their final pages Boston, Dalziel and St John argue that social policy needs to become more transparent. I agree with this argument. The welfare state redistributes from those with high current incomes to those with low current incomes. But it also redistributes from younger people and couples with children to older people and sole parents. Only through a careful understanding of what the redistributional consequences of the welfare state actually are can the desirability of the existing arrangements, and of changes to them, be assessed. There is much more to welfare than the welfare state. All countries need to review periodically the advantages and disadvantages of private and government production of welfare state services. The analyses that are presented in this study are presented as a contribution to the debate about the welfare state in New Zealand. I hope they assist understanding of the consequences of New Zealand's welfare state and of alternatives to it. I also hope that the study provides examples of the type of analysis that is worth undertaking on a periodic basis.

APPENDIX

Table A.1: Average incomes, benefits and taxes, 1997/98 – households ranked by market income

	Incomes, benefits and taxes: average annual amounts (dollars)								
	Market income	*Direct taxes*	*Indirect taxes*	*Total taxes*	*Benefits*	*Education spending*	*Health spending*	*All government social expenditure*	*Final income*
Lowest 10 percent	–1,015	2,596	2,653	5,249	17,689	2,340	4,250	24,279	18,015
	(–0.2)	(2.1)	(4.2)	(2.8)	(21.4)	(6.9)	(12.4)	(16.1)	(4.6)
Second decile	1,196	2,994	3,104	6,098	17,645	1,546	4,206	23,397	18,495
	(0.3)	(2.4)	(4.9)	(3.2)	(21.4)	(4.6)	(12.3)	(15.5)	(4.7)
Third decile	7,191	3,611	4,105	7,716	16,784	3,097	4,157	24,038	23,513
	(1.7)	(2.9)	(6.5)	(4.1)	(20.4)	(9.1)	(12.2)	(16.0)	(6.0)
Fourth decile	17,352	4,956	4,544	9,500	11,730	3,722	3,410	18,862	26,714
	(4.1)	(4.0)	(7.2)	(5.1)	(14.2)	(11.0)	(10.0)	(12.5)	(6.8)
Fifth decile	28,822	7,116	5,946	13,062	6,936	4,635	3,571	15,142	30,902
	(6.7)	(5.7)	(9.4)	(7.0)	(8.4)	(13.7)	(10.5)	(10.1)	(7.9)
Sixth decile	38,983	9,779	6,244	16,023	3,532	3,190	3,133	9,855	32,815
	(9.1)	(7.9)	(9.8)	(8.5)	(4.3)	(9.4)	(9.2)	(6.5)	(8.4)
Seventh decile	50,192	12,422	6,948	19,370	2,261	4,027	3,021	9,309	40,131
	(11.7)	(10.0)	(10.9)	(10.3)	(2.7)	(11.8)	(8.8)	(6.2)	(10.3)
Eighth decile	62,410	16,208	7,536	23,744	2,437	3,444	2,929	8,810	47,476
	(14.6)	(13.1)	(11.9)	(12.7)	(3.0)	(10.2)	(8.6)	(5.9)	(12.1)
Ninth decile	79,285	21,267	9,165	30,432	2,076	4,209	2,765	9,050	57,903
	(18.5)	(17.1)	(14.4)	(16.2)	(2.5)	(12.4)	(8.1)	(6.0)	(14.8)
Highest 10 percent	143,649	43,278	13,212	56,490	1,296	3,710	2,735	7,741	94,900
	(33.6)	(34.9)	(20.8)	(30.1)	(1.6)	(10.9)	(8.0)	(5.1)	(24.3)
All households	42,816	12,426	6,347	18,773	8,240	3,392	3,418	15,050	39,093
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Table A.2: Average incomes, benefits and taxes, 1997/98 – households ranked by household gross income

	Incomes, benefits and taxes: average annual amounts (dollars)								
	Market income	*Direct taxes*	*Indirect taxes*	*Total taxes*	*Benefits*	*Education spending*	*Health spending*	*All government social expenditure*	*Final income*
Lowest 10 percent	659	2,036	2,664	4,700	11,144	927	3,008	15,079	11,038
	(0.2)	(1.6)	(4.2)	(2.5)	(13.5)	(2.7)	(8.8)	(10.0)	(2.8)
Second decile	4,387	3,057	3,219	6,276	13,985	2,129	3,588	19,702	17,813
	(1.0)	(2.5)	(5.1)	(3.3)	(17.0)	(6.3)	(10.5)	(13.1)	(4.6)
Third decile	8,998	3,888	3,752	7,640	14,673	2,810	4,065	21,548	22,906
	(2.1)	(3.1)	(5.9)	(4.1)	(17.8)	(8.3)	(11.9)	(14.3)	(5.9)
Fourth decile	18,011	5,323	4,793	10,116	12,255	3,533	3,936	19,724	27,619
	(4.2)	(4.3)	(7.5)	(5.4)	(14.8)	(10.4)	(11.5)	(13.1)	(7.1)
Fifth decile	25,999	7,118	5,478	12,596	10,514	4,357	3,564	18,435	31,838
	(6.1)	(5.8)	(8.7)	(6.7)	(12.9)	(12.9)	(10.5)	(12.2)	(8.1)
Sixth decile	37,853	9,520	6,482	16,002	6,349	4,558	3,868	14,775	36,626
	(8.8)	(7.7)	(10.2)	(8.5)	(7.7)	(13.4)	(11.3)	(9.8)	(9.4)
Seventh decile	48,622	12,620	6,957	19,577	4,631	3,903	3,260	11,794	40,839
	(11.4)	(10.2)	(11)	(10.4)	(5.6)	(11.5)	(9.6)	(7.8)	(10.4)
Eighth decile	61,669	16,011	7,715	23,726	3,333	4,006	3,029	10,368	48,311
	(14.4)	(12.9)	(12.1)	(12.6)	(4.0)	(11.8)	(8.9)	(6.9)	(12.4)
Ninth decile	78,716	21,243	9,348	30,591	3,360	4,133	2,998	10,491	58,616
	(18.3)	(17)	(14.7)	(16.3)	(4.1)	(12.1)	(8.7)	(7.0)	(15.0)
Highest 10 percent	143,071	43,389	13,047	56,436	2,167	3,559	2,861	8,587	95,222
	(33.5)	(35)	(20.6)	(30.1)	(2.6)	(10.5)	(8.4)	(5.7)	(24.4)
All households	42,816	12,426	6,347	18,773	8,240	3,392	3,418	15,050	39,093
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Table A.3: Average incomes, benefits and taxes, 1997/98 – households ranked by household disposable income

	Incomes, benefits and taxes: average annual amounts (dollars)								
	Market income	*Direct taxes*	*Indirect taxes*	*Total taxes*	*Benefits*	*Education spending*	*Health spending*	*All government social expenditure*	*Final income*
Lowest 10 percent	749	2,079	2,674	4,753	11,210	608	2,963	14,781	10,777
	(0.2)	(1.7)	(4.2)	(2.5)	(13.6)	(1.8)	(8.6)	(9.8)	(2.8)
Second decile	4,990	3,078	3,241	6,319	13,796	2,344	3,469	19,069	18,280
	(1.2)	(2.5)	(5.1)	(3.4)	(16.8)	(6.9)	(10.2)	(13.0)	(4.7)
Third decile	8,725	3,959	3,771	7,730	15,016	2,712	4,009	21,737	22,732
	(2.0)	(3.2)	(5.9)	(4.1)	(18.2)	(8.0)	(11.7)	(14.4)	(5.8)
Fourth decile	17,722	5,441	4,750	10,191	12,537	3,897	3,930	20,364	27,895
	(4.1)	(4.4)	(7.5)	(5.4)	(15.2)	(11.5)	(11.5)	(13.5)	(7.1)
Fifth decile	27,772	7,465	5,425	12,890	8,782	3,532	3,512	15,826	30,708
	(6.5)	(6.0)	(8.6)	(6.9)	(10.7)	(10.4)	(10.3)	(10.5)	(7.9)
Sixth decile	36,984	9,663	6,345	16,008	7,131	4,097	3,799	15,027	36,003
	(8.6)	(7.8)	(10.0)	(8.5)	(8.6)	(12.0)	(11.1)	(10.0)	(9.2)
Seventh decile	48,180	12,386	7,147	19,533	4,994	4,709	3,489	13,192	41,839
	(11.3)	(10.0)	(11.3)	(10.4)	(6.1)	(13.9)	(10.2)	(8.8)	(10.7)
Eighth decile	61,328	16,162	7,762	23,924	3,661	4,178	3,173	11,012	48,416
	(14.3)	(13.0)	(12.2)	(12.7)	(4.4)	(12.3)	(9.3)	(7.3)	(12.4)
Ninth decile	78,924	21,250	9,537	30,787	3,134	4,200	2,866	10,200	58,337
	(18.5)	(17.1)	(15.1)	(16.4)	(3.8)	(12.4)	(8.4)	(6.8)	(14.9)
Highest 10 percent	142,946	42,827	12,822	55,649	2,121	3,640	2,967	8,728	96,025
	(33.3)	(34.4)	(20.2)	(29.6)	(2.6)	(10.7)	(8.7)	(5.8)	(24.6)
All households	42,816	12,426	6,347	18,773	8,240	3,392	3,418	15,050	39,093
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Table A.4: Average incomes, benefits and taxes, 1997/98 – households ranked by household final income

	Incomes, benefits and taxes: average annual amounts (dollars)								
	Market income	*Direct taxes*	*Indirect taxes*	*Total taxes*	*Benefits*	*Education spending*	*Health spending*	*All government social expenditure*	*Final income*
Lowest 10 percent	1,429	2,179	2,552	4,731	10,991	229	2,477	13,697	10,395
	(0.3)	(1.8)	(4.0)	(2.5)	(13.3)	(0.7)	(7.2)	(9.1)	(2.7)
Second decile	6,921	3,465	3,438	6,903	12,768	777	3,165	16,710	16,728
	(1.6)	(2.8)	(5.4)	(3.7)	(15.5)	(2.3)	(9.3)	(11.1)	(4.3)
Third decile	11,697	4,530	3,957	8,487	13,031	1,577	3,699	18,307	21,517
	(2.7)	(3.7)	(6.2)	(4.5)	(15.8)	(4.7)	(10.8)	(12.2)	(5.5)
Fourth decile	20,999	6,098	4,638	10,736	10,383	2,409	3,311	16,103	26,366
	(4.9)	(4.9)	(7.3)	(5.7)	(12.6)	(7.1)	(9.7)	(10.7)	(6.7)
Fifth decile	26,557	7,681	5,192	12,873	10,742	3,401	3,677	17,820	31,504
	(6.2)	(6.2)	(8.2)	(6.9)	(13.1)	(10.1)	(10.8)	(11.8)	(8.1)
Sixth decile	36,363	9,524	6,154	15,678	7,943	3,800	3,455	15,198	35,883
	(8.5)	(7.6)	(9.7)	(8.4)	(9.6)	(11.2)	(10.1)	(10.1)	(9.2)
Seventh decile	49,095	12,892	7,070	19,962	5,374	4,104	3,263	12,741	41,874
	(11.5)	(10.4)	(11.1)	(10.6)	(6.5)	(12.1)	(9.6)	(8.5)	(10.7)
Eighth decile	58,004	15,486	8,058	23,544	5,274	5,318	4,263	14,855	49,315
	(13.5)	(12.4)	(12.7)	(12.5)	(6.4)	(15.7)	(12.5)	(9.9)	(12.6)
Ninth decile	77,150	20,665	9,234	29,899	3,280	5,706	3,510	12,496	59,747
	(18.1)	(16.7)	(14.6)	(15.9)	(4.0)	(16.9)	(10.3)	(8.3)	(15.3)
Highest 10 percent	140,113	41,792	13,184	54,976	2,597	6,601	3,355	12,553	97,690
	(32.6)	(33.5)	(20.7)	(29.3)	(3.1)	(19.4)	(9.8)	(8.3)	(25.0)
All households	42,816	12,426	6,347	18,773	8,240	3,392	3,418	15,050	39,093
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Table A.5: Average incomes, benefits and taxes, 1997/98 – households classified by household composition: Statistics New Zealand household composition

	Incomes, benefits and taxes: average annual amounts (dollars)								
	Market income	*Direct taxes*	*Indirect taxes*	*Total taxes*	*Benefits*	*Education spending*	*Health spending*	*All government social expenditure*	*Final income*
Sole occupant:									
• Aged less than 40 years	26,572	7,046	3,711	10,757	2,296	771	762	3,829	19,644
	(2.5)	(2.3)	(2.4)	(2.3)	(1.1)	(0.9)	(0.9)	(1.0)	(2.0)
• Aged 40 to 62 years	34,151	9,587	4,168	13,755	2,416	255	1,028	3,699	24,095
	(5.5)	(5.3)	(4.5)	(5.0)	(2.0)	(0.5)	(2.1)	(1.7)	(4.2)
• Aged 63 and over	4,204	3,459	2,451	5,910	13,853	20	3,554	17,427	15,721
	(1.0)	(2.8)	(3.9)	(3.2)	(16.9)	(0.1)	(10.5)	(11.7)	(4.0)
Couples without children:									
• Female aged under 40 years	72,311	19,315	7,866	27,181	382	585	1,394	2,361	47,491
	(9.1)	(8.4)	(6.7)	(7.8)	(0.3)	(0.9)	(2.2)	(0.8)	(6.6)
• Female aged 40 to 62 years	57,124	16,277	7,028	23,305	3,947	206	2,122	6,275	40,094
	(15.6)	(15.3)	(13.0)	(14.5)	(5.6)	(0.7)	(7.3)	(4.9)	(12.0)
• Female aged 63 and over	14,365	7,504	4,633	12,137	20,116	19	5,965	26,100	28,328
	(2.5)	(4.4)	(5.3)	(4.7)	(17.8)	(0)	(12.7)	(12.7)	(5.3)
Couples with children:									
• Female aged under 30 years	35,720	9,258	5,236	14,494	6,237	4,076	5,660	15,973	37,199
	(2.8)	(2.5)	(2.8)	(2.6)	(2.5)	(4.0)	(5.6)	(3.6)	(3.2)
• Female aged 30 to 34 years	48,207	12,730	6,694	19,424	4,047	5,934	4,964	14,945	43,728
	(5.4)	(4.9)	(5.0)	(4.9)	(2.3)	(8.4)	(6.9)	(4.7)	(5.3)
• Female aged 35 to 39 years	67,328	18,782	8,529	27,311	3,519	7,900	4,188	15,607	55,624
	(10.2)	(9.8)	(8.7)	(9.4)	(2.8)	(15.1)	(8.0)	(6.7)	(9.2)
• Female aged 40 to 44 years	74,036	20,701	10,640	31,341	3,633	8,261	3,294	15,188	57,883
	(10.0)	(9.6)	(9.7)	(9.6)	(2.5)	(14.1)	(5.6)	(5.8)	(8.5)

continued overleaf

Table A.5: continued

	Incomes, benefits and taxes: average annual amounts (dollars)								
	Market income	*Direct taxes*	*Indirect taxes*	*Total taxes*	*Benefits*	*Education spending*	*Health spending*	*All government social expenditure*	*Final income*
• Female aged 45 to 49 years	84,672	23,022	10,272	33,294	2,696	6,580	3,130	12,406	63,784
	(8.4)	(7.9)	(6.9)	(7.5)	(1.4)	(8.2)	(3.9)	(3.5)	(6.9)
• Female aged 50 and over	54,720	15,587	8,423	24,010	10,468	2,592	4,027	17,087	47,797
	(5.9)	(5.8)	(6.1)	(5.9)	(5.9)	(3.5)	(5.4)	(5.2)	(5.6)
Sole parent families:									
• Parent aged under 30 years	4,545	3,242	2,494	5,736	16,980	4,377	4,798	26,155	24,964
	(0.1)	(0.3)	(0.5)	(0.4)	(2.7)	(1.7)	(1.8)	(2.3)	(0.8)
• Parent aged 30 and over	17,744	6,203	4,363	10,566	13,941	5,730	2,998	22,669	29,847
	(3.1)	(3.7)	(5.1)	(4.2)	(12.6)	(12.6)	(6.5)	(11.2)	(5.7)
Other family groups:									
• With children	40,924	11,926	6,868	18,794	16,463	7,952	5,774	30,189	52,319
	(6.5)	(6.5)	(7.3)	(6.8)	(13.5)	(15.9)	(11.4)	(13.6)	(9.1)
• Without children	58,243	16,064	8,314	24,378	10,900	3,479	3,967	18,346	52,211
	(5.3)	(5.0)	(5.1)	(5.1)	(5.1)	(4.0)	(4.5)	(4.7)	(5.2)
Non-family households	44,732	11,347	7,486	18,833	6,701	5,354	2,697	14,752	40,651
	(6.2)	(5.4)	(7.0)	(6.0)	(4.8)	(9.4)	(4.7)	(5.8)	(6.2)
All households	42,816	12,426	6,347	18,773	8,240	3,392	3,418	15,050	39,093
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Table A.6: Average incomes, benefits and taxes, 1997/98 – households classified by household composition: alternative classification for comparison with Australian data

	Incomes, benefits and taxes: average annual amounts (dollars)								
	Market income	*Direct taxes*	*Indirect taxes*	*Total taxes*	*Benefits*	*Education spending*	*Health spending*	*All government social expenditure*	*Final income*
Sole occupant:									
• Aged less than 35 years	26,293	6,937	3,592	10,529	2,308	978	760	4,046	19,810
	(1.7)	(1.6)	(1.6)	(1.6)	(0.8)	(0.8)	(0.6)	(0.8)	(1.4)
• Aged 35 to 61 years	33,059	9,345	4,187	13,532	2,318	273	979	3,570	23,097
	(6.0)	(5.9)	(5.1)	(5.6)	(2.2)	(0.6)	(2.2)	(1.9)	(4.6)
• Aged 62 or more	5,090	3,551	2,466	6,017	13,569	19	3,486	17,074	16,147
	(1.2)	(3.0)	(4.0)	(3.3)	(17.1)	(0.1)	(10.6)	(11.8)	(4.3)
Couples without children:									
• Female aged under 35 years	71,825	19,058	7,753	26,811	449	642	1,391	2,482	47,496
	(7.6)	(7.0)	(5.6)	(6.5)	(0.2)	(0.9)	(1.9)	(0.8)	(5.5)
• Female aged 35 to 61 years	60,047	17,061	7,246	24,307	3,306	221	2,025	5,552	41,292
	(16.8)	(16.4)	(13.7)	(15.5)	(4.8)	(0.8)	(7.1)	(4.4)	(12.6)
• Female aged 62 and over	14,949	7,425	4,631	12,056	19,491	18	5,756	25,265	28,158
	(2.8)	(4.7)	(5.7)	(5.1)	(18.6)	(0)	(13.3)	(13.2)	(5.7)
Couples with dependent children only:									
• Female aged under 25 years	32,330	8,787	3,140	11,927	7,423	2,960	6,296	16,679	37,082
	(0.5)	(0.4)	(0.3)	(0.4)	(0.6)	(0.5)	(1.1)	(0.7)	(0.6)
• Female aged 25 to 34 years	43,779	11,460	6,320	17,780	4,763	5,316	5,169	15,248	41,247
	(7.7)	(6.9)	(7.5)	(7.1)	(4.3)	(11.8)	(11.4)	(7.6)	(7.9)
• Female aged 35 to 44 years	70,366	20,021	9,404	29,425	3,514	8,468	3,878	15,860	56,801
	(16.9)	(16.6)	(15.2)	(16.1)	(4.4)	(25.7)	(11.7)	(10.8)	(15.0)
• Female aged 45 to 54 years	76,736	21,592	8,953	30,545	3,074	7,726	3,013	13,813	60,004
	(4.8)	(4.6)	(3.7)	(4.3)	(1.0)	(6.0)	(2.3)	(2.4)	(4.1)
• Female aged 55 and over	23,663	7,875	6,489	14,364	12,443	3,784	3,757	19,984	29,283
	(0.2)	(0.3)	(0.4)	(0.3)	(0.7)	(0.5)	(0.5)	(0.6)	(0.3)

continued overleaf

Table A.6: continued

	Incomes, benefits and taxes: average annual amounts (dollars)								
	Market income	*Direct taxes*	*Indirect taxes*	*Total taxes*	*Benefits*	*Education spending*	*Health spending*	*All government social expenditure*	*Final income*
Couples with dependent and non-dependent children	78,202 (4.2)	20,730 (3.9)	10,609 (3.9)	31,339 (3.9)	4,640 (1.3)	8,851 (6.1)	4,320 (2.9)	17,811 (2.8)	64,674 (3.8)
Couples with non-dependent children only	65,934 (8.3)	17,775 (7.7)	9,462 (8.1)	27,237 (7.9)	7,915 (5.2)	1,702 (2.7)	3,413 (5.4)	13,030 (4.7)	51,727 (7.2)
Sole parents with dependent children only:									
• Parent aged less than 35 years	5,431 (0.3)	3,491 (0.7)	2,664 (1.1)	6,155 (0.8)	17,031 (5.2)	6,110 (4.5)	4,762 (3.5)	27,903 (4.6)	27,179 (1.7)
• Parent aged 35 years or more	10,297 (0.9)	4,343 (1.3)	3,841 (2.2)	8,184 (1.6)	14,819 (6.5)	7,649 (8.2)	2,597 (2.8)	25,065 (6.0)	27,178 (2.5)
Other sole parent families	33,207 (2.0)	9,885 (2.1)	5,773 (2.4)	15,658 (2.2)	11,293 (3.6)	2,034 (1.6)	2,767 (2.1)	16,094 (2.8)	33,643 (2.3)
Other family groups	47,251 (11.8)	13,438 (11.5)	7,396 (12.4)	20,834 (11.8)	14,431 (18.7)	6,318 (19.8)	5,114 (15.9)	25,863 (18.3)	52,280 (14.2)
Non-family households	44,732 (6.2)	11,347 (5.4)	7,486 (7.0)	18,833 (6.0)	6,701 (4.8)	5,354 (9.4)	2,697 (4.7)	14,752 (5.8)	40,651 (6.2)
All households	42,816 (100)	12,426 (100)	6,347 (100)	18,773 (100)	8,240 (100)	3,392 (100)	3,418 (100)	15,050 (100)	39,093 (100)

Table B.1(a): Younger couples with children aged under 18 years: government social expenditure and direct and indirect taxation classified by taxation group of households ($ million)

	Taxation group				*Total for whole*	
	Low	*Medium*	*High*	*Total*	*population*	*%*
Education	118	830	579	1,527	4,695	33
Health	73	673	396	1,142	4,731	24
New Zealand Superannuation	0	4	8	12	5,289	0
Benefits	168	518	44	729	5,114	14
Family support	70	274	7	351	1,002	35
Total social expenditure	429	2,300	1,034	3,762	20,831	18
Direct and indirect taxation	87	1,725	3,105	4,916	25,985	19
Number of households	14,680	124,413	87,530	226,623	1,384,204	16

Table B.1(b): Taxation groups for younger couples with children under 18 years: percentage of government social expenditure, direct and indirect taxes and household numbers within each group

	Taxation group			
	Low %	*Medium %*	*High %*	*Total %*
Education	2.5	17.7	12.3	32.5
Health	1.5	14.2	8.4	24.1
New Zealand Superannuation	0	0	0.2	0.2
Benefits	3.3	10.1	0.9	14.3
Family support	7.0	27.3	0.7	35.0
Total social expenditure	2.1	11.0	5.0	18.1
Direct and indirect taxation	0.3	6.6	11.9	18.9
Number of households	1.1	9.0	6.3	16.4

Table B.2(a): Older couples with children aged under 18 years: government social expenditure and direct and indirect taxation classified by taxation group of households ($ million)

	Taxation group				*Total for whole*	
	Low	*Medium*	*High*	*Total*	*population*	*%*
Education	56	455	652	1,163	4,695	25
Health	27	218	321	566	4,731	12
New Zealand Superannuation	29	52	89	170	5,289	3
Benefits	91	229	109	429	5,114	8
Family support	21	121	38	180	1,002	18
Total social expenditure	224	1,075	1,209	2,508	20,831	12
Direct and indirect taxation	33	790	3,416	4,240	25,989	16
Number of households	6,577	54,333	81,744	142,654	1,384,204	10

Table B.2(b): Taxation groups for older couples with children under 18 years: percentage of government social expenditure, direct and indirect taxes and household numbers within each group

	Taxation group			
	Low %	*Medium %*	*High %*	*Total %*
Education	1.2	9.7	13.9	24.8
Health	0.6	4.6	6.8	12.0
New Zealand Superannuation	0.5	1.0	1.7	3.2
Benefits	1.8	4.5	2.1	8.4
Family support	2.1	12.1	3.8	18.0
Total social expenditure	1.1	5.2	5.8	12.0
Direct and indirect taxation	0.1	3.0	13.1	16.3
Number of households	0.5	3.9	5.9	10.3

Table B.3(a): Sole parents with children aged under 18 years: government social expenditure and direct and indirect taxation classified by taxation group of households ($ million)

	Taxation group				*Total for whole*	
	Low	*Medium*	*High*	*Total*	*population*	*%*
Education	418	503	92	1,014	4,695	22
Health	229	286	44	558	4,731	12
New Zealand Superannuation	5	44	18	67	5,289	1
Benefits	888	962	101	1,951	5,114	38
Family support	237	219	16	471	1,002	47
Total social expenditure	1,777	2,014	271	4,061	20,831	19
Direct and indirect taxation	323	804	359	1,486	25,985	6
Number of households	61,576	70,683	12,048	144,307	1,384,204	10

Table B.3(b): Taxation groups for sole parents with children: percentage of government social expenditure, direct and indirect taxes and household numbers within each group

	Taxation group			
	Low	*Medium*	*High*	*Total*
	%	*%*	*%*	*%*
Education	8.9	10.7	2.0	21.6
Health	4.8	6.0	0.9	11.8
New Zealand Superannuation	0.1	0.8	0.3	1.3
Benefits	17.4	18.8	2.0	38.2
Family support	23.7	21.9	1.6	47.1
Total social expenditure	8.5	9.7	1.3	19.5
Direct and indirect taxation	1.2	3.1	1.4	5.7
Number of households	4.4	5.1	0.9	10.4

Table B.4(a): Adults only households with young adults: government social expenditure and direct and indirect taxation classified by taxation group of households ($ million)

	Taxation group				*Total*	
	Low	*Medium*	*High*	*Total*	*for whole population*	*%*
Education	some	346	448	837	4,695	18
Health	some	190	272	480	4,731	10
New Zealand Superannuation	some	0	0	0	5,289	0
Benefits	some	443	195	737	5,114	14
Family support	some	0	0	0	1,002	0
Total social expenditure	some	979	915	2,054	20,831	10
Direct and indirect taxation	some	1,392	4,058	5,509	25,985	21
Number of households	some	94,624	115,690	224,780	1,384,204	16

Table B.4(b): Taxation groups for adults only households with young adults: percentage of government social expenditure, direct and indirect taxes and household numbers within each group

	Taxation group			
	Low %	*Medium %*	*High %*	*Total %*
Education	some	7.4	9.5	17.8
Health	some	4.0	5.7	10.1
New Zealand Superannuation	some	0	0	0
Benefits	some	8.7	3.8	14.4
Family support	some	0	0	0
Total social expenditure	some	4.7	4.4	9.9
Direct and indirect taxation	some	5.4	15.6	21.2
Number of households	some	6.8	8.4	16.2

Table B.5(a): Adults only households without young adults: government social expenditure and direct and indirect taxation classified by taxation group of households ($ million)

	Taxation group				*Total for whole*	
	Low	*Medium*	*High*	*Total*	*population*	*%*
Education	27	61	38	126	4,695	3
Health	94	322	197	613	4,731	13
New Zealand Superannuation	78	298	114	490	5,289	9
Benefits	411	335	31	777	5,114	15
Family support	0	0	0	0	1,002	0
Total social expenditure	609	1,016	381	2,005	20,831	10
Direct and indirect taxation	239	2,509	4,292	7,040	25,985	27
Number of households	51,804	181,591	115,181	348,576	1,384,204	25

Table B.5(b): Taxation groups for adults only households without young adults: percentage of government social expenditure, direct and indirect taxes and household numbers within each group

	Taxation group			
	Low	*Medium*	*High*	*Total*
	%	*%*	*%*	*%*
Education	0.6	1.3	0.8	2.7
Health	2.0	6.8	4.2	13.0
New Zealand Superannuation	1.5	5.6	2.2	9.3
Benefits	8.0	6.6	0.6	15.2
Family support	0	0	0	0
Total social expenditure	2.9	4.9	1.8	9.6
Direct and indirect taxation	0.9	9.7	16.5	27.1
Number of households	3.7	13.1	8.3	25.2

Table B.6(a): Single person retiree households: government social expenditure and direct and indirect taxation classified by taxation group of households ($ million)

	Taxation group				*Total for whole*	
	Low	*Medium*	*High*	*Total*	*population*	*%*
Education	3	0	Some	3	4,695	0
Health	432	64	Some	501	4,731	11
New Zealand Superannuation	1,534	283	Some	1,849	5,289	35
Benefits	91	8	Some	100	5,114	2
Family support	0	0	Some	0	1,002	0
Total social expenditure	2,060	355	Some	2,453	20,831	12
Direct and indirect taxation	538	225	Some	864	25,985	3
Number of households	117,793	23,141	Some	143,645	1,384,204	10

Table B.6(b): Taxation groups for single person retiree households: percentage of government social expenditure, direct and indirect taxes and household numbers within each group

	Taxation group			
	Low	*Medium*	*High*	*Total*
	%	*%*	*%*	*%*
Education	0.1	0	some	0.1
Health	9.1	1.4	some	10.6
New Zealand Superannuation	29.0	5.4	some	35.0
Benefits	1.8	0.2	some	2.0
Family support	0	0	some	0
Total social expenditure	9.9	1.7	some	11.8
Direct and indirect taxation	2.1	0.9	some	3.3
Number of households	8.5	1.7	some	10.4

Table B.7(a): Retiree couple households: government social expenditure and direct and indirect taxation classified by taxation group of households ($ million)

	Taxation group				Total for whole population	%
	Low	*Medium*	*High*	*Total*		
Education	0	11	15	26	4,695	1
Health	263	434	80	778	4,731	16
New Zealand Superannuation	759	1,432	272	2,463	5,289	47
Benefits	52	106	42	200	5,114	4
Family support	0	0	0	0	1,002	0
Total social expenditure	1,075	1,982	410	3,467	20,831	17
Direct and indirect taxation	240	776	563	1,578	25,985	6
Number of households	40,525	73,586	15,496	129,607	1,384,204	9

Table B.7(b): Taxation groups for retiree couple households: percentage of government social expenditure, direct and indirect taxes and household numbers within each group

	Taxation group			
	Low %	*Medium* %	*High* %	*Total* %
Education	0	0.2	0.3	0.6
Health	5.6	9.2	1.7	16.4
New Zealand Superannuation	14.4	27.1	5.1	46.6
Benefits	1.0	2.1	0.8	3.9
Family support	0	0	0	0
Total social expenditure	5.2	9.5	2.0	16.6
Direct and indirect taxation	0.9	3.0	2.2	6.1
Number of households	2.9	5.3	1.1	9.4

Table B.8(a): Other retiree households: government social expenditure and direct and indirect taxation classified by taxation group of households ($ million)

	Taxation group				*Total for whole*	
	Low	*Medium*	*High*	*Total*	*population*	*%*
Education	some	0	some	1	4,695	0
Health	some	49	some	92	4,731	2
New Zealand Superannuation	some	99	some	237	5,289	4
Benefits	some	118	some	191	5,114	4
Family support	some	0	some	0	1,002	0
Total social expenditure	some	267	some	521	20,831	3
Direct and indirect taxation	some	147	some	352	25,985	1
Number of households	some	12,933	some	24,012	1,384,204	2

Table B.8(b): Taxation groups for other retiree households: percentage of government social expenditure, direct and indirect taxes and household numbers within each group

	Taxation group			
	Low	*Medium*	*High*	*Total*
	%	*%*	*%*	*%*
Education	some	0	Some	0
Health	some	1.0	Some	1.9
New Zealand Superannuation	some	1.9	Some	4.5
Benefits	some	2.3	Some	3.7
Family support	some	0	Some	0
Total social expenditure	some	1.3	Some	2.5
Direct and indirect taxation	some	0.6	Some	1.4
Number of households	some	0.9	some	1.7

References

Adema W (1999), 'Net Social Expenditure', *Labour Market and Social Policy Occasional Paper*, No 39, OECD, Paris.

Alesina A (1999), 'Too Large and Too Small Governments', in Tanzi V, Chu K and Gupta S (1999), pp 216–234.

Alesina A, Perotti R and Tavares J (1998), 'The Political Economy of Fiscal Adjustment', *Brookings Papers on Economic Activity*, No 1, pp 197–266.

Arrow KJ (1963), 'Uncertainty and the Welfare Economics of Medical Care', *American Economic Review*, Vol 53 (December), pp 941–973.

ABS (1996a), Australian Bureau of Statistics, *1993–94 Household Expenditure Survey Australia: Detailed Expenditure Items*, AGPS, Canberra.

ABS (1996b), Australian Bureau of Statistics, *1993–94 Household Expenditure Survey Australia: The Effects of Government Benefits and Taxes on Household Income*, AGPS, Canberra.

ABS (1997), Australian Bureau of Statistics, 'Government and Non-Government Schools', *Australian Social Trends, 1997,* Catalogue No 4102.0, AGPS, Canberra, pp 69–74.

ABS (1998a), Australian Bureau of Statistics, *Government Financial Estimates, Australia, 1998–99*, Catalogue No 5501.0, AGPS, Canberra.

ABS (1998b), Australian Bureau of Statistics, *National Income, Expenditure and Product*, September Quarter, Catalogue No 5206.0, AGPS, Canberra.

ABS (2000a), Australian Bureau of Statistics, *Social Trends 2000*, Catalogue No 4102.0, ABS, Canberra.

ABS (2000b), Australian Bureau of Statistics, *Household Expenditure Survey: Summary of Results*, Catalogue No 6530.0, ABS, Canberra.

ABS (2000c), Australian Bureau of Statistics, *Household Expenditure Survey: Detailed Expenditure Items*, Catalogue No 6530.0, ABS, Canberra.

AIHW (1997), Australian Institute of Health and Welfare, *Australia's Welfare 1997: Services and Assistance*, AIHW, Canberra.

AIHW (1998), Australian Institute of Health and Welfare, *Australia's Health 1998*, AIHW Catalogue No Aus 10, AIHW, Canberra.

AIHW (1999), Australian Institute of Health and Welfare, *Australia's Welfare 1999: Services and Assistance,* Catalogue No Aus 16, AIHW, Canberra.

AIHW (2000), Australian Institute of Health and Welfare, *Australia's Health 2000,* Catalogue No 19, AIHW, Canberra.

Barker G (1996), *Income Distribution in New Zealand*, Institute of Policy Studies, Victoria University of Wellington, Wellington.

Barr N (1992), 'Economic Theory and the Welfare State: A Survey and Interpretation', *Journal of Economic Literature,* Vol XXX (June), pp 741–803.

Barr N (1993), *The Economics of the Welfare State,* Weidenfeld and Nicholson, London.

Bastiat F [1848] (1964), *Selected Essays in Political Economy,* (translated by Seymour Cain), D Van Nostrund Company Inc, Princeton, New Jersey.

Bates W (2001), *How Much Government? The Effects of High Government Spending on Economic Performance*, New Zealand Business Roundtable, Wellington.

Bertram G (1988), 'Middle Class Capture: A Brief Survey', in *Future Directions*, Vol III, Part II of *Report to the Royal Commission on Social Policy,* Government Printer, Wellington.

Blondal S and Scarpetta S (1998), 'The Retirement Decision in OECD Countries', *Ageing Working Papers 1.4*, OECD, Paris.

Börsch-Supan A and Reil-Held A (1998), 'Retirement Income: Level, Risk and Substitution Among Income Components', *Ageing Working Papers 3.7*, OECD, Paris.

Boston J, Dalziel P and St John S (1999), *Redesigning the Welfare State in New Zealand: Problems, Policies, Prospects,* Oxford University Press, Auckland.

Brennan G and Pincus J (1983), 'Government Expenditure Growth and Resource Allocation: The Nebulous Connection', *Oxford Economic Papers*, Vol 35, pp 351–365.

Buchanan C and Hartley P (2000), *Equity as a Social Goal,* New Zealand Business Roundtable, Wellington.

Buckingham J (2000), *The Truth about Private Schools in Australia,* Issue Analysis No 13, The Centre for Independent Studies, Sydney.

Burhardt T (1997), *Boundaries Between Public and Private Welfare: A Typology and Map of Services,* CASE Paper 2, London School of Economics, London.

Caldwell B (1997), 'Hayek and Socialism', *Journal of Economic Literature*, Vol XXXV (December 1997), pp 1856–1890.

Castles F (1985), *The Working Class and Welfare: Reflections on the Political Development of the Welfare State in Australia and New Zealand, 1890–1960,* Allen and Unwin/Port Nicholson Press, Wellington.

Centrelink (2001), *Financial Information Service* (www.centrelink.gov.au).

Cohn E (ed) (1997), *Market Approaches to Education: Vouchers and School Choice,* Pergamon, New York.

Commonwealth of Australia (1998), *Budget Strategy and Outlook, 1998–99*, Budget Paper No 1, AGPS, Canberra.

Cox JP (1998), *Towards Personal Independence and Prosperity: Income Support for Persons of Working Age in New Zealand,* New Zealand Business Roundtable, Wellington.

Danzon P (1991), *Options for Health Care in New Zealand,* New Zealand Business Roundtable, Wellington.

Datson J (1998), 'Can the Voluntary Sector Meet the Challenge of Civil Society', in James M (ed), 1998, pp 85–99.

DSW (1996), Department of Social Welfare, *Social Welfare in New Zealand: Strategic Directions,* Ministerial Briefing Papers, DSW, Wellington.

DSW (1997), Department of Social Welfare, *Statistical Report for the Year ending 30 June 1997,* DSW, Wellington.

DSW (1998), Department of Social Welfare, *Statistical Report for the Year ending 30 June 1998,* DSW, Wellington.

Diewert W and Lawrence D (1994), *The Marginal Costs of Taxation in New Zealand,* New Zealand Business Roundtable, Wellington.

Disney R, d'Ercole M and Scherer P (1998), 'Resources During Retirement', *Ageing Working Paper AWP 4.3*, OECD, Paris.

Fane G (1985), *Education Policy in Australia,* Discussion Paper 85/08, Office of EPAC, Canberra.

Feldstein M (1995), 'The Effect of Marginal Tax Rates on Taxable Income: A Panel Study of the 1986 Tax Reform Act', *Journal of Political Economy,* Vol 103, No 3, pp 551–571.

Fergusson D, Hong B, Horwood J, Jensen J and Travers P (2001), *Living Standards of Older New Zealanders*, Ministry of Social Policy, Wellington.

Galt D (2000), *New Zealand's Economic Growth*, Treasury Working Paper 00/09, Wellington.

Gerdtham U, Jönsson B, McFarlan M and Oxley H (1994), 'Factors Affecting Health Spending: A Cross-Country Econometric Analysis', annex to Oxley H and MacFarlan M, *Health Care Reform: Controlling Spending and Increasing Efficiency,* Economics Department Working Papers, No 149, OECD, Paris.

Giersch H, Paqué K and Schmieding H (1994), *The Fading Miracle: Four Decades of Market Economy in Germany*, (revised edition), Cambridge University Press, Cambridge.

Green D (1996), *From Welfare State to Civil Society: Towards Welfare that Works in New Zealand,* New Zealand Business Roundtable, Wellington.

Green D (1998), 'Summary of From Welfare State to Civil Society: Towards Welfare that Works in New Zealand', in James (ed), (1998).

Green D (2001), *Poverty and Benefit Dependency*, New Zealand Business Roundtable, Wellington.

Green D and Casper L (2000), *Delay, Denial and Dilution: The Impact of NHS Rationing on Heart Disease and Cancer,* IEA Health and Welfare Unit, London.

Goodger K (1997), *New Zealand Retirement Income Support and Average Wages Since 1970,* Social Policy Agency, Wellington.

Gruber J and Wise D (1998), 'Social Security and Retirements: An International Comparison', *American Economic Review*, (Papers and Proceedings), Vol 88, No 2 (May).

Harding A (1984), *Who Benefits? The Australian Welfare State and Redistribution*, Social Welfare Research Centre, Reports and Proceedings, No 45, University of New South Wales, Sydney.

Harrison M (1998), 'Revealing Secrets: Information Provision in Public and Market Systems of Education', in *Excellence Isn't Optional*, New Zealand Business Roundtable, Wellington.

Hartley P and Kyle A (1985), 'The Economics of Medical Care', in Buchanan C and Prior E (eds), *Medical Care and Markets: Conflicts Between Efficiency and Justice*, George Allen and Unwin, Sydney.

Hayek FA (1960), *The Constitution of Liberty,* Routledge and Keegan Paul, London.

Henderson D (1999), *The Changing Fortunes of Economic Liberalism: Yesterday, Today and Tomorrow*, Institute of Public Affairs and New Zealand Business Roundtable, Melbourne and Wellington.

Hoxby C (1995a), *Do Private Schools Provide Competition for Public Schools?*, National Bureau of Economic Research, Working Paper No 4978, (revised), Cambridge, Massachusetts.

Hoxby C (1995b), *Is There an Efficiency–Equity Trade-Off in School Finance? Tiebout and a Theory of the Local Public Goods Producer*, National Bureau of Economic Research, Working Paper No 5265, Cambridge, Massachusetts.

Hoxby C (1997), *Does Competition Among Public Schools Benefit Students and Taxpayers? Evidence from Natural Variation in School Districting*, National Bureau of Economic Research, Working Paper No 4979, (revised), Cambridge, Massachusetts.

Hyslop D (2000), *A Preliminary Analysis of the Dynamics of Individual Market and Disposable Incomes*, Treasury Working Paper 00/15, Wellington.

ISI (1998), Investment Savings and Insurance Association of New Zealand, The *ISI Report on Retirement Savings: A Wake-up Call*, ISI, Wellington.

Jacobs D (1998), *Social Welfare Systems in East Asia, A Comparative Analysis Including Private Welfare*, CASE Paper 10, London School of Economics, London.

Jacobzone S (1999), 'Ageing and Care for Frail Elderly Persons', *Labour Market and Social Policy – Occasional Papers*, No 38, OECD, Paris.

James M (1998), (ed), *Exploring Civil Society: Essays on David Green's From Welfare State to Civil Society,* New Zealand Business Roundtable, Wellington.

Jasay A de (1985), *The State*, Basil Blackwell, Oxford.

Jouvenal B de [1952] (1990), *The Ethics of Redistribution*, (edited by John Gray), Liberty Press, Indianapolis.

Kealey T (1998), 'Wayward Thatcher', *The Spectator*, Vol 281, No 886 (18 July), pp 16–17.

Keynes JM [1926] (1972), 'The End of Laissez-faire', in 'Essays in Persuasion', in *Royal Economic Society, The Collected Writings of John Maynard Keynes*, Vol IX, Macmillan, London.

Lambert S and Keating M (1998), *From Welfare to Work: Improving the Interface of Tax and Social Security*, NATSEM Discussion Paper No 35, University of Canberra, Canberra.

Le Grand J (1982), *The Strategy of Equality: Redistribution and the Social Services,* George Allen and Unwin, London.

Lindbeck A (1995), 'Hazardous Welfare-state Dynamics', *American Economic Review,* (Papers and Proceedings), Vol 85, No 2 (May 1995), pp 9–15.

Lindbeck A (1997), 'The Swedish Experiment', *Journal of Economic Literature*, Vol XXXV (September), pp 1273–1319.

Mackay R (1998), *Targeting in Social Security: The New Zealand Experience*, paper presented at the 2nd International Research Conference on Social Security, 25–29 January, 1998, Jerusalem.

Ministry of Education (1993), *Government Expenditure on Education: 1990*, Ministry of Education, Wellington.

Ministry of Education (1996), *Schooling in New Zealand: A Guide*, Ministry of Education, Wellington.

Ministry of Education (1997a), *Government Expenditure on Education: 1994*, Ministry of Education, Wellington.

Ministry of Education (1997b), *Tertiary Education and Training in New Zealand: A Guide,* Ministry of Education, Wellington.

Ministry of Education (1998a), *Better Beginnings: Early Childhood Education in New Zealand*, Ministry of Education, Wellington.

Ministry of Education (1998b), *New Zealand Schools: A Report on the Compulsory Schools Sector in New Zealand,* Ministry of Education, Wellington.

Ministry of Education (1998c), *Education Statistics of New Zealand: 1998,* Ministry of Education, Wellington.

Ministry of Education (1999a), *Schools Report,* Ministry of Education, Wellington.

Ministry of Education (1999b), *Briefing for the Incoming Minister of Education*, Ministry of Education, Wellington.

Ministry of Health (1995), *Patients in Profile: The Use of Health Care Services in New Zealand,* Ministry of Health, Wellington.

Ministry of Health (1998), *Health Expenditure Trends in New Zealand, 1980–1997,* Ministry of Health, Wellington.

Ministry of Health (1999), *Health Expenditure Trends in New Zealand, 1980–1998*, Ministry of Health, Wellington.

Ministry of Health (2000), *Health Expenditure Trends in New Zealand, 1980–1999,* Ministry of Health, Wellington.

Ministry of Social Policy (1999), *Post-election Briefing Papers*, Ministry of Social Policy, Wellington.

Ministry of Social Policy (2000), *Statistics Report for the Year Ending 1999*, Ministry of Social Policy, Wellington.

NZBR (1996), New Zealand Business Roundtable, *Moving Into the Fast Lane,* New Zealand Business Roundtable, Wellington.

OECD (1995), 'Health Care Reform: Controlling Spending and Increasing Efficiency', *OECD Economic Studies*, No 24, pp 8–48.

OECD (1998a), *Education at a Glance, OECD Indicators, 1998,* Centre for Educational Research and Innovation, OECD, Paris.

OECD (1998b), *Education Policy Analysis, 1998,* Centre for Education Research and Innovation, OECD, Paris.

OECD (1998c), *OECD Health Data, 1998,* (electronic publication), OECD, Paris.

OECD (1998d), *Economic Surveys, 1998, New Zealand,* OECD, Paris.

OECD (1998e), *OECD Economic Outlook*, 63 (June), OECD, Paris.

OECD (1998f), *Maintaining Prosperity in an Ageing Society,* OECD Policy Brief No 5, OECD, Paris.

OECD (1999), *OECD Social Expenditure Database, 1980–1996,* OECD, Paris.

O'Higgins M (1985), 'Inequality, Redistribution and Recession: The British Experience, 1976–1982', *Journal of Social Policy,* Vol 14, No 3, pp 279–307.

Passmore J (1997), *Memoirs of a Semi-Detached Australian,* Melbourne University Press, Melbourne.

Periodic Report Group (1997a), *1997 Retirement Income Report, A Review of the Current Framework,* Interim Report, July 1997, Wellington.

Periodic Report Group (1997b), *1997 Retirement Income Report, Building Stability,* Concluding Report, December 1997, Wellington.

Pierson P (1994), *Dismantling the Welfare State: Reagan, Thatcher and the Politics of Retrenchment*, Cambridge University Press, Cambridge.

Polackova H (1996), *Population Aging and Financing of Government Liabilities in New Zealand*, New Zealand Treasury Working Paper, Wellington.

Putterman L, Roemer J and Sylvestre J (1998), 'Does Egalitarianism Have a Future?', *Journal of Economic Literature*, Vol XXXVI (June), pp 861–902.

Rosen S (1996), 'Public Employment and the Welfare State in Sweden', *Journal of Economic Literature,* Vol XXXIV (June), pp 729–740.

Roseveare D, Leibfritz W, Fore D and Wurzel E (1996), *Ageing Populations, Pension Systems and Government Budgets Simulations for 20 OECD Countries,* Economics Department, Working Paper, No 168, OECD, Paris.

Rothschild M and Stiglitz J (1976), 'Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information', *Quarterly Journal of Economics,* Vol 90, No 4, pp 629–649.

Saunders P and Smeeding T (1998), *How Do the Elderly in Taiwan Fare Cross-Nationally? Evidence from the Luxembourg Income Study Project,* Social Policy Research Centre, University of New South Wales, Sydney.

Savage J (1998), 'Getting from Here to There: The Transition from Corporate to Civil Association', in James (ed), (1998), pp 157–170.

Scott C and Cumming J (1998), 'A Critique of David Green's Approach to Health Care Policy in New Zealand', in James (ed), (1998), pp 101–115.

Schwartz S (1999), 'Saving Australia's Health Care Systems: Nostrums or Cures?', *Policy*, Vol 15, No 1, pp 3–7.

Sen A (1999), 'Economic Policy and Equity', in Tanzi V, Chu K and Gupta S (eds), 1999, pp 28–43.

Snively S (1988), *The Government Budget and Social Policy,* a paper prepared for the Royal Commission on Social Policy, Department of Social Welfare, Wellington.

Snower D (1993), 'The Future of the Welfare State', *The Economic Journal,* Vol 103 (May), pp 700–717.

SNZ (1990), Department of Statistics, *The Fiscal Impact on Income Distribution, 1987/88,* Catalogue No 01.016, Department of Statistics, Wellington.

SNZ (1995), Statistics New Zealand, *Labour Market Statistics*, Statistics New Zealand, Wellington.

SNZ (1996), Statistics New Zealand, *New Zealand System of National Accounts, 1996,* Statistics New Zealand, Wellington.

SNZ (1997), Statistics New Zealand, *Household Labour Force Survey,* Catalogue No 05.500, March Quarter and June Quarter issues, Statistics New Zealand, Wellington.

SNZ (1998a), Statistics New Zealand, *Incomes of Persons, Year Ended March 1995,* Catalogue No 09.503, Statistics New Zealand, Wellington.

SNZ (1998b), Statistics New Zealand, *New Zealand Official Yearbook 1998,* Statistics New Zealand, Wellington.

SNZ (1998c), Statistics New Zealand, detail of expenditure items in the health services sub-group, educational and tuitional services sub-group, medical services sub-group, household services nec sub-group and services nec subgroup; private communication.

SNZ (1998d), Statistics New Zealand, *Household Economic Survey, Year Ended March 1998,* Hot Off the Press, Statistics New Zealand, Wellington.

SNZ (1999a) Statistics New Zealand, *Household Labour Force Survey, December 1998 Quarter,* Catalogue No 05.500, Statistics New Zealand, Wellington.

SNZ (1999b), Statistics New Zealand, *New Zealand Now: Incomes*, Statistics New Zealand, Wellington.

SNZ (1999c), Statistics New Zealand, *Household Economic Survey, Year Ended March 1999,* Statistics New Zealand, Wellington.

SNZ (2000a) Statistics New Zealand, *Labour Market Statistics 1999*, Statistics New Zealand, Wellington.

SNZ (2001), Statistics New Zealand, *Demographic Trends 2000,* Statistics New Zealand, Wellington.

Stephens R, Waldegrave C and Frater P (1995), 'Measuring Poverty in New Zealand', *Social Policy Journal of New Zealand,* Issue 5, December, pp 88–112.

Stewart D (1998), 'Civil Society or the Corporate State in Health Care?', in James (ed), (1998), pp 117–128.

Stewart D and Stewart H (1998), 'Deregulating Medical Practice in New Zealand', *Agenda,* Vol 5, No 4, pp 407–418.

Stigler G (1970), 'Director's Law of Public Income Redistribution', *Journal of Law and Economics*, Vol XIII, No 1, pp 1–10.

Stiglitz J (1998), 'The Private Uses of Public Interests: Incentives and Institutions', *The Journal of Economic Perspectives*, Vol 12, No 2, pp 3–22.

Stocks P (1993), 'Changes to Health Targeting', *Social Policy Journal of New Zealand,* Issue 1, November 1993.

Sutton F (1999a), *Allocating 1997/98 Government Education Expenditure to TAXMOD Categories,* report prepared for the Treasury, 26 May, 1999.

Sutton F (1999b), *Allocating 97/98 Health Expenditures to Households,* report prepared for the Treasury, 10 June, 1999.

Tanzi V (2000), *Globalisation and the Future of Social Protection*, Working Paper WP/00/12, International Monetary Fund, Washington.

Tanzi V, Chu K and Gupta S (eds), (1999), *Economic Policy and Equity,* International Monetary Fund, Washington.

Tanzi V and Schuknecht L (1995), *The Growth of Government and the Reform of the State in Industrial Countries,* IMF Working Paper WP/95/130, International Monetary Fund, Washington.

Temple J (1999), 'The New Growth Evidence', *Journal of Economic Literature*, Vol XXXVII (March), pp 112–156.

Thompson D (1991), *Selfish Generations: The Ageing of New Zealand's Welfare State,* Bridget Williams Books, Wellington.

Thompson D (1998), *A World Without Welfare: New Zealand's Colonial Experiment,* Auckland University Press with Bridget Williams Books, Auckland.

Treasurer (1997), *The Budget Economic and Fiscal Update 1997*, The Treasury, Wellington.

Treasurer (1998), *The Budget Economic and Fiscal Update 1998*, The Treasury, Wellington.

Treasurer (1999), *The Budget Economic and Fiscal Update 1999*, The Treasury, Wellington.

Welch F (1999), 'In Defense of Inequality', *American Economic Review*, (Papers and Proceedings), Vol 89, No 2, pp 1–17.

Wilson M (1999), 'The Duration of Benefit Receipt: New Findings from the Benefits Dynamics Data Set', *Social Policy Journal of New Zealand,* December, pp 59–82.

Zajac E (1995), *Political Economy of Fairness*, MIT Press, Cambridge, Massachusetts.

Index

By comparison with some other countries, New Zealand relies heavily on education and health services and retirement income support provided by governments and financed through taxation. Much government education and health expenditure benefits families with moderate to high current incomes. Much expenditure on superannuation benefits individuals and couples who earned moderate to high incomes during their working lives. Such 'churning' of income and the high taxation associated with it does nothing for equity, is economically wasteful and damages economic growth.

In *Middle Class Welfare,* James Cox documents the level of income churning in New Zealand and argues that governments should consider alternative policies that involve people who can afford to do so taking greater responsibility for providing their own health care, education and retirement incomes. Such policies would result in improved service quality and reduce the burden of financing the welfare state that falls particularly heavily on families with children.

Although there are many issues that need to be considered in designing policies, alternative approaches operate successfully in overseas countries, including Australia. *Middle Class Welfare* analyses such options and advances positive proposals for reform of the New Zealand welfare state that would better allocate public assistance and allow taxes to be reduced.

James Cox has been a Member of the Independent Pricing and Regulatory Tribunal of New South Wales since 1996. He was previously Principal Adviser to the Tribunal and, between 1989 and 1992, a consultant to the New South Wales Cabinet office. He has held positions in the Australian Public Service, including in the Department of Social Security, and advised the New Zealand government on aspects of social policy changes during the early part of 1991. His book *Towards Personal Independence and Prosperity: Income Support for Persons of Working Age in New Zealand* was published by the New Zealand Business Roundtable in 1998. He has also published many articles in economics and public policy journals.

ISBN 1-877148-72-5

9 781877 148729

RRP $34.95 (recommended)
New Zealand Business Roundtable