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Reducing Maori and Pacific Inequalities

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TREASURY WORKING PAPER

01/30

Reducing Māori and Pacific Inequalities The Treasury¹.

Abstract

Over the last fifty years the Māori and non-Māori populations have slowly and unevenly become more similar on a range of key demographic, social and economic outcomes. This has principally been driven by increased geographic and social proximity between the two groups. There is evidence that similar processes may be operating for migrant peoples from the Pacific.

Many Māori and Pacific people do better than the population median. Conversely, on most outcomes, a much greater number of people other than Māori and Pacific people do worse than the median. Nevertheless, it remains true that Māori and Pacific people are disproportionately represented in the group that do worse than the median. In this paper, we consider priorities for action aimed at improving outcomes for those Māori and Pacific people, who do worse than the median population. The companion working papers prepared for Treasury's "Inclusive Economy" key priority explore other aspects of social and economic inclusion within New Zealand.

The paper sets out a preliminary framework to assist Ministers to identify policy and spending priorities for strengthening policy for reducing these disparities. It identifies policy areas and general design issues pivotal to accelerating a reduction in disparities.

The paper draws on New Zealand and international evidence to understand the mechanisms that perpetuate disparities, and to identify policies that can better address them. The paper concludes that policy should address its primary effort to improve outcomes for those Māori and Pacific people who do worse than the median for the population, while, at the same time assisting others who have similarly poor outcomes. It suggests that improving literacy and numeracy skills of Māori and Pacific students at primary school level is a priority for further development. It also recommends programmes in the health, employment and housing sectors to back this up.

JEL classification: H0 Public economics - general, I0 Health, Education and Welfare – general, I3 Welfare and Poverty

Keywords: disparity, inequality, Māori, Pacific people,

¹ * Ron Crawford was primarily responsible for the preparation of this paper for the Treasury, PO Box 3724 Wellington, NZ, <http://www.treasury.govt.nz/>. It is a companion paper to the Treasury Working Papers *Towards the Inclusive Economy*, *Human Capital and the Inclusive Economy* and *Geography and the Inclusive Economy: A Regional Perspective*. An earlier version, prepared in late 2000, served as an input into these reports. Several departments were consulted in the preparation of the paper. However, it represents the views of Treasury.

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REDUCING MĀORI AND PACIFIC INEQUALITIES

Executive Summary

This report sets out our preliminary thinking about priority policy areas and strategies to strengthen the Government's "reducing inequalities" strategy. It is designed to provide a context for considering future budget bids, but is not a commentary on specific bids. The report is in partial fulfilment of the Treasury's "Inclusive Economy" key priority. Because they are disproportionately represented in the disadvantaged population, this report has a particular focus on Māori and Pacific people. It is complementary to the other reports produced for the "Inclusive Economy" key priority, which discuss more broadly social and economic inclusion in New Zealand.

We take into account the large government resources already devoted to achieving good social outcomes for the population in general; and also the many initiatives in place and proposed to make mainstream services more responsive to the needs of Māori and Pacific peoples, and to provide specially designed services for them. Therefore, we look at where extra effort is likely to produce the biggest gains.

We aim to identify the policy areas and general design issues, attention to which will provide greatest assurance of accelerating reduction in disparities, especially over the longer term. The design of particular policies and initiatives is the responsibility of sectoral departments.

A key to strengthening the Government's strategy is to understand the mechanisms that perpetuate disparities, and to identify policies that can better harness both government and community resources to address them. We draw on New Zealand and international research to do this.

Over the last fifty years the Māori and non-Māori populations have slowly and unevenly become more similar on a range of key demographic, social and economic outcomes. This has principally been driven by increased geographic and social proximity between the two groups. There is evidence that similar processes may be operating for migrant peoples from the Pacific.

Children's economic outcomes in one generation depend on the success of their parents in the previous. In addition they also depend on the resources available in their communities to assist with providing them with the skills and capabilities to be successful. On both these counts, Māori and Pacific children are, on average, disadvantaged relative to the rest of the population. Because of this, even without active barriers to current achievement, reduction of disparities is likely to be a slow process.

Many Māori and Pacific people do better than the population median. Conversely, on most outcomes, a much greater number of people other than Māori and Pacific people do worse than median. We think that the strategy to reduce inequalities should aim to improve outcomes for those Māori and Pacific people who do worse than the median for the population, while, at the same time assisting others who have similarly poor outcomes.

Our principal conclusion is that improving literacy and numeracy skills of Māori and Pacific students at primary school level is a priority area for further development.

Progress in this objective is relatively easily measured over the short-term. Literacy and numeracy are strongly related to later educational achievement, employment and earnings, and the ability to raise economically successful children. Measurable progress in the short-term thus provides assurance of long-term improvements in a wider range of key outcomes.

This focus needs to be backed up with programmes in the high priority health, employment and housing sectors to strengthen reduction of current disparities. We recommend priorities in each of these areas. In all areas, but particularly schooling there needs to be better focus on key measures of progress, experimentation with a variety of approaches, better evaluation against the outcomes sought, and dissemination of learning to inform better design and implementation of policies.

Further work to reduce disparities for Māori and Pacific peoples should include improving information on the geographic distribution of disadvantaged Māori and Pacific peoples, to assist with the targeting of policies; reviewing the resourcing needs of low decile primary schools and Māori medium education relative to other schools; improving literacy and numeracy assessment practices in primary schools; improving information on Māori and Pacific peoples' access to primary health care, and reasons for disparities; and reviewing health sector priorities for their likely impact on improving Māori and Pacific children's readiness to learn at primary school.

Introduction

This report sets out a preliminary framework to assist Ministers to identify overall policy and spending priorities for strengthening the Government's programmes to reduce inequalities. We identify potential to get better results from baseline expenditure to meet this objective. At the same time, we set out a strategic context in which to consider budget bids. The paper is not, however, a commentary on specific bids.

We take into account the large government resources already devoted to achieving good social outcomes for the population in general; and also the many initiatives in place and proposed to make mainstream services more responsive to the needs of Māori and Pacific peoples, and to provide specially designed services for them. We set out to identify the policy areas and design issues, attention to which will provide greatest assurance of accelerating reduction in disparities, especially over the longer term.

In particular, we focus on how to use the available resources to greatest effect in achieving the Government's objectives. This inevitably involves trade-offs both in terms of targeting, and in terms of choice of policy focus – we identify areas where the causal mechanisms transmitting disadvantage are most clearly established in the empirical literature.

The report represents our best judgment from ongoing reading of New Zealand and international research on the causes and evolution, and implications for policy, of gaps in social and economic outcomes, with a particular focus on ethnicity. We discuss the strength of evidence to support different policy directions, areas of uncertainty, and policy design and implementation issues that flow from this.

Preliminary issues

Ministers have identified employment, education, health and housing as the priority areas of disparity to be addressed.

Policies to reduce inequalities will in part intersect with other policy issues – notably cultural maintenance and language revitalisation, and the social and economic implications of the Treaty of Waitangi - where Ministers will have additional objectives. In this report, we focus on what policies are likely to be most effective in reducing key social and economic disparities between Māori and Pacific peoples and other New Zealanders.

Policies may aim to improve the position of Māori and Pacific peoples with poor outcomes relative to the whole population, or they could also aim to improve outcomes for those who are already more successful than the median for the whole population. Our focus is primarily on groups with poor outcomes relative to the whole population, so that, in the longer run Māori and Pacific people will have no higher probability of poorer than median outcomes than other people. We expect that effective interventions targeted to locations where disadvantaged Māori and Pacific peoples are concentrated, will, in many cases also benefit other disadvantaged people.

In this report our focus is on using limited resources to effect the most significant reduction in disparities. Thus, we do not here consider interventions specifically targeted at the two to three percent most disadvantaged among Māori and Pacific peoples. The complex and deep-seated problems of these groups are an important issue and much attention has been given to the design and implementation of programmes to address them. There are highly targeted intensive interventions in such diverse areas as early childhood home-based programmes, child welfare and youth justice, and prisoner rehabilitation. Interventions are costly, and underlying problems are often relatively intractable – pointing to the need for good evaluation of current initiatives as a prelude to programme expansion. We think these issues will most usefully be considered separately from broader reducing inequalities policy processes. In this report, we concentrate on opportunities for accelerating gains for the much broader group whose outcomes are worse than the population median.

We develop a framework intended to be relevant both to Māori and to Pacific peoples' disparities in outcomes with other New Zealanders. While there are substantial similarities in the nature and degree of disparities for the two groups, there are also significant differences. In addition, the position of Māori as the indigenous people of New Zealand adds a further dimension to understanding the origins of disparities, and to the design of policies to address them.

Data is more readily available for Māori outcomes over time, and on relative outcomes by subgroups in the Māori ethnic population, than for Pacific peoples. Our commentary on Māori issues is, accordingly, more extensive.

Understanding trends in ethnic disparities

Analysis of longer-term trends and experience with ethnic disparities in other countries can help understand the underlying mechanisms that maintain disparity. We note that, while we draw on evidence from the experience of migrant groups in developed economies, an historical understanding of the processes of colonisation which impact

on indigenous peoples is particularly relevant to understanding the origins of Māori/non-Māori disparities over the last two centuries. This literature is beyond the scope of our analysis here, and we take as given the existence of large disparities around 1950, when relatively consistent data first became available.

Since the beginning of the 1950s, disparities in key social, demographic and economic outcomes between Māori and others have been slowly and unevenly reducing. This includes life expectancy, infant mortality, fertility, education and per capita income (see Appendix II). Over this period some marked reversals in the trend can be observed – particularly in the late 1980s when there was a sharp deterioration, and some recovery subsequently, in the relative position of Māori in employment and market income. Disparities in some outcomes – particularly employment, market income and post-compulsory education participation are influenced by the economic cycle – with Māori data showing greater volatility on some measures than non-Māori.

Long-term trends of reducing disparities are consistent with international experience, particularly in the United States. Research on disparity trends in the United States is mostly focused on large migrant groups, and the black population. In particular there is little evidence on disparity trends for indigenous peoples². Researchers estimate that it takes approximately 100 years for migrant groups to reach parity in employment, earnings and education outcomes with the majority population³. Black-white disparities have also reduced over time – though at different rates in different periods. Convergence accelerated from the 1950s and 1960s as large-scale migration of blacks to the north occurred and desegregation policies were put in place.

The United States evidence suggests that geographic and social proximity is the major driver of convergence in social and economic outcomes. To the extent that different ethnic groups live in the same location, face the same labour markets and services, mix socially and inter-marry, their demographic and economic outcomes will become more similar. It is important to note, though, that there is no simple relationship between socio-economic success, ethnic identity and the strength of engagement with cultural practices associated with particular ethnic groups⁴. Convergence in employment, income, education and other outcomes, does not entail assimilation of one group's cultural identity to another. A strong cultural identity may be associated with better outcomes.

While this evidence needs to be applied cautiously to New Zealand, particularly as it mostly does not relate to the experience of indigenous peoples, the post 1950 experience of Māori and recent experience of Pacific peoples, suggests that it is of relevance here.

The same underlying social and economic forces appear to have been in operation in New Zealand. In 1945 roughly a quarter of the Māori population lived in urban areas (of 1,000 people or more); by the mid 1970s this had risen to three quarters. Between 1956 and 1976, as a result of very strong migration, the proportion of the Māori population living in urban centres doubled. At the same time, rates of marriage between Māori and other ethnic groups have been very high. By 1996 there were

² However, evidence on years of schooling of successive age cohorts of indigenous peoples in a number of Latin American nations over time, (set out in Psacharopoulos & Patrinos, 1994) suggest similar processes of convergence in educational attainment.

³ E.g. Borjas (1994)

⁴ These relationships are being explored for Māori in a longitudinal study Te Hoe Nuku Roa, by a research team based at Massey University (Te Hoe Nuku Roa Research Team, 1999).

almost as many people (roughly 250,000) who identified for census purposes as being both Māori and at least one other ethnic identity, as identified only as Māori (274,000). Moreover, of those married (legal or defacto) in the Māori ethnic population aged 24-34, 66% were married to a member of the non-Māori group⁵.

What are the forces that cause persistence in disparities? Children's economic success as adults is linked to the success of their parents. There is strong evidence that average literacy and numeracy levels of Māori and Pacific adults are lower than those for the rest of the population, even for people in similar occupations, and that this affects employment and earnings outcomes⁶. There is also evidence that this affects the ability of families to support their children's education in the home⁷. It is precisely in the areas of literacy and numeracy that the disparity between Māori and Pacific children and others are widest in primary schools⁸. Finally, there is growing evidence that these differences are important causes of disparities in adulthood⁹.

Higher rates of sole parenting amongst Māori, entailing on average lower household incomes and resources of time, are also likely to play a role in Māori children's poorer education outcomes. Higher rates of sole parenting in turn may be partly due to lower earnings capacity on average amongst Māori adults (there is evidence that earnings capacity is a determinant of couple formation¹⁰).

Low family income itself may have an adverse impact on children's outcomes. The evidence on this is not clear cut, partly because low income is associated with other factors that independently impair achievement, and partly because in developed countries, incomes at the bottom of the distribution are generally high enough to satisfy basic needs, and services in kind provided by the state (particularly in health and education) compensate for some of the disadvantage due to low income¹¹. Nevertheless, though the mechanisms are not well understood, many researchers conclude that there is a direct negative causal effect of low income itself on health outcomes, in developed countries as well as in others¹². However, the current evidence suggests that very large increases in income transfers for families on low incomes would have quite small effects in improving children's outcomes.

Children's success is also separately linked to the general level of success of their parents' ethnic group in the locality where they were brought up¹³.

A number of mechanisms may be responsible – not all of them currently relevant in New Zealand – including poor schools in neighbourhoods where ethnic minorities are concentrated, poor access to health care which, in turn, affects participation and success in education and the labour market, poor information networks about

⁵ Chapple (2000). Similar forces also appear to be operating amongst Pacific peoples. In 1996 54% of newborn children of Pacific ethnicities had multiple ethnicity and 42% had at least one non-Pacific ethnicity. (Statistics NZ, 2000)

⁶ E.g. Nash (1997), Mare & Chapple (2000), Chapple (2000).

⁷ Nash (1997)

⁸ Crooks & Caygill (1999)

⁹ e.g. Johnson & Neal (1998); Pryor & Schaffer (1999); Boozer & Maloney (2000)

¹⁰ Ermisch & Di Salvo (1996)

¹¹ Mayer (1997), Nechyba et. al. (1999). Caution is required in applying U.S. evidence to New Zealand, as U.S. income levels are considerably higher than in New Zealand. For a more sceptical summary of this evidence, see Boggess & Corcoran with Jenkins (1999). This is an area where more New Zealand research is required, and this may be facilitated both by the proposed extension of the Living Standards survey to the working age population, and, in the longer run, by the proposed longitudinal survey of income and labour market dynamics.

¹² See, for instance, O'Dea & Howden-Chapman (2000). If there were large causal effects of income on children's health in developed countries, these should in turn have an effect on other outcomes such as educational achievement and attainment. The more sophisticated studies suggest that such effects are relatively small.

¹³ Borjas (1992)

education and job opportunities, low exposure to successful role models and high exposure to unsuccessful ones¹⁴.

In short, as children from disadvantaged ethnic minorities grow up, they enjoy fewer of those resources that enable them to acquire the skills and knowledge and networks needed to be economically successful adults. This is true not only of resources in their immediate families, but also in the communities and social groupings in which they spend their time.

Passive and active discrimination and segregation, where they exist, exacerbate these difficulties – but disparities will persist even in their absence¹⁵. The relative importance of these different mechanisms is not well established, and probably differs from situation to situation. Nevertheless they provide clues about the sorts of policies that are likely to accelerate social and economic convergence.

Ethnic sub populations and differences in outcomes

Recent research shows that, while there is a difference in average employment and earnings outcomes between Māori and non-Māori, there is a considerable overlap between the two groups. Many Māori have better than median outcomes, while many non-Māori have worse outcomes than the median¹⁶. Because the non-Māori population is larger, on most outcomes of concern there are usually more non-Māori than Māori with worse outcomes than the median.

This directs attention to identifying the more disadvantaged among the Māori group. Research¹⁷ shows that on average, individuals who identify for survey or census purposes only as Māori have lower incomes than those who identify both as Māori and some other ethnic group. Māori without educational qualifications are particularly disadvantaged relative to non-Māori without them. (As a result, Māori benefit more strongly than others from gaining a qualification, both in terms of employment, and in terms of income¹⁸).

Living in a rural area, and areas where there are high proportions of Māori, also seems to be associated with poorer outcomes for Māori compared to others, even when many other factors are taken into account¹⁹.

For Pacific peoples, recent migration and poor education levels are associated with poorer employment outcomes. Pacific peoples are highly concentrated in major urban areas (those with over 30,000 people).

It is likely that these patterns hold for most other major outcomes of concern. In this respect, it should be noted that Māori and particularly Pacific peoples are highly concentrated in the most deprived locations as defined by the New Zealand Deprivation Index. Almost one quarter of Māori, and thirty per cent of Pacific peoples live in the most deprived decile of locations²⁰.

¹⁴ See for instance, Cutler & Glaeser (1995). For summaries of the relevant U.S. literature see Nechyba et. al. (1999), Boggess & Corcoran with Jenkins (1999)

¹⁵ Lundberg and Startz (1998)

¹⁶ Chapple (2000)

¹⁷ e.g. Chapple (2000), Maani (2000b)

¹⁸ Winkelmann (1999), Gibson (1998 & 2000), Maani (2000b).

¹⁹ See Chapple (2000) and recent tabulations provided to the Treasury as part of an extension to Maani (2000b).

²⁰ Howden-Chapman & Tobias (2000)

The association of poor outcomes with geographic concentration of disadvantage is consistent with the evidence on causal mechanisms covered in the previous section, and also has implications for the targeting of policies, as we discuss later.

To what extent does ethnicity “cause” the difference in socio economic outcomes?

This section briefly comments on selected New Zealand and international quantitative empirical research and associated hypotheses concerning the effect of ethnicity itself on outcomes of concern, once correlated factors have been taken into account. This is potentially an important question for policy because it may help identify the relative importance of particular causal mechanisms that need to be addressed.

In view of current controversies, a word of caution is required. Virtually all the studies reviewed have limitations of one sort or another – whether in sample size and representation, the range of variables available in the data, or the way in which relationships are specified. In addition, often very complex statistical issues need to be addressed in order to be confident of identifying causal relationships²¹. A finding that ethnicity has no statistically measurable effect should, therefore, be viewed cautiously. On the other hand, a finding that a significant effect of ethnicity remains, after controlling for other factors, should also be interpreted cautiously. Usually a large amount of the variation in outcomes remains unexplained, and there is plenty of scope to hypothesise about a range of unmeasured factors correlated with ethnicity, that account for this effect. Familiarity with a wide range of literature, and with a range of theoretical perspectives is required to make sensible judgments based on these studies.

Once other factors have been taken into account (age, marital status, industry and occupation, education and literacy) the current effect (measured in terms of differences in means) of ethnicity on outcomes is usually much reduced. Nevertheless, the remaining effect may be both statistically and economically significant, and it is useful to gauge its importance relative to the effect of other factors. For example, in a recent study using a 50% sample from the 1986 and 1996 Census, and which controls for a wide range of demographic and socio-economic variables, the effect on annual income of being Māori compared to being European was of a similar order to the effect of having school certificate, compared to having no qualifications.²²

Another recent study, using a different data set, finds comparable effects of ethnicity on hourly earnings²³. The study finds that when a number of factors are controlled, including differences by ethnicity in the probability of employment, Māori earn on average about 13% less per hour than Europeans. Other research²⁴ suggests that this effect will be stronger than the average for Māori without qualifications, but relatively weak for those with post school qualifications.

²¹ See Nechyba et. al. (1999) for a discussion of these issues.

²² Preliminary tabulations from a regression study being undertaken for the Treasury by Dr. Sholeh Maani of the University of Auckland. This is an extension to Maani (2000). This result can be compared with Alexander, Genc & Jafarullah (2000) in which the effect of being Māori is smaller than the effect of having a school qualification compared to having no qualification.

²³ Alexander, Genc & Jafarullah (2000). The study is shortly to be updated with data from the year 2000 Income Supplement, and a revised specification.

²⁴ Maani (2000b), Gibson (2000).

Research (both in New Zealand and overseas) sometimes fails to find any significant effect, or only a small effect of ethnicity on education outcomes²⁵. A substantial part of the ethnic difference in outcomes remaining after standard socio-economic factors are taken into account may be explained by differences in child rearing and literacy practices in the home²⁶. This lack of a strong current ethnic effect may be explained by the evidence that current disadvantage is, to a large extent, a reflection of disadvantage in the previous generation (as discussed in the previous sections).

On the other hand recent New Zealand research²⁷ suggests that ethnic disparities exist in life expectancy and a range of health outcome and utilisation measures across different socio-economic groups as measured by the New Zealand Deprivation Index score of their area of residence. More work would be useful, if feasible, to see how much of these disparities are accounted for when individual measures of socio-economic status are used in the research.

Reasons why ethnicity might “cause” disadvantage include direct discrimination, different aspirations culturally determined within ethnic groups, and culturally inappropriate policies and service delivery. Direct evidence of systematic overt discrimination is rare²⁸ (for obvious reasons). Unexplained differences in outcomes due to ethnicity are sometimes taken as evidence for discrimination. For reasons outlined above this interpretation should be treated cautiously, as many other unmeasured factors might be responsible²⁹.

If people from different ethnic groups measure success in different ways and by different criteria, then this might lead to ethnic disparities in outcomes such as earnings, employment and education. We believe, however, that goals of achieving a good education, good health and secure and well paid employment are widely held across all ethnic groups, and that these goals are well captured in the Government’s objective to reduce inequalities. We also believe that these goals are compatible with a range of cultural aspirations³⁰.

Culturally inappropriate policies and service delivery may make it difficult for Māori and Pacific peoples to benefit. Considerable effort has been applied over the last fifteen years to improved government health, education and employment services, in this respect³¹. Continuing involvement of Māori and Pacific people in the design and delivery of services affecting them, together with guidance from levels of demand for

²⁵ See, for instance, Fergusson, Lloyd & Horwood (1991) and Barker & Maloney (2000) which use data from the Christchurch Health and Development Study (and hence it should be noted that the data is not nationally representative). Nash & Harker (1996) and Nash (1997) uses a sample of 5,000 secondary school students from the North Island to investigate progress between years 9 and 11, and, after controlling a range of variables, find a relatively small current ethnic effect on differences in outcomes in School Certificate English, Maths and Science. At least some of this remaining effect is due to differences in “educational resources” – particularly ownership of books, and literacy practices - in the home. Nechyba et. al. (1999 pp89ff) argue that relevant effects of ethnicity are unlikely generally to be well captured by “broad brush” measures of the type used in quantitative studies, but do point to evidence of differences in cultural norms having an effect on outcomes among different ethnic sub-groups.

²⁶ See, for example Nash (1997), Phillips, Brooks-Gunn, Duncan, Klebanov & Crane (1998)

²⁷ Reported in Howden-Chapman & Tobias (2000)

²⁸ Spoonley (1978) reported direct evidence of racial discrimination by New Zealand employers in their employment decisions. The question remains how much these findings still apply, and how important they are in explaining current ethnic disparities in employment and earnings outcomes.

²⁹ See Winkelmann (1999), for instance, for a discussion of possible explanations of the remaining association between Māori and Pacific ethnicity and employment outcomes.

³⁰ As argued by Mason Durie, *Dominion* 5 October 2000

³¹ Examples include: the Puao-te-Atatu initiatives in the then Department of Social Welfare in the late 1980s and first half of the 1990s; ongoing revisions to the curriculum, encouragement of Māori teacher supply and development and redevelopment of strategies for Māori education; and pursuance of the directions set out in *Whaia te ora mo te iwi: Strive for the good health of the people* (1992)

particular types of services, and evidence of effectiveness in meeting needs should help ongoing improvements in this respect.

Finally, there is evidence that disadvantaged ethnic minorities benefit more than others with similar backgrounds from well-designed generic interventions³². They may have a greater but undeveloped potential to benefit, because, for instance, investments from family and their previous schooling have not been as advantageous as for others.

Summary

The principal lessons we draw from this evidence are:

- Current levels of capability – education, literacy, employment and earnings – in disadvantaged ethnic communities have an important effect on perpetuating ethnic disparities in the next generation – even if current obstacles, such as discrimination and poor services are overcome.
- Place based mechanisms appear to be important – inter-generational effects are stronger where disadvantaged ethnic minorities are concentrated – but there is a degree of uncertainty about precisely which mechanisms are most important.
- Causal mechanisms are complex, involving many feedback loops. As a result, many different types of interventions may have useful effects. There is room for different judgments about which are likely to be most effective. This immediately suggests a need for good evaluation of initiatives for their effects on intended outcomes.
- However, we think there is strong evidence that differences in education and skill investments during childhood are a key driver of ethnic disparities in adult education, employment and earnings outcomes. Literacy and numeracy skills are an increasingly important determinant of success in modern economies. Raising literacy and numeracy to parity is a key element of capacity building in disadvantaged ethnic communities.

Strengthening the strategic direction

Over the longer term, fundamental social and economic processes are working slowly and unevenly towards convergence in key outcomes across ethnic groups in New Zealand. Large government resources are being devoted to securing good outcomes for the whole population.

In addition, numerous initiatives have been implemented and are being proposed, aimed at reducing ethnic disparities in outcomes. Because of lack of robust evaluation, often little is known about the effectiveness of specific initiatives – though there may be theoretical and common sense reasons for believing that many of them are beneficial.

We have given thought to which areas, and what policy levers provide the most opportunity to strengthen the Government's strategy to reduce inequalities for Māori

³² For instance, reduced class sizes, a stronger focus on academic standards and assessment against them, differentially raise the achievement of disadvantaged minority students in the United States (e.g. Grissmer, et. al. 2000; Krueger & Whitmore, 2000 and *Economist* 1.4. 2000). Similarly, the "Success for All" program designed at Johns Hopkins University has been replicated across a wide range of schools, and particularly improves the achievement of disadvantaged students (Slavin et. al., 1997; Jencks & Phillips, 1998)

and Pacific people in particular. Based on the evidence covered in the earlier sections, we conclude that an increased emphasis on improving literacy and numeracy at primary school level is strongly indicated.

- Literacy and numeracy levels seem to be an important driver of intergenerational persistence in disparities; they strongly affect later education, employment and earnings outcomes, and, through these, will have effects on health and housing outcomes.
- Short-term progress in improving literacy and numeracy is relatively easily measured, and there are interventions that are known to be effective for disadvantaged ethnic minority groups.
- The government already spends a lot on primary education – getting marginal improvements in the effectiveness of this resource for Māori and Pacific peoples should have a large pay-off.
- We already have good information on where disadvantaged Māori and Pacific children are concentrated geographically³³, so targeting policies for greatest effect is relatively straightforward.

However, this strategy will not immediately benefit those whose employment and health status and housing arrangements are already compromised.

To better address these more immediate issues, a range of sector specific strategies is required. As we discuss later, these should be focused on:

- Remedial active labour market interventions in employment, focusing on policies that have been shown to be effective for Māori and Pacific peoples.
- Improving Māori and Pacific peoples' access to good quality services in education and health – this has a number of dimensions, but there is reason to believe that currently Māori and Pacific people face a disadvantage in access to good quality services.
- Improving interventions designed to address key health issues for Māori and Pacific peoples, where, taking account of demographic and other factors, rates of disease and mortality are significantly higher than for the rest of the population.
- Addressing overcrowding in Pacific peoples' households, and pockets of sub-standard housing among rural Māori.

While these strategies are focused on sector specific outcomes, some emphasis should be placed on areas – particularly in health - which are likely to reinforce the education strategy, by improving children's readiness for learning.

In short, we believe that an increased focus on measurably improving Māori and Pacific peoples' literacy and numeracy at primary schools will provide most assurance of long-

³³ In 1998, approximately 60% of Māori and 75% of Pacific Island primary students were in decile one to three schools. About 61% of all students in decile one to three primary schools were Māori or Pacific Islands (Source: *Education Statistics of New Zealand for 1998*).

term reductions in a range of social and economic disparities between Māori and Pacific peoples and the rest of the population. This needs to be complemented by refinement of sector-by-sector strategies that address specific key disparities in the shorter term.

Policy design and implementation issues

There is a range of general design and implementation issues that we think will be useful for Ministers to take into account when considering particular initiatives. In addition there are some specific issues to consider in evaluating particular proposals that we set out in Appendix I.

Targeting

We have argued that Ministers should place the highest priority on initiatives which are most likely to improve outcomes for those Māori and Pacific peoples whose outcomes are currently worse than the population median.

We know something of the characteristics of more disadvantaged Māori and Pacific people, which communities they live in, and the government health and education facilities that currently serve them. Policies need to be systematically and carefully targeted to these communities, or through these facilities, so that a majority of the disadvantaged population is covered, given available resources. This approach should, at the same time, reduce inequalities for other people who are also concentrated in the same communities³⁴ – on most outcomes of concern, there are many more non-Māori and non-Pacific than Māori and Pacific peoples who do worse than the median. Within this general targeting, more detailed targeting of interventions to people more at risk of poor outcomes will often be appropriate.

We are undertaking further research to enable us better to comment on the geographic targeting of policies.

Leverage on mainstream provision

Currently the government spends approximately \$15.6 billion per annum on education, health, employment and housing programmes. On a population basis, assuming equal access, the Māori and Pacific peoples' share of this expenditure is in the order of \$3.1 billion. Most of this is delivered through mainstream services in health and education. Resources devoted to programmes and services designed specifically for Māori and Pacific peoples including recent initiatives are estimated to be a quite small proportion of the total (\$500 million).

A number of initiatives over the years have been devoted to making mainstream provision more responsive to Māori and Pacific peoples' needs³⁵, and thus getting better leverage on the large resources involved. We think that this emphasis should continue, but with an increased focus on effectiveness in achieving measurable short-term improvements in outcomes.

³⁴ For instance the population in the most deprived decile of locations in New Zealand, measured by the New Zealand Deprivation Index, is approximately 40% Māori, 20% Pacific and 40% European/other. (Chapman-Howden & Tobias, 2000)

³⁵ See footnote 30 for examples.

Equity in resourcing

Disadvantaged people, including Māori and Pacific peoples, are relatively concentrated in particular communities, and served by particular education and health services. It is possible that these services do not receive even an equal share of resources on a population basis, or, at the least, do not receive sufficient resources to compensate for factors of disadvantage. Either way, inequitable allocation of government resources could be a significant cause of disparities in outcomes. Addressing inequitable allocation, if it exists, should be an important part of the strategy to reduce inequalities. We comment further on this issue in our discussion of education and health sector priorities.

Local implementation and integration, engagement

By and large, effective interventions to improve Māori and Pacific peoples' outcomes will need to be delivered locally by schools, health services, and community organisations³⁶. To maximise gains, interventions will often need to mobilise resources and build capability in families and the wider community. Government agencies involved in this process, whether directly or indirectly, will need to exercise care and patience to build up the trust and mutual understanding of objectives and means required for success³⁷.

Important inter-related issues to consider are:

- Complementarity of interventions (both within and across different government sectors, and across non governmental initiatives) targeted on the same community, taking advantage of possible synergies, promoting effective collaboration and linkages among the people involved, and pursuing multiple complementary outcomes.
- Cultural dimensions of change management processes and service delivery – particularly in terms of processes that enable participation of target groups and build capacity for longer-term gains.
- Building local commitment to initiatives, through involvement in design and setting of objectives.

The view is frequently advanced that initiatives to improve outcomes for Māori and Pacific peoples will be more successful to the extent that they are designed, developed, and implemented by Māori and Pacific people, themselves. This may well be the case, especially in the longer term³⁸. The issue however, is an empirical one – and needs to be informed by judgments about current capability, as well as future development possibilities, the preferences of those who are to be served by the initiatives, and, ultimately, by evidence on effectiveness. In our view, effectiveness should be a key criterion for choice of programme.

³⁶ At Ministers' request, the Treasury has developed guidelines for contracting with non-governmental organisations. These are available from the Treasury website: <http://www.treasury.govt.nz>

³⁷ For example, Timperley, Robinson & Bullard (2000) discuss the requirements for successful education interventions in disadvantaged communities in terms of the formation of partnerships between government and local agencies and the community. A similar point for health promotion measures is made by Gillies (1997).

³⁸ For instance, the Tipu Ora programme, a well-child programme operating in the Rotorua area, has provided figures that show good outcomes for its children compared to national averages for Māori on key indicators such as gestation, birth weight, SIDS and immunisation rates (Kingi, 2000).

All these considerations will require careful design of initiatives. However, no one design is likely to suit all circumstances, or to be clearly superior. This leads to the next issue.

Experimentation, outcome measurement and evaluation

While we have a general idea of the range of initiatives that are likely to be effective in reducing inequalities, there is less certainty about which will be most effective. In addition the need for devolved, or decentralised implementation of initiatives, adds a further dimension of uncertainty about likely effectiveness.

We thus consider it desirable to experiment with a portfolio of initiatives, but with a strong requirement for robust evaluation of effectiveness against clear key outcome measures. We think that Ministers should give priority to initiatives that are susceptible to such evaluation, and in all cases require explicit consideration of outcome-related evaluation in proposals. Done well, this should improve our understanding of what works in what circumstances, and help shape future policy directions³⁹.

We recognise however, that not all worthwhile programmes will be able to be evaluated rigorously. There is a range of less rigorous approaches that can be considered in such cases – for instance evaluating achievement of intermediate outcomes, effectiveness of implementation processes, and community participation and satisfaction may be worthwhile.

There is considerable room to improve evaluation and learning from existing programmes, both at the local level (to inform detailed design and implementation issues) as well as at the national level, and covering both mainstream programmes, and initiatives that are designed specifically for Māori and Pacific peoples. More attention is also needed to disseminate learning from such evaluations, and expand approaches that are shown to work.

Focus

There is already a wide range of current and proposed initiatives aimed at reducing inequalities. This very diversity poses a risk to policy effectiveness. For instance many programmes require implementation by schools, which have limited management resources with which to manage complex changes. It is desirable that effort be better focused on achieving measurable improvements on a very few key outcome measures, such as literacy and numeracy levels in primary schools. The outcome measures should be selected for their likely effect on a fuller range of other outcomes.

This sort of focus, consistently applied, should guide more effective use of both specially targeted and mainstream resources delivering services to Māori and Pacific peoples. Regular accountability mechanisms should take care of the many other less strategic objectives expected of these services.

³⁹ The State Services Commission is working on a proposal that there should be mandatory consideration of evaluation as part of the policy development process. Increased emphasis on evaluation and evidence of effectiveness has also formed part of the current “Value for Money” exercise initiated by Ministers.

Sectoral priorities

At this point we turn to a sector-by-sector analysis of the priority areas for further funding or policy development. This analysis is not a commentary on the particular bids being submitted for the contingency fund, but rather sets out the type of initiatives we believe will be most effective in achieving the Government's objectives.

Education

Over the last thirty years education participation and attainment outcomes for Māori and non-Māori have become more alike⁴⁰. Both Māori and non Māori participation in post compulsory education and training grew rapidly in the 15 years since 1981, with Māori participation in tertiary education growing very strongly in the early 1990s. This is undoubtedly a response in part to economic restructuring which saw the loss of large areas of low skilled employment, and increased returns to higher qualifications. Participation in the senior school sector is quite sensitive to the state of the labour market, so that when aggregate employment is increasing, as in some periods in the 1990s, the gap between Māori and non-Māori tends to be static.

Promisingly, recent results from the first full cycle of the National Education Monitoring Programme suggest that the Māori/non Māori gap in science achievement in primary schools has closed significantly over the four-year period⁴¹. Results for reading, writing and mathematics will become available over the next two years.

Māori participation in early childhood education also grew rapidly from the mid 1980s, driven largely by the emergence of the Te Kohanga Reo movement.

Nevertheless, on all measures of participation and attainment significant and often large gaps between Māori and non-Māori still exist. Within broad measures of attainment and achievement, there remain significant differences in subjects taken, and quality of qualifications.

Long-term education trends for Pacific peoples are not available. Over the 1990s there has been little change in the proportion of Pacific peoples school leavers with no qualifications (this is generally true for all ethnic groups). Disparities between Pacific and non-Pacific people in qualifications held in the working age population appear to have reduced slightly over the same period. Generally current disparities with the wider population are of a similar character to those between Māori and non-Māori, though on many, but not all, measures Pacific people do worse than Māori.

International and local research strongly suggests that reducing disparities in literacy and numeracy levels at primary school is a key to improving later education and employment outcomes for Māori and Pacific people⁴². While early childhood education is an important preparation, it appears that relative gains in cognitive skills made there by disadvantaged groups fade during primary schooling⁴³. It also appears that differences in cognitive achievement correlated with ethnicity widen most during primary schooling⁴⁴. Thus while raising Māori and Pacific children's participation in

⁴⁰ Chapple et. al. (1997). See Appendix II

⁴¹ Flockton & Crooks (1999)

⁴² See footnote 8.

⁴³ Nechyba et. al. (1999). One explanation offered for this is the poor quality of schooling available to disadvantaged minorities. If this is a factor, then it is additional reason to seek improvements in primary schooling

⁴⁴ Phillips, Crouse & Ralph (1998)

good quality early childhood education continues to be important, we believe that special emphasis should be placed on literacy and numeracy skills in primary schools.

Māori and Pacific students who reach tertiary education are relatively advantaged compared to a majority of the population, and prior achievement is a key determinant of access⁴⁵. For this reason we do not think that tertiary education should receive additional emphasis at this point.

As we have earlier noted, a fundamental driver of ethnic disparities in compulsory education are the lower levels of education and acquired skills in the families and communities in which disadvantaged groups are raised, less well resourced or less effective schools, and socio-economic and cultural barriers to engagement between schools and communities.

Given the large resources involved, improving the effectiveness of schools in which Māori and Pacific students are taught will potentially produce large gains in achievement. There are many policies and initiatives in place designed to improve school effectiveness generally, and those of low decile schools in particular. There are also many initiatives designed to make schools more responsive to the needs of Māori and Pacific students, and to improve linkages between schools and Māori and Pacific families and communities⁴⁶. We see two important interlinked elements to making additional gains:

- Ensuring that low decile primary schools have enough resources to compensate for the factors of educational disadvantage that they face
- Ensuring better focus on the key literacy and numeracy outcomes in primary school, and better use of assessment information to facilitate this.

Resourcing low-decile primary schools

Currently it appears that per student funding from all sources for low decile primary schools may be about 12% higher than average levels mostly due to funding for factors of disadvantage⁴⁷. Despite this, such schools still face a disadvantage in attracting high quality teachers, whom research shows make an important difference to achievement outcomes⁴⁸. The balance of recent international and local evidence suggests that reducing class sizes (say by about five students) in the early years in low decile primary schools would have a significant impact on reducing disparities in achievement, and subsequently on a range of outcomes in early adulthood. The cost-effectiveness of such a policy, however, requires further examination.⁴⁹ Continuing examination of the resourcing needs of Māori medium education is required to ensure that educational outcomes at least as good as those in the mainstream are attained.

⁴⁵ Maani (2000a). Cameron & Heckman (1999) show that it is prior achievement, rather than current credit constraints that have the most effect on ethnic differences in college entry in the US.

⁴⁶ See summaries in Ministry of Education (1999a, 1999b)

⁴⁷ Fiske & Ladd (2000) p159; Ministry of Education (1999a). The data presented is incomplete, and recent adjustments following the abolition of bulk funding has provided additional resources to low decile schools.

⁴⁸ Jencks & Phillips (1998)

⁴⁹ Nechyba et. al. (2000), Grissmer et. al. (2000), Krueger & Whitmore (2000). Preliminary findings from a study commissioned by the Treasury (Boozer & Maloney, 2000) using the Christchurch Health and Development study show a measurable effect of class size on reading achievement at age 13, and on employment and education outcomes at age 21.

Improving the focus on literacy and numeracy in primary schools

Compared to other outcomes, numeracy and literacy skills are relatively easy to measure, and there are well-documented programmes and policies that have been shown to improve outcomes for disadvantaged ethnic groups relative to the majority⁵⁰. The difficulty arises either in cost or in ensuring reliable local replication of effective programmes⁵¹ and there may be a choice between using expensive policies such as reducing class size that work reliably if properly targeted, and less expensive policies which may have less reliable effects and be more difficult to implement successfully. Nevertheless better measurement of progress in literacy and numeracy by ethnicity should help teachers and schools improve the focus of their regular programmes on these key outcomes, even in the absence of special initiatives⁵².

In sum, progress in reducing inequalities for Māori and Pacific people in particular depends on the capability of school and community based programmes to compensate for the disadvantages faced by Māori and Pacific students. There are many initiatives already in place, and proposed, that are designed to do this. Up to recently, these initiatives have lacked coherency, sufficient focus on the most important areas, and good evaluation and consistent dissemination of knowledge on effectiveness. The recently agreed Māori education strategy effectively addresses coherency. However we think that improved focus on a few key priorities and, monitoring and evaluation of programmes in terms of standard literacy and numeracy outcomes, both at the local and national levels, is a pre-requisite for accelerating progress.

Health⁵³

In 1996 Māori had a standardised mortality rate 2.0 times higher and Pacific peoples had a standardised mortality rate 1.6 times higher than the European/Other population. Mortality rates are higher for Māori and Pacific peoples at most ages but of particular concern are the relatively high infant mortality rates and shorter life expectancies of Māori and Pacific peoples. Disparities in mortality reflect disparities across a wide range of morbidity and health service utilisation measures, even when socio-economic status is controlled.⁵⁴ Nevertheless, ethnic disparities in health outcomes to a large extent reflect disparities in socio-economic factors. In the long run, addressing these underlying disparities is likely to have the greatest effect on reducing disparities in health.

The key health issues for Māori are SIDS, low birth weight, hearing loss, motor vehicle crash deaths, suicides, heart disease (especially IHD), asthma, lung cancer, breast cancer, cervical cancer, diabetes, pneumonia and influenza deaths⁵⁵. Important health problems for Pacific people are SIDS, low birth weight, pneumonia, asthma and middle ear infections in children and high rates of diabetes, tuberculosis and cancers in

⁵⁰ See footnote 31. Another example is the Books in Homes programme, evaluation of which found that children in participating low decile primary schools made greater progress in reading achievement as a result of the programme than they would otherwise have done (Elley, 1997)

⁵¹ See Jencks & Phillips (1998)

⁵² Timperley, Robinson & Bullard (1999) in recent research on initiatives to improve education in Mangere and Otara (SEMO) stress the need to improve the use of assessment information (particularly on literacy achievement) to design and monitor teaching programmes and engage parents in supporting their children's education. They also stress the importance of partnerships between the Ministry of Education, schools and the local community, particularly in formulating achievement objectives.

⁵³ Copies of the background paper "Improving outcomes for Health: Intersectoral and sectoral drivers of the Gaps" are available on request from the Health Directorate, Social Policy Branch, the Treasury.

⁵⁴ See the discussion on page 7.

⁵⁵ Te Puni Kokiri (2000), Ministry of Health (2000)

adults⁵⁶. Rates of meningitis, measles, rheumatic fever and rheumatic heart disease are highest in the Pacific population.

Many Māori and Pacific people deaths or hospitalisations attributable to these conditions could be avoided through health promotion, and improved primary health care including risk management, early intervention and better management of existing health conditions.

The Ministry of Health has identified eight key risk factors that, if addressed, could lead to an overall improvement in health outcomes. These are smoking, alcohol consumption, poor diet, physical inactivity, diabetes, obesity, high blood pressure and total cholesterol. These factors act directly and indirectly to determine outcomes on SIDS, low birth weight, glue ear, asthma, motor vehicle crash deaths, IHD, and lung cancer. Analysis of the importance of these risk factors by the Ministry of Health for the total population suggests that smoking is the factor most likely to result in improved health outcomes if it can be reduced. Prevalence of smoking is particularly high in the Māori population⁵⁷.

Māori and Pacific people are more likely to have unmet health needs, with 18.6% of Māori and 17.5% of Pacific adults surveyed by the Department of Statistics in 1996/97 saying that they had needed to see a GP in the past year but had not, more than 1.5 times the rates of unmet need identified by the rest of the population.⁵⁸ Not seeing a GP at an early stage may lead to more rapid progression to complications and higher mortality rates. This, and other evidence⁵⁹, raises questions about equitable access of Māori and Pacific peoples to primary care, and through that, to secondary care. More information is required on coverage, other causes of differences in access, if any, and policy approaches to address this.

The government already funds a wide range of health programmes that are used by the Māori and Pacific populations including mainstream services, special services targeted at Māori and Pacific peoples by mainstream providers, and services from Māori and Pacific providers. As in other sectors, there is a lack of data and a lack of evaluation of these programmes.

In our view, the following two areas are priorities for reducing inequalities in health:

- Reviewing health promotion programmes for their adequacy and effectiveness in reducing the incidence of the eight risk factors among Māori and Pacific peoples; and
- Obtaining better evidence on disparities in access to and utilisation by Māori of primary health services, and redesigning policies to address those causes.

In addition, health problems among Māori and Pacific children may be an important factor in impairing learning and to strengthen initiatives in the education sector we recommend a further health sector priority:

⁵⁶ Ministry of Health (1998)

⁵⁷ Ministry of Health (2000)

⁵⁸ Data collected in the New Zealand Health Survey carried out by the Department of Statistics in 1996/7.

⁵⁹ See, for instance, Chapman-Howden & Tobias (2000)

- Identifying a suite of health initiatives that are likely to be most effective in improving the readiness to learn of Māori and Pacific children in disadvantaged communities.

Employment

The shock to labour markets in the late 1980s and early 1990s reduced employment in several industries and occupations where less skilled Māori and Pacific people were over-represented. Employment rates for Māori and Pacific people fell more than for Europeans, with the disparity peaking in 1991 at about 15 percentage points. That is, about 15% fewer of the Māori and Pacific Island working age populations had work. Since then this disparity has gradually declined, and this year is 6 percentage points for Māori and 8 percentage points for Pacific people. There are also significant differences between sole and mixed Māori – with the average employment rates during 1985–98 being 48.2% for sole Māori and 56.6% for mixed Māori, compared to 61.1% for non-Māori.

Evidence on Māori labour market disadvantage is stronger for entry into employment than for wage discrimination or less wage progression once employment has been gained⁶⁰. Consequently, the Māori groups warranting attention are those having difficulty finding and retaining work, or who have become discouraged and left the labour market. These groups include: unemployed Māori youth and Māori sole parents on the Domestic Purposes Benefit (DPB) who have few qualifications and little work experience; long term unemployed adult Māori, often with skills in declining demand; and Māori living in depressed regional areas with few work opportunities. For Pacific people, those with lower qualifications or who were recent migrants fared worse.

A variety of employment programmes are used to address these groups by improving skill levels (e.g. remedial and vocational training), assisting with job search, and providing work experience (e.g. with wage subsidies). About \$343 million (GST excl) was expended in 1999/2000 for the delivery of employment programmes through the Department of Work and Income (DWI). Other policies implemented by DWI, such as expenditures on childcare and the application of work testing, will also interact with employment programmes to influence the return of beneficiaries to work.

Little evaluation information is available on the effectiveness of these employment programmes for Māori or Pacific people. DWI and the Department of Labour have indicated that improvements in the data on costs and outcomes are due shortly. Overseas evidence on the effectiveness of these programmes indicates that the net benefits typically are not large. The Hunn report⁶¹ criticised DWI for its “one size fits all” approach, and raised concerns about its strategies for addressing disparities.

Therefore, we think attention should be focussed on improving the quality of the services delivered and getting better value for money from existing expenditure. Consequently, employment programmes cannot be regarded as a priority area for additional expenditure until better information is available on their effectiveness. More specifically, the focus should be on:

⁶⁰ See the discussion on pages 5 & 6. Part of any apparent disadvantage in earnings may be due to differences in employment histories because of disadvantage in gaining employment.

⁶¹ Hunn (2000)

- determining the key sub-groups to target, and developing a fuller understanding of their characteristics and location;
- clarifying which combinations of programmes are most suited to these sub-groups; and
- ensuring that the most effective delivery systems are being used.

A number of initiatives are already underway within DWI that will contribute to achieving these goals:

- The regional flexibility project aims to provide regional commissioners with scope for tailoring services to the needs of individual job seekers and the local communities in their region.
- Contestability pilots are proposed which would allow private providers, including Māori providers, to design innovative solutions to the specific needs of Māori and Pacific people.

The Department is building the capability of frontline staff to better understand the needs of Māori and Pacific People, and testing alternative case management models.

Work is also underway to better understand which interventions are most effective at improving employment outcomes for these target groups.

Housing

National data on the percentage of income spent on rent suggest that there is no significant difference between Māori and non-Māori on this indicator, on average.

Māori and Pacific peoples are significantly more likely to rent than own, and (if they own) are more likely to have a mortgage than other New Zealanders. To a large extent these tenure gaps can be explained by demography (differences in the age profile of the populations, family size, age of childbearing, and family structure) income levels, and, for given household socio-economic characteristics, accumulated wealth⁶². Māori are over-represented among people living in temporary housing⁶³ (an indicator of transience and homelessness) but the numbers are small and declining.

Around 25% to 30% of Pacific Island households (50,000 – 65,000) are crowded⁶⁴, compared to around 9% of Māori households and 1% of non-Māori households. The proportion of crowded households has declined markedly over time for Māori, but is thought to be remaining relatively stable for Pacific Island groups.

Estimates by various commentators suggest that around 2,000 to 3,000 Māori households in rural areas are living in sub-standard houses (mainly in Northland, East Cape and the central North Island).

⁶² Bourassa (1997)

⁶³ Temporary dwellings are defined by Statistics New Zealand as caravans, cabins or tents in a motor camp; and mobile or temporary dwellings not in a motor camp.

⁶⁴ Using Statistics New Zealand definition of over-crowding.

Substantial government funding is available to assist low-income people to meet housing costs, through the Accommodation Supplement and from 1 December 2000 through income-related rents for state tenants⁶⁵. Given the existing resources and the lack of evidence of any significant disparity between Māori and Pacific peoples and other New Zealanders in the cost of housing relative to income, we suggest that housing affordability is given a low priority for additional funding aimed to reduce inequalities.

We suggest that home ownership assistance is also given a low priority, because it is not clear that renting rather than owning has negative social impacts (people can be adequately housed in the private rental market). Some evidence suggests that home ownership has a positive effect on educational outcomes for children. On the other hand, home ownership is associated with a higher probability of unemployment (probably because ownership deters some household from moving in order to obtain employment)⁶⁶. Home ownership without a mortgage also eases financial pressures in retirement.

The tendency for Māori to rent may result in lower wealth transfer from generation to generation than among non-Māori (if renters accumulate less capital over time than home owners) but this is unlikely to be a major factor in the inter-generational transmission of disadvantage. Home ownership assistance will only ever be cost-effective for a relatively small slice of the population: those in need, who can nevertheless manage the financial commitment entailed in owning a home. Also assistance is currently available through Housing Corporation of New Zealand (HCNZ) for people who meet certain need and prudential criteria.

We suggest that medium priority is given to Pacific Island over-crowding. This disparity is stark and not reducing over time. There is evidence that over-crowding is associated with the transmission of certain serious infectious diseases. Over-crowding may also contribute to poor educational outcomes for children. However the potential for government intervention to reduce over-crowding is limited: Housing New Zealand (HNZ) is currently piloting the provision of houses designed for large households, but there will be fiscal and practical constraints to the capacity for HNZ to re-configure or expand its stock to house large families. A more cost-effective approach may be to intervene within other sectors to reduce the negative outcomes associated with crowding (eg. to immunise children against disease and to provide homework centres).

We suggest that medium priority is also given to addressing sub-standard rural housing among Māori. This disparity is also stark and not reducing, and poor housing conditions are associated with certain health problems (although the causal links are not clear). Significant resources are currently available to improve rural housing, through the Low Deposit Rural Loans (LDRL) scheme, Group Self Build (GSB) and Papakainga schemes and Special Housing Action Zones. The first three schemes provide assistance for purchase or building of houses and are currently being reviewed to see if their effectiveness can be improved. Assistance for upgrading existing homes could have a greater impact in improving rural housing conditions, and we suggest that this is the focus of any additional resources. In addition, HNZ is currently considering options for the provision of low-cost housing in rural areas - and we suggest that the

⁶⁵ It has been argued from evidence in Colmar Brunton Research (1996) that a significant number of Māori do not take up entitlements to the Accommodation Supplement. While this is true, non take up rates as a percentage of those eligible are substantially higher for the NZ European group, than for Māori – no doubt at least in part due to differences in the distribution of entitlements.

⁶⁶ Hendershott & White (2000)

priority and resourcing implications are examined within the context of the 2001 asset-planning round for HNZ.

In considering interventions to address rural housing problems, it will be important to avoid creating undue incentives for people to remain in (or move to) areas with few employment opportunities, and few opportunities for skill development through post-compulsory education or training. The social gains from improved housing will need to be balanced against the possible social costs from entrenching people within remote areas.

Conclusions

This paper has set out a framework for understanding the mechanisms that perpetuate ethnic disparities in key social and economic outcomes. We use this to review the current state of play in the four priority areas identified by Ministers – education, health, employment and housing.

We conclude that improving literacy and numeracy skills of Māori and Pacific students in primary school is a priority to reduce ethnic disparities in New Zealand. This should reap long-term gains in reducing inequality on a range of key outcomes. This focus needs to be backed up with programmes in each of the other sectors to address current disparities.

In all areas, but particularly schooling there needs to be better focus on key measures of progress, experimentation with a variety of competing approaches, better evaluation against the outcomes sought, and dissemination of learning to inform better design and implementation of policies.

Areas where we think further work will assist in improving policy and prioritisation of effort include:

- Improving information on the geographic distribution and concentration of disadvantaged Māori and Pacific peoples, to improve the targeting and coverage of policy initiatives;
- Reviewing the resourcing needs of low decile primary schools, and Māori medium education relative to other schools, including the allocation of funds and staffing entitlements, and the ability to attract high quality staff;
- Improving the use of literacy and numeracy assessment information in primary schools, to assist with focusing effort, measuring progress, and evaluating the effects of particular initiatives;
- Improving information on Māori and Pacific peoples' access to primary health care, including current coverage and other reasons, if any, for differences in access;
- Reviewing health sector priorities for their likely impact on improving Māori and Pacific children's readiness to learn at primary school.

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Appendix I Characteristics of Successful Programmes

The following elements are essential for programmes aimed at reducing inequality among Māori and Pacific people:

1. *Rationale:*

There should be a clear definition of the problem that the programme is addressing. The expected benefits should be articulated.

2. *Design and Delivery:*

The programme design should “match” the problem being addressed. The target group or community should be clearly defined. Stake-holders including the target community should be consulted on the design and delivery of the programme. Early co-operation between the various stake-holders, including different agencies administering the programme (where more than one agency is involved), would be important to ensure effective implementation.

3. *Accountability to Government and the Community:*

The lines of accountability should be clear, and the processes to ensure accountability should be outlined. Leadership of the programme, both within government and within the target community should be established – this would require community buy-in to the programme. Realistic assessment of resources that the community can, or needs to, bring to the programme is also important.

4. *Context:*

It is important to establish at the outset whether there are any barriers to effective implementation of the programme (including regulatory and legislative barriers) and if so either how these could be overcome, or how the programme could be modified to comply with existing conditions.

5. *Culture:*

Cultural practices of the target community should be respected in implementation of the programme.

6. *Timeframe:*

The timeframe for an improvement in outcomes (i.e. for the programme to contribute towards reducing inequality) should be clearly specified and factored into design of the programme (regardless of whether the programme is expected to reduce inequality in the short, medium or long term).

Evaluation: Evidence of Successful Programmes

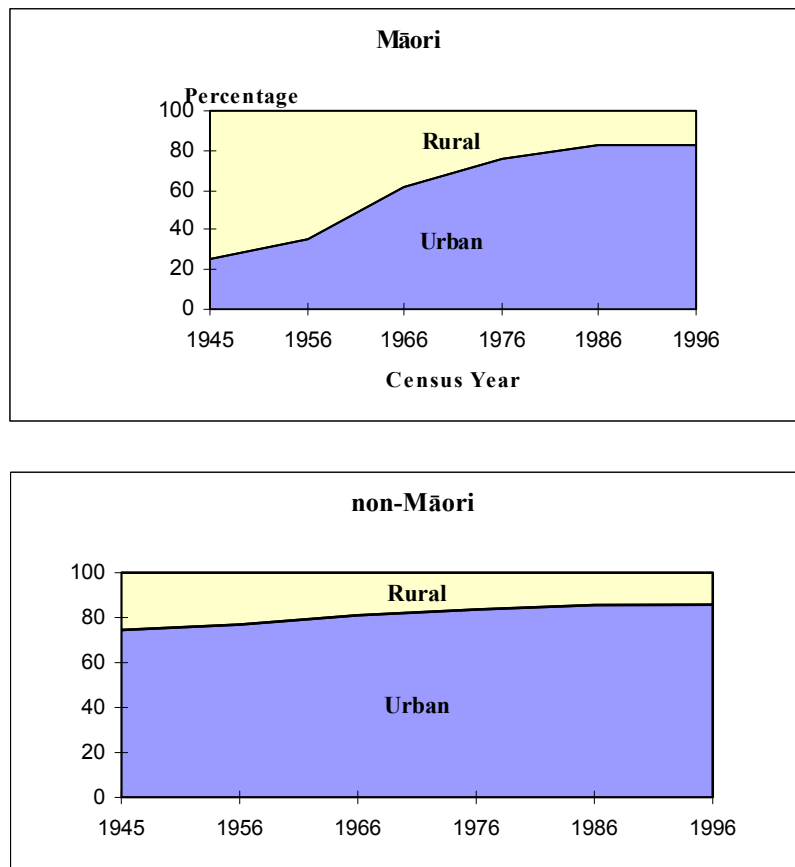
Evidence is required in order to know whether a programme was delivered in a manner consistent with the above indicators. It is desirable that a formal evaluation of effectiveness is incorporated into the original design of programmes. We recognise

however, that not all worthwhile programmes will be able to be evaluated rigorously. There is a range of less rigorous approaches that can be considered in such cases – for instance evaluating achievement of intermediate outcomes, effectiveness of implementation processes, and community participation and satisfaction may be worthwhile. Nevertheless, an effective evaluation strategy for programmes is essential.

Appendix II Long-term trends in Māori/non Māori disparities

Figure 1

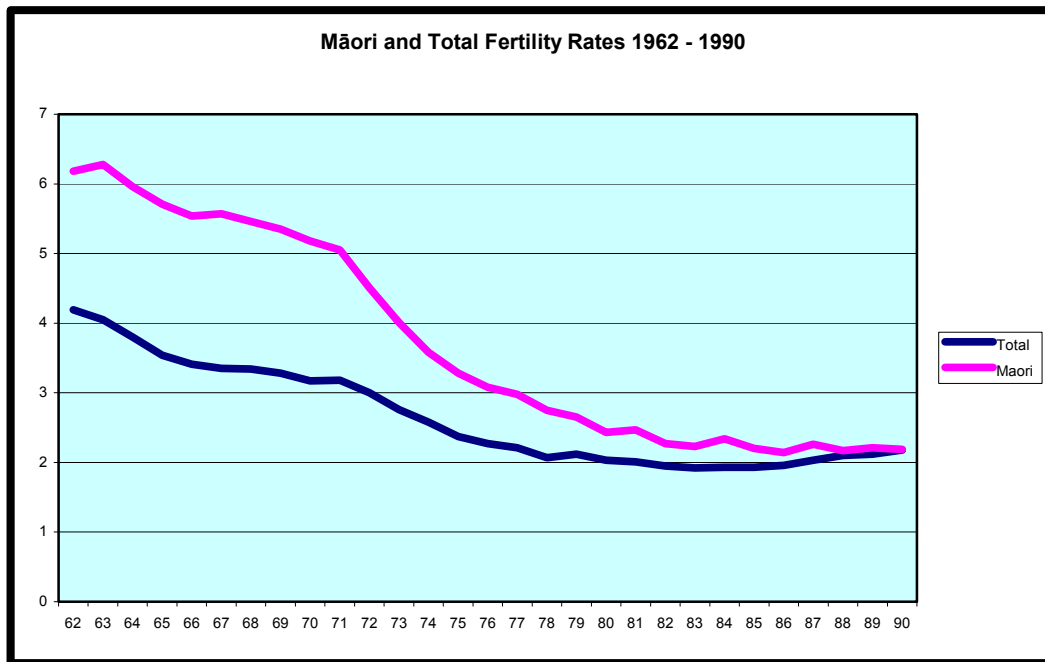
Proportion of Population Living in Urban and Rural New Zealand, 1945-1996



Source: Statistics New Zealand (1998)

Figure 2

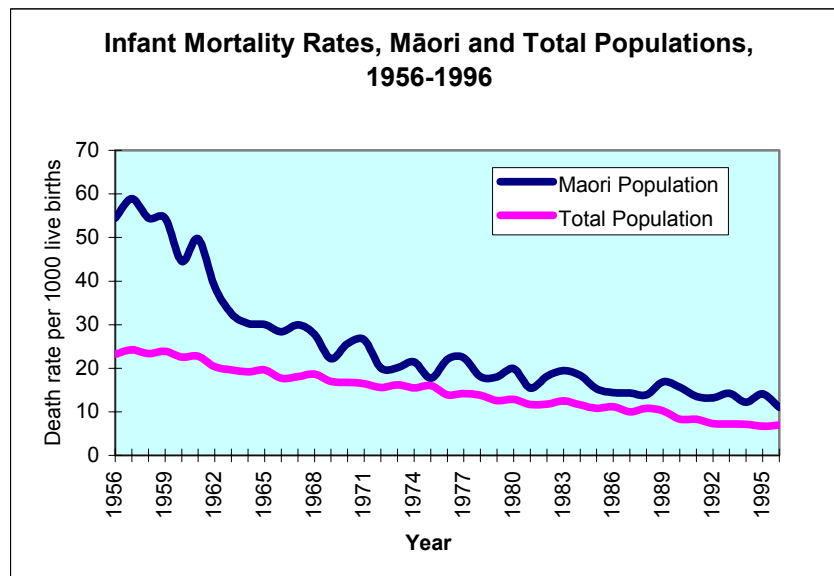
Māori and Total Fertility Rates 1962-1990



Source: Statistics New Zealand (2000)

Figure 3

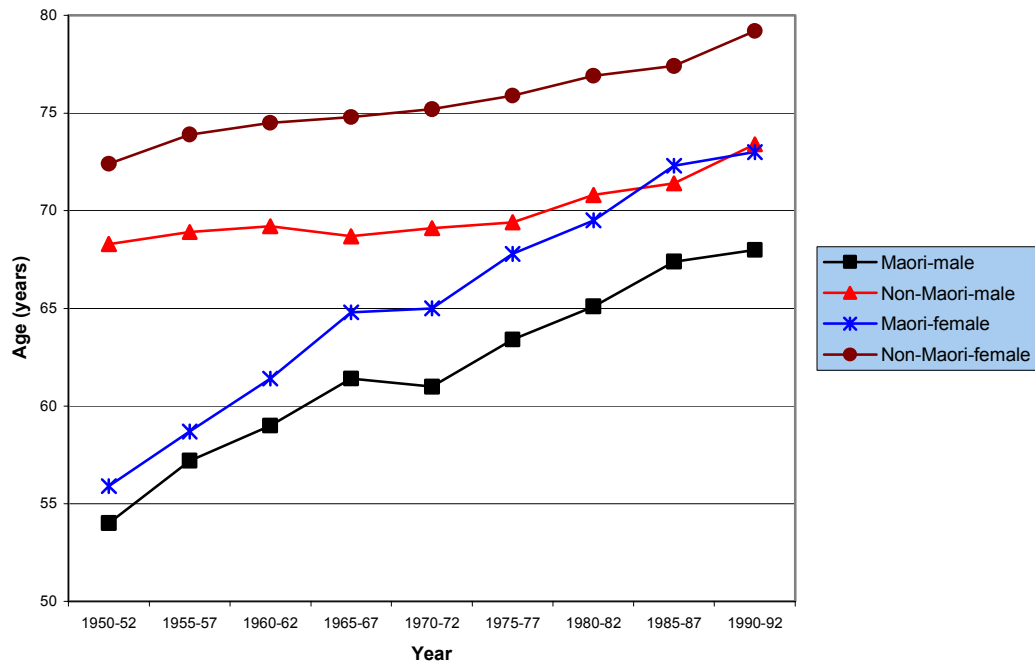
Infant Mortality Rates, Māori and Total Populations, 1956-1996



Source: Statistics New Zealand (1998)

Figure 4

Life expectancy at birth by ethnicity and gender, 1950-1992



Source: Statistics New Zealand (1998) *New Zealand Life Tables 1995-97*

Table 1: Trends in relative income

A consistent long term series on Māori income relative to others is not available. A selection of data from different sources is presented.

Table 1: Relative improvement in Māori income per head as a percent of the major group

Year	Māori	Pacific Island	non-Polynesian
1951*	49.0	n/a	100
1961*	53.8	n/a	100
1971*	53.9	n/a	100
1981*	59.2	59.8	100
1981**	59.9	58.1	100

Source: Gould (1990, p. 108), Census data.

* income excluding social welfare benefits

** income including social welfare benefits

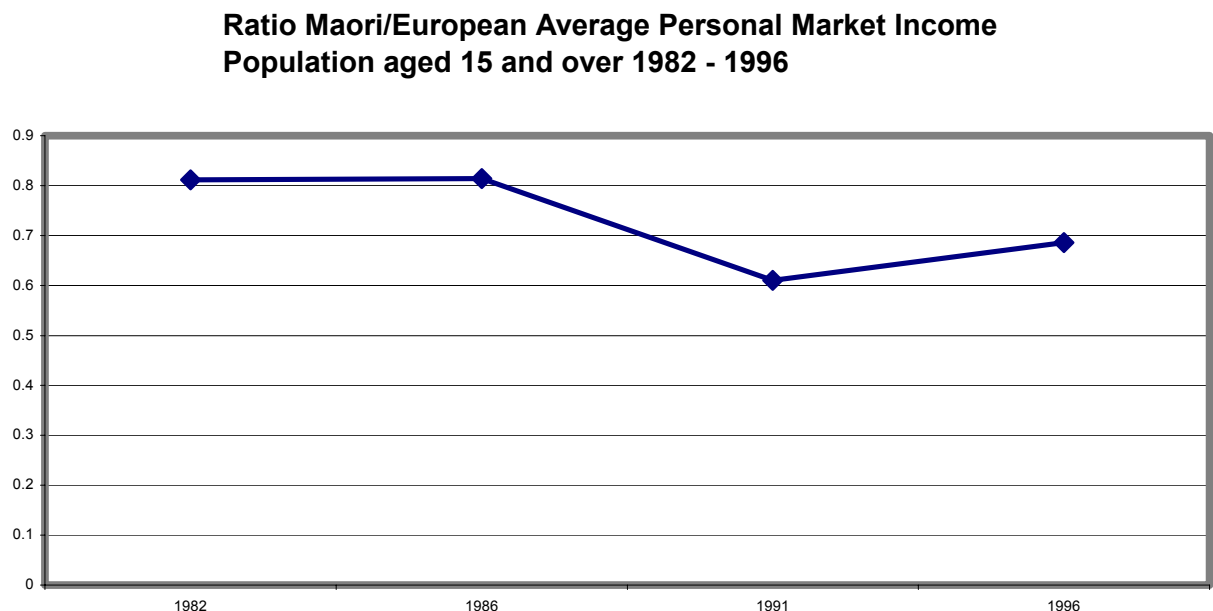
Table 2: Reversal in the relative improvement in Māori income per head as a percent of the major group

Year	Māori	Pacific Island	Chinese	Indian	European
1986**	66.7	64.0	96.5	91.1	100
1991**	58.6	59.3	86.8	89.0	100

Source: Gould (1990, p. 108) and Statistics New Zealand.

** income including social welfare benefits

Figure 5

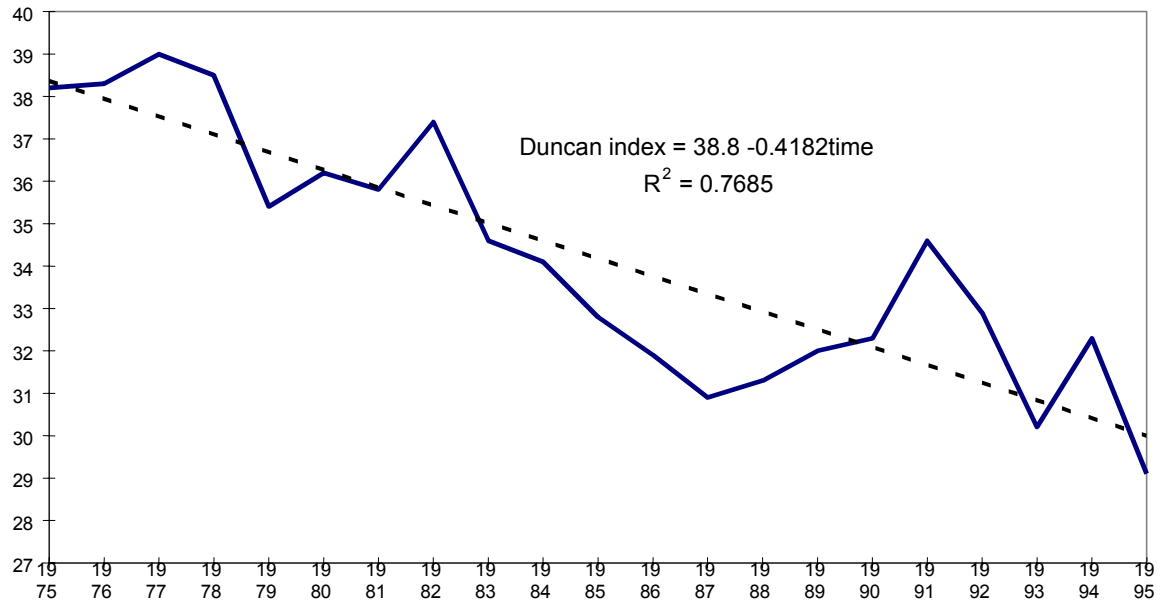


Source: Statistics New Zealand, Household Economic Surveys

Figure 6

Disparity trends for school leaver qualifications

Secondary school outcomes become more similar for Maori and non-Maori school leavers



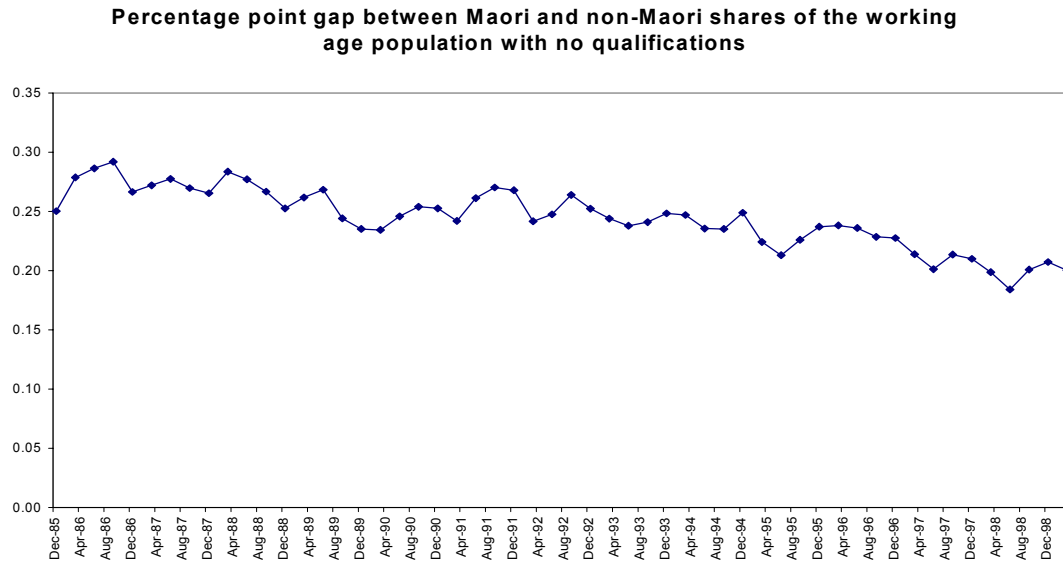
Source: *Education Statistics of New Zealand*, various issues

Vertical axis measures the value of the Duncan index (%). The Duncan index measures the percentage of Māori secondary school leavers who would have to have a different qualification in order for the Māori secondary school leaver population to have the same qualification as the non-Māori population.

Source: Chapple, Jefferies & Walker (1997)

Figure 7

Trends in Percentage Point Gap Between Māori and non-Māori Share of the Working Age Population with no Qualifications



Source: Chapple (2000)