Lifting the Bucket: Tax policy and economic growth

by Steve Thomas
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"We contend that for a nation to tax itself into prosperity is like a man standing in a bucket and trying to lift himself up by the handle."\footnote{Winston Churchill}

New Zealand is a bit like Churchill’s man in a bucket, trying vainly to lift himself to greater prosperity but limiting his chances by the position he adopts. We need to lift ourselves up, to achieve greater economic growth, but our current tax policies reduce our chances of success even as we pull on the handle. Fortunately, there are ways that we can step out of the bucket and lift it higher—ways to improve our tax policies so that growth increases and social well-being improves.

Economic growth is only one ingredient in a healthy society, but it is a crucial one. Economic growth is not an end in itself, rather it serves good ends, contributing to people’s well-being, living standards and opportunities in life. Growth is affected by tax, which is how the government raises its revenue to do the crucial things we need it to, like paying for a police force or a public education system, building roads and supporting the poorest when they need it.

However, when we try to take too much money out of the economy in tax to fund government spending, we risk undermining the very source of that revenue. Also, if government spending is misdirected or of poor value, then we hamstring the economy’s ability to produce what we need and the amount of tax the government is able to collect. This relationship between tax and the economy therefore needs to be carefully considered. We need to design the tax system so that it allows the government to take the money it requires, while doing the least amount of damage to the economy and so too our potential prosperity.

This paper tackles these issues by asking questions about how taxes affect economic growth. It also asks how growth is affected by the level and make-up of the government spending that is typically funded by our taxes. It answers these questions through detailed literature reviews, summarising the main themes of the reviews in this report.

Unfortunately, the questions are urgent because New Zealand’s economic outlook is not good. Our current spending pattern is unsustainable. If continued it would see spending climbing ever-higher than revenue and deficits ballooning.\footnote{Core government spending is forecast to stay at about 36% of the total amount we produce (GDP) until 2011, when it is expected to drop slightly to between 34% and 35% of GDP over the period 2012–14.} Core government spending is forecast to stay at about 36% of the total amount we produce (GDP) until 2011, when it is expected to drop slightly to between 34% and 35% of GDP over the period 2012–14.\footnote{That drop would normally be a good sign, but the bad news is that the amount of money government collects is expected to also drop from 33% of GDP in 2009 to about 31% of GDP in 2010—and stay at about that share throughout the forecast period to 2014.} This means the Government will be constantly out-spending its income, paying for expensive programmes like interest-free student loans and Working for Families tax credits, and subsidising KiwiRail and KiwiSaver incentives, even as the economy has weakened.\footnote{Demographic change over the next twenty to thirty years—what is often called a greying population—means there will not be enough taxpayers or tax revenue to pay for the kind of government services we receive today, unless we boost productivity or are prepared to foot the bill.
with higher public debt, higher taxes or both.6

Problems also abound in the tax system itself. We rely heavily on personal and corporate income taxes—the least growth-friendly taxes. Also, tax bases are mobile, and they are voting with their feet. For example, Inland Revenue has reported that about 24% of highly-skilled New Zealanders live overseas.7 There is also a risk of international tax competition, in which our tax system is compared unfavourably to that of other countries by firms who are deciding which countries to base themselves in. An uneven system, finally, invites tax planning and avoidance—an invitation which has been accepted.

To continue along with the way things are now is not an option. These challenges threaten our country’s long-term well-being. The research we review in this paper suggests, however, that there is a better way.

This paper is the third in a series that stems from a very basic question: “What is tax, and what is it for?” and that seeks to join up theory about the role of government and community, the meaning and enacting of justice, compassion and freedom, and the economic literature on taxation. The goal of the series is concrete policy recommendations based on this holistic framework.

**TAX SYSTEM DESIGN PRINCIPLES**

To provide a framework to underpin the tax policy aspects of our review, we adhere to the following principles of tax system design:

1. the function of taxes is primarily to raise revenue to fund necessary and proper government activity;
2. taxes should be efficient—raising revenue is not a costless exercise, and the costs of tax should always be considered and minimised;
3. the tax system should be neutral, so that it does not distort people’s decisions;
4. the tax system should be fair—people should be treated equally—and while compassion and questions of need may influence tax design, the more appropriate policy response may be through government spending; and
5. the tax system should be simple so that administration costs are low.

**GROWING A HEALTHY ECONOMY**

To understand the effect that taxes can have on economic growth, we begin by considering what factors drive growth. They can include:

1. value-adding infrastructure;
2. training and skills;
3. lower personal income taxes; and
4. good regulatory policies.

Another particularly important issue for New Zealand is our need to increase productivity growth. In 2008, the Treasury published analysis that showed New Zealand was ranked 22nd out of 30 countries in terms of GDP per hour worked, as well as GDP per capita.8 We need to think about how to get the most output out of every hour each New Zealand worker works and the most value out of our natural resources, every good or service we produce and our intellectual property.9

The Treasury has identified five inter-related drivers of productivity growth:10

1. innovation—including new ideas and new ways of producing goods and services;
2. investment—including the formation of finance;
3. enterprise—including the role of business in expanding the economy;
4. skills—including more and better education and training for both children and adults; and
5. natural resources—including getting more value out of our land, water and raw minerals.

Tax policy can affect each of these drivers of growth and productivity growth. For example, income taxes can affect incentives for entrepreneurship, by changing the level of reward that the risk of innovation might bring. As entrepreneurs create new products and opportunities, they are very valuable to the economy—we need a tax system that does not overly penalise or discourage their important work.

**HOW TAXES AFFECT OUR LIVES AND OUR PROSPERITY**

Researchers have found that some taxes are less growth-inhibiting than others, because of their
differing impacts on the things that drive productivity and economic growth. This paper considers the effects on growth of consumption taxes, like our Goods and Services Tax (GST), property taxes, personal income taxes, and corporate taxes. It finds that each type of tax has its strengths and weaknesses—there is no such thing as a perfect tax. Overall, however, the least growth-friendly taxes are personal and corporate income taxes—the taxes on which the government most heavily relies. By contrast, consumption taxes are likely to be the most growth-friendly, with property taxes also rated highly (figure 1).

This suggests that changing where we collect our tax from—as well as reducing the level of tax—could make a genuine difference to New Zealand’s growth performance.

THE LINK BETWEEN TAXATION, GOVERNMENT SPENDING AND PROSPERITY

The way government spends money and the amount it spends can also make a difference to growth.

We need the government to spend some money to perform its proper functions, such as maintaining law and order and providing a social safety net. But if government gets too big, and steps into parts of our common life that are beyond its proper role, economic growth is overly restricted. As Treasury Secretary, John Whitehead, has said, “Every dollar that is spent by the public sector is a dollar that is not spent on business investment, or left in taxpayers’ pockets, or saved.”

Of course, not all government spending is bad for growth. Within what is proper for a government to do, we find that if a government spends more on nominally “productive” activities, such as building valuable infrastructure, there is a good chance that growth will be positively affected. Whether government spending is financed by distortionary taxes (like income taxes) or non-distortionary taxes (like consumption taxes) and whether the money is coming from deficits or surpluses also makes a difference.

POLICY RECOMMENDATIONS

Drawing on the insights of our literature reviews, the principles of tax design, and a realism about New Zealand’s current situation, we believe that New Zealand needs to make some changes to the tax system over the medium term for the sake of our future. We must move towards a more growth-enhancing mix of taxes as a base, keep spending to a contained level, and remove particular wasteful tax incentives that are currently in the system. The
following policy recommendations are indicated:

1. Personal income taxes

To make New Zealand’s personal income taxes flatter and simpler over the medium-term, we recommend that a two-step progressive rate structure should be introduced, where:

- the top marginal personal income tax rate is approximately 27%; and
- a low income tax rate is retained for taxpayers who earn up to a threshold set according to a relative measure of low income.

We do not recommend that a tax-free threshold should be introduced.

We do not recommend that income splitting for families should be introduced.

2. Corporate taxes

To lower the corporate tax rate, we recommend that:

- the 30% rate should be reduced and aligned with personal income and trustee rates at approximately 27% over the medium-term; and
- the corporate tax rate should be further reduced if the top marginal personal income tax rate is also reduced over the medium-term.

3. Savings and investment taxes

We recommend that:

- the trust tax rate should be lowered from 33% to align with the personal income and corporate tax rate over the medium-term;
- the PIE tax rate should align with personal income, corporate and trustee tax rates over the medium-term; and
- KiwiSaver tax incentives for employers and employees should be removed over the medium-term.

4. Property taxes

We do not recommend that a land tax should be introduced in the medium-term.

We do not recommend that a capital gains tax should be introduced.

We do not recommend that a capital income tax should be introduced.

5. Consumption taxes

We recommend that the GST rate should be increased from 12.5% to 15% over the medium-term.

6. Size of government and government spending

To reduce government size and spending we recommend that over the medium-term:

- an upper limit benchmark for central government operating spending could be set at, for example, 30% of GDP; and
- accordingly, a benchmark for the size of core government expenditure and provision of a social welfare safety net could both be set at around 15% of GDP.

To improve the quality of government spending, we recommend that the government should be mindful of the evidence relating to the composition, financing and value of that spending.

WHAT’S RIGHT IS NOT ALWAYS POPULAR

While these changes are important, our research has found that, by and large, they are not particularly popular.

Maxim Institute commissioned UMR Research to carry out a telephone survey of a representative sample of 750 New Zealanders aged 18 and over to see what their opinion was of a variety of tax policy and government spending issues that are discussed in this paper. The results of New Zealanders’ opinion of tax policy issues, with a margin of error of +/-3.6%, were that:

- 56% of participants oppose increasing GST, if personal income taxes were lowered at the same time; and
- 62% of participants oppose an annual tax being charged on the value of land, if personal income taxes were lowered at the same time.

The results of New Zealanders’ opinion of government
spending issues, with a margin of error of +/- 3.6%, were that:

- 50% of participants think the government should spend about the same as it presently spends on KiwiSaver incentives;
- 47% of participants think the government should spend about the same as it presently spends on New Zealand Superannuation;
- 47% of participants also think the government should spend about the same as it presently spends on “20 hours free” early childhood education;
- 46% of participants think the government should spend about the same as it presently spends on Working for Families; and
- 48% of participants think the government should spend about the same as it presently spends on interest free student loans.

Despite the fact that the changes we recommend may not be popular now, they remain important and not only justified but crucial. While the government must pay careful attention to what its constituents would like, it is also charged with the responsibility to do what is best for the country as a whole. The government must convincingly explain why the changes are required. Given the outlook of our economy and future pressures on government spending, it seems that the design of the tax system needs to be reconsidered. If we neglect this responsibility we face serious consequences in the long-term.

ENDNOTES

12. Note that as they are not costed, they are introductory only. Final recommendations and costings will be presented in the final paper of this series.
SECTION 1

Introduction

Taxes are an integral part of our society and our economy, funding government to do what we need it to do. However, the health of New Zealand’s tax system is currently under threat. Once a model to other countries of a relatively efficient system which did not unduly discriminate against people's choices to work, invest or start a business, the past decade has seen many new distortions introduced which threaten to undermine the tax system's efficiency and capacity to collect revenue. The previous government decided to tax the highest income earners at a higher rate, raising the top marginal personal income tax rate from 33% to 39%. This allowed significant gaps to emerge among tax rates on different bases, such as personal, corporate and trust income. Rather than boosting the amount of tax collected, over time this kind of policy can create loopholes that lower the tax take, and can produce all sorts of unintended consequences, such as lower rates of workforce participation and business creation.

Taxes can change our incentives—that is, how much we do or value certain things, like working or leisure. Government policies like KiwiSaver and changes to Portfolio Investment Entity (PIE) rules distort our incentives for saving and investment, while the Working for Families package has altered incentives to work harder, or longer, for more pay. Working for Families has also introduced corrosive effective marginal tax rates on certain families' income. Together, these sorts of policies have made the tax system more costly to administer and have increased compliance costs, thereby raising the costs of collecting tax. Besides this, government size and spending has been on the rise, such that government spending was recently equivalent to over a third of the value of what we produce. All of this works to undermine New Zealanders' living standards, as tax inefficiencies and perverse incentives chip away at or inhibit what our nation produces.

In 2009, the New Zealand Government established a Tax Working Group to identify major issues the Government should consider with "medium-term tax policy and to better inform public debate." The Group considered these sorts of mounting problems with the tax system and reported back in January 2010 with a range of suggestions for restoring the tax system's fairness and revenue-raising integrity. It recommended options such as: aligning personal income, corporate and trust tax rates; increasing the rate of Goods and Services Tax (GST); and changing the way property is taxed, for example by closing loopholes on residential rental property. While the Tax Working Group's recommendations are important and should be duly considered by the Government, the Group's brief restricted it to considering only tax changes that are "fiscally neutral": that is, ones that would not reduce the total amount of tax the government collects.

The Group's recommendations must be seen within this constraint; it was not able to consider how the total tax burden could be lowered by reducing government spending. Government operating spending (that is, core Crown expenditure) was 29% of gross domestic product (GDP) as recently as 2004. It is now about 36% of GDP, partly due to pressures on the Government to provide greater assistance during and after the recession, such as income support, and to the recession's effect on GDP itself. However, the recession's impact should not distract us from how operating spending as a share of GDP still tracked up between 2004 and 2008. If New Zealand reduced government spending, more significant change to the tax
system would be possible. This could alleviate the total tax burden New Zealanders face, thereby stimulating the economy and improving living standards.

The focus of this paper

In light of this, the purpose of this discussion paper is to consider some of the economic questions affecting our tax system—primarily, questions about how taxes affect economic growth. It is the third in a series that seeks to join up theory about the role of government and community, the meaning and enacting of justice, compassion and freedom, and the economic literature on taxation. The goal of the series is concrete policy recommendations based on this holistic framework.

We believe the relationship between taxes, the economy and society is important because the way taxes affect the economy also affects people's living standards and the opportunities open to them in life. Of course other economic issues, such as New Zealand's indebtedness, also have an impact on New Zealanders' livelihoods—and tax can have an impact, even if indirectly, on these sorts of issues. However, to cover all of the possible ways taxation could interact with the economy would be difficult and, moreover, hard to describe with certainty.

We draw on recent work by the Organisation for Economic Cooperation and Development (OECD) and others that looks at how taxation interacts with various economic growth drivers—for example, innovation and investment—as a way of understanding how taxation influences a country's economic performance. This body of research has implications for how governments may choose to collect and spend taxpayers' money.

We have chosen to limit our discussion's scope to concentrate on taxes that are primarily designed to be revenue-raising—such as personal income taxes, consumption taxes like the GST and corporate taxes—and on the way government spends the money raised by taxation. These taxes are also very important because they make up the greatest share of all the taxes New Zealanders pay.

We also recognise that governments may collect revenue through corrective taxes, such as environmental taxes and “sin” taxes, like those on tobacco. Since all taxes impose a cost, the idea is that corrective taxes can be used to make people do less of what is harmful to society as a whole, for example taxing fuel emissions to reduce pollution. Corrective taxes are important and will have an impact on economic growth, but these taxes should be assessed on a different set of criteria to revenue-raising taxes because the main purpose of corrective taxes is to change people's behaviour and not to collect government revenue. We therefore do not discuss corrective taxes in this paper, as their policy underpinnings and purposes are quite different.

Our approach is situated within a comprehensive income tax framework. The theory of comprehensive income taxation suggests that governments should endeavour to tax all income; that is, a dollar earned should be a dollar taxed. The wider the sources of tax—the tax base—the more tax can be collected from the myriad ways people earn an income. The tax policy framework New Zealand adopted after 1984 was a comprehensive income tax approach, which improved the tax system's fairness and integrity. This approach can help ensure the design of the tax system satisfies horizontal equity concerns, meaning that all taxpayers who are in the same welfare situation are treated in the same way.

That said, we recognise that the comprehensive income tax approach is just one tax policy framework. Another, optimal tax theory, suggests government should ideally tax what we take from the economy (consumption) and not what we put into it (income). Among other things, it is thought that taxing consumption should help stimulate the formation and productive use of capital throughout the economy. Optimal taxation theory, therefore, challenges the idea that we should tax all income sources in the same way, since it suggests, for example, that capital and savings should be more lightly taxed than other income, because of their role in driving economic growth.

While optimal tax theory makes worthy suggestions about how taxes might be designed in theory, an optimal tax system would be difficult to implement in practice because, for example, it would require policy-makers to have accurate, up-to-date information about taxpayers' preferences that simply is not available all the time. An optimal tax system would also require more complex tax structures, which would mean differentiating clearly between forms of capital and labour income so that different tax bases could be taxed at an optimal rate. For these reasons, we have not
followed an optimal tax approach, instead relying on a comprehensive income tax system which is likely to be simpler to administer and easier for everyone to understand.

A comprehensive income tax framework suggests the tax system should be designed with a policy of lowering and flattening tax rates and broadening the tax base. This does not mean we necessarily believe that every income source should be taxed. The extent of the tax base should also be determined by whether a tax on a particular source is fair, poses implications for economic performance, and/or is simple to administer. We therefore believe many of the efficiency and growth objectives held as important by optimal tax theory can still be achieved within a comprehensive income tax framework so long as government considers the implications of taxing each income source. This means our discussion and our policy recommendations are presented within a modified comprehensive income tax framework.

Although we are concerned with how taxes affect economic growth, we do not suggest economic growth is an end in itself, crucial and valuable as it is for improving people’s lives. We suggest whatever policy direction is chosen should also take account of other considerations of people’s non-material well-being—we need what has been called a “functional economy.”

A “FUNCTIONAL ECONOMY”

Building on an established philosophical tradition, the economist Bernard Dempsey further developed the idea of a “functional economy.” The theory of a functional economy suggests that the economy does not exist apart from society and people. Like a human person, the economy should have a reference point for its operation. Simplifying Dempsey’s thought to its core, he believed the common good, defined in terms of social (commutative) justice, was this reference point to which the economy should be oriented.

We can think of the common good as what is good for sustaining holistic, social life. Since human beings are relational, genuine fulfilment in life comes from living in community. Community and the common good are in some ways inseparable. Some theorists have argued that what is good for sustaining life is indicated by intrinsically basic goods that we all share or partake in, like life, knowledge, friendship and play. These basic goods are good for all people at all times and in all places. This means the common good is revealed by reason and by the customs and traditions that have shown themselves to sustain the basic goods of life. The common good is not a simple end goal that can theoretically be achieved once and for all—like eliminating poverty or income inequality—it is something “valued, supported and protected by society’s members” for their benefit and flourishing as people.

Dempsey suggests that the overriding purpose of economic exchange is not simply to produce wealth. His position implies that economic exchange has a clear social dimension. Work, for example, is not merely a way to generate income; it also helps to develop the human person.

Similarly, businesses, and in particular entrepreneurs, should not be seen as solely engaged in commerce, but rather as using their intelligence and freedom to create opportunities for all of us to enjoy better lives by generating wealth, and creating jobs and opportunities for investment. Businesses also “form communities of work in which investors and employees can use their resources, their talents and their energies to support human well-being.” They also contribute to the common good themselves by creating wealth, providing good work for people and being wise stewards of the community’s resources. The broader part that business plays in society means that we should not downplay the importance of wealth creation and its source in human ingenuity and work.

Seen in this way, work, businesses and entrepreneurship fulfil larger human purposes, and should be valued accordingly. We believe the same is true of the economy and of economic growth. That is, while economic growth is not an end in itself, we should value it because it can help us realise the ends indicated by the common good, for true human flourishing. The common good as a reference point can also serve to restrain what might otherwise be excesses of market participants or a pursuit of economic growth at all costs. Nevertheless, free markets produce the wealth that sustains a community in the most efficient way, and reward human initiative, ingenuity, industry and self-discipline.
MEASURING WEALTH AND WELL-BEING

If you were to ask most economists how we could measure whether people were better or worse off in various countries, they would probably reply that a reliable way of doing this is to first consider a country’s GDP, GDP growth and GDP per head. They are considered key measures of a country’s economic performance since they are the best available economy-wide measures of production and income—two crucial factors behind better living standards. Though recently the value of GDP as an indicator of a country’s well-being has been called into question, GDP growth remains a very important and useful indicator despite its limitations.

GDP per capita as a well-being measure

An indicator that economists and governments often use to consider whether a country’s economy is growing or not is to look at the change in GDP per capita. Statistics New Zealand defines GDP as “the total of goods and services produced in New Zealand at market value after deducting the cost of goods and services used in the process of production,” before depreciation deductions. GDP therefore “describes in a single figure, and with no double counting, all output or production carried out by all enterprises, government and non-profit institutions and households in New Zealand during any given time.” GDP growth is the rate of change in per capita GDP (that is, the share of GDP per head of population).

The OECD has recently discussed what GDP is and what some limitations might be with using it to assess well-being in and across countries. They say GDP per capita “is the most commonly used measure of material living standards because it is readily available for a large number of countries on a timely basis.” Despite this, since GDP per capita measures economic output, it misses some aspects that are important for judging a country’s welfare, including the value attached to leisure and the use of non-renewable resources. For example, in the OECD’s opinion it would be more accurate to measure living standards by the sum of a country’s consumption and “changes in the net stock of wealth, both held at home and abroad.” This means that a country’s net income per capita would be a better measure of living standards than GDP per capita because it would account for both the “net flow of income from foreign investment and the depreciation of the capital stock.”

However, data like this is not available for all OECD countries, and country comparisons would not be significantly changed by considering these finer details. The change to GDP per capita therefore remains a standard measure of economic growth and well-being, as a close relationship exists in most cases between “GDP per capita and other measures of economic well-being, such as net national income per capita or GDP per capita adjusted for leisure and income inequality.” If a country has low per capita income and it consistently fails to boost its per capita income closer to the level of the highest-income countries, this is a strong signal that its economic policies are not very growth friendly. This is why evaluations like the OECD’s “Going for Growth” reports, which analyse the kinds of policies that would help OECD countries to grow their economies, centre on the initiatives that might raise GDP per capita.

Broader well-being indicators

GDP per capita is an important, indeed crucial tool for measuring one aspect of a country’s prosperity and living standards. However, it could also be understood within a broader vision of society such as that suggested by our discussion of a functional economy, conscious that GDP is still a valuable proxy for many complex factors that relate to measuring well-being.

There is some overlap here with recent discussion about how to measure social well-being and progress. A concern for broader, more “human” indicators of economic and social progress is a topic becoming more popular among world leaders, international organisations and established scholars. At a conference in Wellington about the “Ethical Foundations of Public Policy” in December 2009, organised by Victoria University, several papers highlighted or had a focus on developing better indicators of social well-being or sustainable development.

This issue was also relevant to the development and release of the report of The Commission on the Measurement of Economic Performance and Social Progress (CMEPSP) in September 2009. French President Nicolas Sarkozy had sparked off this work in February 2008 with a request to American
economist Joseph Stiglitz and two other economists, Amartya Sen and Jean-Paul Fitoussi, to form the Commission.40

The report produced by the Commission fulfilled its brief to identify the limits of using GDP per capita as an economic and social progress indicator and the problems with accurately measuring GDP;41 to identify what additional information should be collected and produced; and to assess the feasibility of alternative measurement tools.42 The Commission’s report argues that GDP per capita is insufficient as a well-being indicator because it does not capture phenomena besides wealth or potential purchasing power that may affect people’s living standards or quality of life. While GDP does include a wide range of national income variables, and so economic progress, it does not account for indicators like health, freedom and security that may also influence incomes, economic progress and well-being more generally.43

Despite the Commission’s good intentions, a major problem with their work is that it assumes it is possible to measure non-market activity that is, in fact, very difficult to measure. Measuring non-market activity is difficult because it does not have market prices associated with it. Without such prices, any judgement about an activity’s value is subjective. While the Commission’s indicators alert us to how non-market factors can shape our well-being, this limitation should give us food for thought about how relevant and helpful the Commission’s proposals actually are for improving our understanding of well-being.

Conscious of these sorts of limitations, the London-based Legatum Institute approached the issues the Commission was concerned with in a different way. It attempted to consider what contributes to prosperity in broader terms than just what determines GDP per capita. While arguing strongly for the role that economic growth plays in producing the wealth necessary for improving social outcomes and life satisfaction, the Legatum Institute has developed indices that measure the more subjective aspects of social well-being as part of its “Prosperity Index.”44 The first four sub-indices relate to variables that influence GDP per capita growth while the last five relate to satisfaction of life quality or subjective well-being. New Zealand ranked tenth overall out of 104 countries in the 2009 rankings.45

Interestingly, statistical analysis shows that about two-thirds of subjective well-being measured by the Index can be explained by economic and political freedom scores (indicators relating to the “transparency and accountability of a country’s democratic institutions, and the political rights and civil liberties”).46 This means that while economic prosperity does not account for all the national differences in social well-being, it does account for a lot of the difference. Although some would argue there is a point beyond which increases in economic prosperity will not bring about improvement in social well-being, another study has found a positive relationship between “GDP and average levels of subjective well-being across countries” and “no evidence of a satiation point beyond which wealthier countries have no further increases in subjective well-being.”47 In other words, GDP growth continues to be associated with increases in well-being even in countries that are already wealthy.

Conclusion: Measuring wealth and well-being

There is more to life, of course, than economic growth. But growth is a crucial determinant of national prosperity and well-being. Coupled with the difficulties of measuring well-being more broadly than GDP, this suggests we should not reject GDP growth as one ingredient of social well-being. We should value it in its proper place, but we should value it nonetheless. The following discussion expands on this.

WHY ECONOMIC GROWTH IS IMPORTANT

Economic growth is “the basis for increased prosperity,”48 and consequently for higher living standards. This is why the OECD argues in its annual “Going for Growth” publication that its member countries should try to improve their economic growth so that “advances in material living standards” will not be held back.49

An increase in living standards provides some important elements that help us to flourish and live well. When we have greater prosperity, our capacity to provide for ourselves and others is protected. For example, a prosperous business can afford to pay its workers higher incomes and give them job security. Economic growth may also reduce welfare dependency and helps to fund a public sector that
can provide high-quality services that can improve social outcomes in vital areas like health and education. A fundamental reason why economic growth is good for us has been illustrated by the effects of the recession: we need growth to create and sustain jobs.

New Zealand’s dive into recession shows that when economic growth falls, there is an impact on the livelihood of many New Zealanders. A recession also puts more stress on government funds as the number of people accessing welfare like the Unemployment Benefit increases, while at the same time falling labour force participation and shrinking company profits reduce the amount of tax the government can collect.

As the cost-cutting in the 2009 Budget indicated, falling revenue means government has fewer resources to pay for the things we expect it to do.

Poor economic performance is ultimately linked to poor social outcomes. For example, unemployment or reduced access to training can be associated with delinquent or dangerous behaviour in children and young adults. The Ministry of Social Development argues that youth aged between 15 and 19 years who are out of education, work or training for a long time have “a heightened risk of poor outcomes, including: lower earnings; greater reliance on social assistance; and higher rates of unemployment, criminal offending, substance abuse, teenage fertility, suicide, homelessness and mental or physical ill health.” Further, these outcomes are associated with “significant social and economic costs for individuals, their families and wider society,” and reduce the chance for many of our young people to live a good life. This is all the

"Challenges and Choices" ahead—making government affordable for future generations

The Treasury said in its 2009 statement on New Zealand’s long-term fiscal position that our current social spending will be unsustainable in the future. If New Zealand were to continue on its current path—offering the range of entitlements, pensions and services that it currently does—Crown revenue will not match expected expenditure (figure 1.1). New Zealand would have to borrow to pay for this. The Treasury forecast that New Zealand’s net debt could be 223% of GDP. Demographic change over the next 30 years means the share of working-aged people to retirees will be smaller, causing tax revenue to fall.

While improving our growth rate and improving workforce participation were floated as solutions, this situation can only change if we also make hard choices about how much government spending is sustainable in the future. The Treasury highlighted that the government has to spend better or reduce spending in the areas that consume the most money: health, education and superannuation. It also firmly stated that we have to get value for money from the $64 billion of total government expenditure.
more important because if a generation’s children suffer it can contribute to a spiral of decline as future generations suffer from broken families, poverty and disrupted communities. To sum up, higher growth matters because it could improve living standards, helping to make “New Zealand into a more attractive place to live, work and do business with and from,” creating conditions in which all of us can flourish. And as far as our living standards go, there is room for improvement.

COULD DO BETTER: NEW ZEALAND’S CURRENT LIVING STANDARDS

We can think of living standards as both the level of economic resources people have in order to purchase goods and services as well as their physical living circumstances. When it comes to living standards, New Zealand has a lot to be positive about. However, our generally good quality of life does not extend to our whole population, and living standards in New Zealand, across the board, could certainly improve.

In 2004, the Ministry of Social Development published research from an ongoing project that provided data about New Zealanders’ living standards across indicators like family structure, labour market participation, education and health. We present a selection of the findings here, which helps indicate the share of the population who may be suffering from hardship. The research measured living standards according to an economic living standard index (ELSI). The ELSI is a direct measure of living standards since it is calculated according to what people consume. The index gives a numerical score between 0 and 60 for each person in the population. A higher score means a person has a higher living standard.

The study showed that “more than three-quarters of the population [had] living standards that were ‘fairly comfortable’ [32–39 ELSI points] to ‘very good’ [56–60 ELSI points].” Nearly all New Zealanders reported that they had basic household items like a washing machine or a good pair of shoes. The spread of scores across the population, however, was quite uneven. Further, “the gap between those with higher living standards and those with lower living standards [had] widened slightly,” with 8% of the population reporting that they were in severe hardship compared to 5% in 2000 at the time of the first study. Another important finding was confirmation that “living standards [rise] progressively with equivalent disposable income.” Equivalent, or equivalised income, is an income measure that adjusts a household’s total annual income so that different sized households and families can be compared accurately.

This study also asked questions to help explain the differences between people’s living standards. For instance, the study found that people experiencing a marriage break-up had a higher chance of experiencing hardship than did those who stay married. Further, suffering multiple instances of ill health was found to have had a negative impact on people’s living standards. When people’s living standards declined, there was a corresponding increase in the risk they would experience poor health. In terms of source of income, it was found that self-employed people had higher average living standards (47 ELSI points) than wage and salary earners (43 ELSI points). The greatest share of the population of income-tested beneficiaries was in “severe hardship.” Disturbingly, the study also showed that Maori and Pasifika on average had living standards that were substantially lower than the whole population. The key messages from this data would appear to be that adverse life experiences, like a marriage ending, or restrictions of economic participation, like unemployment, increase the chance that households will experience lower living standards, and that higher income reduces the chance that households will experience lower living standards.

While this study is five years old, we still believe the general trends of the findings are true from some more recent data. For instance, data released in “The Social Report 2009” by the Ministry of Social Development shows that a substantial proportion of the population faces challenges to experiencing good living standards. In terms of measuring people’s economic standard of living, “The Social Report 2009” states that in the year to June 2008, 14% of the population were earning a low income. “The Social Report 2009” also shows that the proportion of the population earning a low income rose sharply until the mid-1990s and then gradually declined up to 2008. However, the proportion is still higher than it was before 1990.

Falling unemployment and more financial
assistance for families with children and for housing also explained why the proportion of the population earning a lower income fell from the mid-1990s. The improvement since the mid-1990s was the result of the benefits of institutional reform that allowed the economy and incomes to grow and unemployment to reduce. On this point, evaluation of the Working for Families package by the Ministry of Social Development has shown that more sole parents receiving the Domestic Purposes Benefit have been able to move into employment. “Between June 2004 and June 2008, the percentage of sole parents in paid employment for at least one hour per week increased from 48% to 58%,” with 8,100 recipients employed. However, the recent recession somewhat reduced this improvement.

While economic growth is clearly not relevant to all of the factors that influence living standards, equally clearly it is relevant to many of them, such as job opportunities and incomes, and should be pursued. But how promising are New Zealand’s prospects for sustained higher economic growth?

NEW ZEALAND’S RECENT GROWTH PERFORMANCE

The Labour-led Government set out to raise New Zealand’s per capita income to put it in the top half of OECD economies and keep it there. It failed to hit this target, and New Zealand’s recent growth performance has not been stunning. How can we explain this? We can understand our growth performance in terms of various economic inputs and how our growth rate compares with other countries.

While our average annual GDP per capita growth rate was one of the highest in the OECD over the early 1990s, this growth was largely the product of an expanding services sector (in trade, transport and communications) and increasing workforce participation. It was not down to an increase in labour productivity. Productivity is a major area where New Zealand has fallen behind. A disappointing implication is that our workforce has been working longer and harder to produce an equivalent return to what Australian workers produce with less effort. The Treasury reported in 2008 that our workers added 30% less output to the economy than Australian workers added to theirs, and this was with New Zealanders working 887 hours per year per population head compared with 864 hours for Australians.

New Zealand could use its capital more productively. New Zealand’s capital to labour ratio is small compared to Australia’s indicating that it has not done as well at creating growth through higher rates of capital investment. This could partly be related to the relatively small size of our economy. One form of capital investment that we do make is in residential housing. New Zealanders have a lot of wealth tied up in residential housing, many argue because of tax advantages for investing in property. This has created disincentives for people to invest in business or to accumulate capital. On this point, the December 2009 report of the Capital Markets Development Taskforce said that “[t]o get the most out of saving, New Zealanders need more than term deposits and rental property. It is important that capital markets provide investors with a broader set of options and better outcomes.”

The prosperous times we enjoyed before the recent recession provided an opportunity to enhance our growth prospects, for example by reducing taxes or creating a more business-friendly environment by reducing red tape and making it easier to invest. However, the Government put more emphasis on expanding government agencies and the number of public sector employees, and prioritised spending on costly welfare programmes, like interest-free student loans and the expansion of Working for Families.

Government spending on social expenditure, such as social security and welfare, has steadily increased over the past five years. Core Crown expenditure as a whole grew from 29% of GDP in the 2004-05 year to about 36% in 2009. Though some of the recent increase in this has been due to the effects of the recession, including the economy contracting, there was an upward trend even before the recession. When local government and spending on capital outlays are included, in 2010 government spending will be equivalent to nearly half of what New Zealanders produce. Core Crown expenditure is forecast to stay at about 36% of GDP until 2011, when it will drop slightly to between 34% and 35% of GDP over the period 2012-14. The bad news is that core Crown revenue drops from 33% of GDP in 2009 to about 31% of GDP in 2010. It will stay at about that share throughout the forecast period to 2014. This means the Government will be spending more
money than it collects in revenue, paying more or about the same as a percentage of what we produce on expensive programmes like interest-free student loans, Working for Families tax credits, subsidising KiwiRail and KiwiSaver incentives. While some of the government’s current expenditure is meant to soften the blow of the recent recession by bringing forward and lifting investment in key infrastructure, like roads and broadband internet, it has also contributed to the upward spending trend.

We as a nation will have to make significant changes relating to how much money the government spends. Demographic change over the next forty years means there will not be enough taxpayers or tax revenue to pay for the kind of government services we receive today, unless we boost productivity or are prepared to foot the bill with higher public debt, higher taxes or both.

If we can do these sorts of things then New Zealand will be on a surer path to higher growth rates than if government spends more than what the economy can produce. Increasing growth and cutting spending will not be easy, however. In the Treasury’s opinion reaching even the median OECD per capita income will require an “unprecedented increase in the average annual rate of economic growth” compared with our annual per capita economic output since 2000. If tax, government spending and capital levels, among other things, stay the same it seems unrealistic to expect New Zealand can lift its economic growth rate to the heights required to level peg with the wealthiest OECD countries any time soon.

However, this does not mean we should shirk from the challenge of raising our growth rate. If anything the tough economic times should strengthen our resolve to do everything we can to raise medium- to long-term growth. We have to do this to protect the future well-being of our families, our children and our nation. The post-recession period gives us the opportunity to make changes that could get the economy into top gear. And that returns us to the focus of this paper—the tax system, and the role it can play in improving New Zealand’s growth performance.

The next section begins this consideration by discussing the principles that should underpin the design of our tax system. After that, the rest of this paper is structured as follows:

- Section 3 discusses what the major drivers of economic growth are;
- Section 4 then discusses what research says about how taxation affects those drivers, what kinds of taxes are least likely to reduce growth and some design considerations of different taxes;
- Section 5 considers how government size and government spending affect economic growth; and
- Section 6 presents our specific tax and government spending recommendations.

The recommendations in this paper are not costed. The following paper in this series will discuss this topic, setting out the estimates of the expected revenue changes and possible savings for the taxpayer if our policy package were implemented.

ENDNOTES

1 Inland Revenue Department, “Briefing for the Incoming Minister of Revenue - 2008” (Wellington: 2008), 9; The Treasury, “Briefing to the Incoming Minister of Finance. Medium-term economic challenges” (Wellington: 2008);


3 The Treasury, “Medium Term Tax Policy Challenges and Opportunities” (Wellington: 2008).


5 For example, raising the top marginal personal income tax rate has caused taxpayers to reduce their taxable income above the rate threshold. Inland Revenue Department, “Briefing for the Incoming Minister of Revenue - 2008,” 36-37.

Business School “Distinguished Speaker Series.”


This is similar to the approach adopted by the Tax Working Group. For example, they say, “Environmental taxes should only be used where they are an appropriate policy response to particular environmental issues. The specifics of how and where taxes, as one choice of policy tool, could best assist environmental outcomes, is largely an area of environmental policy and therefore beyond the scope of the Group. Environmental taxes that are fiscally motivated could run contrary to the principle of a broad based-low rate tax system, will require the administering of a new tax base, and therefore are unlikely to be a least-cost source of new revenue.” See “A Tax System for New Zealand’s Future. Report of the Victoria University of Wellington Tax Working Group,” 13–14, 34.


Problems with accurately measuring GDP include, for example, the absence of accurate knowledge of prices for some goods or services, like government-provided health and education services, or differences in quality of products without price changes, like cell phones, which undervalues some goods or services, like government-provided health care. This would lead to a corresponding reduction in core social problems such as crime, poverty, and intergenerational unemployment and poverty – and far less cost to New Zealand in these areas. Ministry of Education, “Schools Plus. Discussion document” (Wellington: Ministry of Education, 2008), 8.


Low income is defined as households with equivalised income net-of-housing below 60% of the 1998 household disposable income medium. Ministry of Social Development, “The Social

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“Our economic objective is to return New Zealand’s per capita income to the top half of the OECD and to maintain that standing. This will require New Zealand’s growth rate to be consistently above the OECD average growth rate for a number of years. That will require sustained growth rates in excess of our historical economic performance.” New Zealand Government, “Growing an Innovative New Zealand” (Wellington: 2002), 12.


2025 Taskforce, “Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce,” 19.


Business Roundtable, “Economic Fact File on the New Zealand Economy,” figure 9B.


SECTION 2

Tax system design principles

FOCUS POINTS

• Tax should be used primarily to raise government revenue.

• The tax system should also raise revenue at the lowest cost to taxpayers (efficiency), should be neutral (neutrality) and designed simply (simplicity), and should treat taxpayers in the same position in the same way (fairness).

• New Zealand’s current tax system does not comply fully with these principles because tax rates are no longer aligned, and tax incentives are used to influence people’s behaviour, like with KiwiSaver.

It is important that a tax system be based on a principled framework, an understanding of what taxation is and how it should function. It should not be a system that evolves in an ad hoc way. Thinking about these principles forces us to identify the potentially competing purposes of taxation, as well as other theoretical values and the practical constraints under which the system must function. In this section we discuss several core principles of tax policy design and the extent to which the current tax system reflects those principles.

We discuss tax system design principles under the headings of:

• raising revenue;

• enhancing efficiency;

• neutrality;

• maintaining the fairness of the tax system; and

• design simplicity and administration.

While having a set of guiding principles is helpful, we should bear in mind that not all principles can be satisfied perfectly. As the authors of the Tax Review 2001 (the McLeod review) commented in their issues paper, it is extremely difficult to satisfy different principles at the same time, since designing a fair and efficient tax system involves “grappling … with inescapable trade-offs among competing objectives that defy neat solutions.”

RAISING REVENUE

While there are a variety of reasons why something might be taxed—for example, to correct a person’s behaviour as corrective taxes do—it is generally agreed that a core function of tax is to raise necessary government revenue. This allows the government to perform all the functions we need it to. So what do we need the government to do?

The role of government

Elsewhere we have proposed that necessary government functions are those which protect the peace and security of the community that a government serves, and which protect the common good. This is vital for establishing an environment in which the communities of civil society—like the family, businesses and voluntary organisations—can flourish without being absorbed by government. This allows each community to perform a necessary and proper function according to its nature, whether that is to care and nurture, in the case of the family,
or to generate jobs and wealth, in the case of business. The free association and flourishing of these communities acts as a bulwark against government defining by itself what is good for people. Instead, what is good for people is revealed and realised as it is lived out in community, which we call the common good. This common good is indicated by the community’s history, customs and traditions and by reasoned deliberation about what the intrinsic basic ends of a good life are: such as life, play, friendship, and knowledge. These goods are not mutually exclusive; each can be considered necessary for living a good life.

This framework is not meant to imply that the government’s role is like a night watchman, only intervening to keep the peace. Rather, it suggests that the government should govern according to the principle of subsidiarity; that, broadly speaking, government should not become involved in regulating or assisting a lower sphere of authority unless it is at threat from harm.

Those functions that protect the peace and security of the community that a government serves, therefore, define the purposes for which it is legitimate for government to raise revenue.

Major challenges to raising government revenue in New Zealand

In its 2008 post-election briefing, Inland Revenue informed the incoming Minister of Revenue that New Zealand required a “robust and sustainable tax system that raises enough revenue” to make the kind of public services that New Zealand needs more affordable.

However, there are some challenges to this at present.

Reliance on personal and corporate taxation

While according to economic theory all taxes ultimately fall on individuals, one of the growing problems that New Zealand has with raising government revenue is that we collect most tax from only a few sources. The sources of government revenue are called tax bases and they are often described by the “nature of the tax and the things that are taxed.” In New Zealand there are taxes, for example, on:

- personal income (earned from such things as salaries and wages; savings; a trust; dividends or a by owning a company, like a loss attributing qualifying company);
- companies;
- consumption; and
- a handful of other things, such as excise taxes and gift duty.

While these represent several different tax bases, the government is most heavily reliant on direct taxes on personal and corporate income. The Tax Working Group reported that 70% of government revenue comes from these bases. This is nothing new; between them ordinary taxpayers (through personal income and consumption taxes) and firms have borne most of the brunt of the taxman’s demands. As we will see, it is not ideal for firms and individuals to bear most of the tax burden since firms and entrepreneurs are responsible for creating new business opportunities, technologies, jobs and training opportunities. When they are taxed more, there is a reduction in their return from investing in these sorts of things, which ultimately means fewer opportunities for people and less wealth to go around.

Mobile tax bases

Another problem is that these tax bases are also highly mobile nowadays and so are less secure revenue sources than in the past. For example, Matt Benge and David Holland of Inland Revenue have reported that about 24% of highly-skilled New Zealanders live overseas. Besides neglecting the retention of skilled workers—human capital—the Treasury has also advised the Government that New Zealand is not doing enough to retain and attract investment from companies. This is a problem because companies that do not have location-specific businesses can easily choose to move their head offices overseas. A related problem is international tax competition.

International tax competition

Because so many countries have open economies, with fewer barriers to work and investment than in the past, it is very easy today for people and firms to choose in which country they want to work or invest. Thus, the OECD has observed that “governments are (finding) themselves squeezed by pressures to
maintain or to increase their expenditures on the one hand and the need to make their tax systems more competitive, so that their countries can retain and attract skilled labour and investment. This is called international tax competition.

New Zealand’s higher corporate tax rate, relative to Australia, for example, has the potential to retard employment, foreign investment and the security of the tax base, encouraging firms which can to move their head office overseas.

While the corporate tax rate can influence the mobility of tax bases, there may be a practical barrier to companies shifting their operations overseas if their staff would prefer to live in New Zealand. A key determinant of this is whether marginal personal income taxes are high. If they are high then some staff may want to move, which might in time cause a company to relocate its head office overseas or eventually cause it to fail for lack of staff.

**Tax planning and avoidance**

Analysis shows that firms have been carrying more of the tax burden than they used to. The New Zealand Institute of Economic Research (NZIER) has analysed how New Zealand’s tax base and tax mix changed between 1987 and 2007. The NZIER described how over the period, government’s reliance on personal income taxes dropped from 62% to 42% as the proportion of taxes collected from firms and other forms of direct taxes increased from 10% to 24%. This means that government more than doubled its reliance on corporate taxes from 1987 to 2007.

The government’s increased collection of personal income taxes can be partly explained by reference to the Labour-led Government’s policies towards personal income tax, and how people respond to more progressive tax rates (a rate structure in which the more you earn, the higher the rate of tax you pay). In 2000, the Government increased the top personal income tax rate from 33% to 39%. Since some taxpayers tend to be sensitive to top marginal tax rates on personal income, the rate increase may have encouraged more people to avoid paying tax at the top rate by, for example, incorporating their businesses to become self-employed (like tradesmen) or retaining income within their companies, sheltering income at lower rates than those which are taxed on an individual basis. The NZIER’s evidence reflects more taxpayers choosing to pay tax at the company rate. The big gap between the trustee tax rate of 33% and the top personal income rate has caused a similar problem because it is now more attractive for taxpayers to funnel income through trusts which are taxed at a lower rate.

Bracket creep also creates problems. This occurs when the government does not adjust the tax thresholds to allow for inflation, and taxpayers are pushed up into higher tax brackets by regular wage increases. Bracket creep encourages taxpayers to find ways of reducing their taxable income.

Like the NZIER, Inland Revenue is well aware of these trends (figure 2.1). It reported them in its 2005 briefing to the incoming Minister of Revenue, highlighting that the proportion of people declaring
their income to be $60,000, the income level at which the 39% rate took effect, had increased from 0.45% in 1998 to 4% in 2003.\textsuperscript{20} The 2008 briefing again indicated an “obvious spike” in each year since the rate was increased to 39\%.

The Government’s move to drop the top personal income tax rate from 39 to 38\% in April 2009 for workers earning greater than $70,000 per year was a small step forward. But the top personal income rate is still not aligned with the company or the trustee rates of 30\% and 33\% respectively. While this position prevails, people will continue to have an incentive to engage in tax planning to avoid higher rates.

\textit{Impact of recession}

An immediate short-term challenge is how the recession has caused present and future economic output to drop. When output drops there is a corresponding fall in how much tax the government can collect from businesses and workers. For instance, the Treasury already expects that tax revenue will be $400 million lower in the June 2010 year than expected in the 2009 Budget, although it is anticipated that more than originally budgeted will be collected in following years.\textsuperscript{22} Nevertheless, nominal GDP (GDP expressed in today’s prices) is expected to be $29 billion smaller over the four years to June 2012. A smaller economy means less tax revenue can be collected.\textsuperscript{23} This means New Zealand is now in a situation more serious than before where we have to think very carefully about what government should be spending taxpayers’ money on and how much tax the government needs to fund that expenditure. This also requires us to think more carefully about how we can raise that taxation so that the tax does not discourage a return to higher economic output. We shall reflect more on these issues in later sections.

\textit{Generational shifts}

A further looming challenge is that large numbers of the baby boomer generation will move out of the workforce and into retirement over the next 10 to 15 years, decreasing the revenue base at the same time that welfare costs for the elderly will increase. If the elderly are to enjoy the same level of support they currently do this will put government finances under more stress.\textsuperscript{24}

\section*{Enhancing Efficiency}

Funding government to do what we need it to do is not a costless exercise. Whenever government decides to levy a tax it creates all sorts of costs—primarily the administrative costs of paying Inland Revenue to collect taxes, and deadweight losses (the economic cost of people choosing to do less of the valuable things that the tax applies to, like work or saving).\textsuperscript{25}

Administration costs are discussed later in this section. Here we focus on deadweight losses (also known as the excess burden) (see figure 2.2 on page 17). Working out the deadweight loss from income taxes and government transfers, like benefits, is not straightforward. One common shorthand way of calculating the deadweight loss of an income tax (without considering the complex ways that people behave) is that the burden is proportionate to the square of the marginal tax rate, the rate that applies to the last dollar of a taxpayer’s income.\textsuperscript{26}

However, as tax economist John Creedy says, “the simple ‘square of the tax rate’ approximation points to the need to recognise that the efficiency losses associated with increases in marginal tax rates are non-proportional.”\textsuperscript{27} What this means is that the cost of raising an extra dollar of tax increases more than proportionately as rates increase, as they do in our progressive income tax scale, for example. This observation should make us think about the less obvious costs of collecting tax using a progressive tax system.

While the deadweight loss shows us how much an incremental increase in tax adds to the tax burden it is also important that we understand who actually ends up paying the tax.

\textit{Who bears the cost of a tax?}

Determining who actually bears the cost of a tax in practice is called the tax incidence.\textsuperscript{28} It is different to the legal incidence—who the law says is responsible for the tax—because while the law may clearly impose tax on one person, the economic effect of the tax may fall on someone else.\textsuperscript{29}

The following example in the McLeod review issues paper discusses tax incidence. It describes how a hypothetical worker called Aroha might
respond to the government introducing a 25% proportionate tax on labour income in a situation where no tax previously existed. When the tax was introduced, Aroha’s employer raised her wage from $30 to $34 to offset the effect of the tax and keep her. This meant that while Aroha was legally obliged to pay the new income tax, the tax affected her employer as well since they had to bear the cost of paying her $4 more wages. The tax incidence is shared by Aroha and her employer.

Tax incidence is not static: it changes across time, affecting different people in different ways as their circumstances change. Economists consider that the economic incidence of a tax is likely to fall to a greater extent on:

- goods or production factors (land, labour or capital) which are unresponsive to changes in their price because of changing demand or supply;
- goods that are not easily substituted for another; and
- production factors which are relatively immobile.

When taxes are levied on goods or production factors that do not share these characteristics then the tax incidence shifts to goods or production factors which are the next least responsive to price, substitutable or mobile. For example, if government increases corporate taxes it is likely to discourage foreign investment. This means shareholders will immediately bear the cost of the tax. However, the economic incidence of the increased corporate tax is ultimately shared with workers (labour) or customers because firms in competitive markets earn a normal return in the long run.

Who bears the tax incidence is therefore more complicated to work out because who finally bears the cost of public expenditures is not always immediately obvious. We have to be careful to think beyond the apparently obvious effects of imposing a tax. The costs are likely to be spread further than those who are legally obliged to pay it.

**Limiting efficiency costs**

The policy-maker’s task is to limit the efficiency costs associated with tax. The size of an efficiency cost will be different depending on the kind of tax or transfer considered. All things being equal, taxes which alter production decisions may be more costly than those which affect consumption. When thinking about which taxes are more or less efficient, a principle which we should consider is the marginal cost of raising the last dollar of revenue from a particular tax, since this is "relevant for comparing the efficiency of different taxes or additional spending."\(^2\)

In theory, efficiency costs can be minimised by imposing higher taxes on immobile production factors because the supply is largely unresponsive to...
a given tax rate. The same is true for taxes on goods and services. In principle, it would be more efficient to differentiate the tax base according to different factors of production, like labour, natural resources or capital. However, because differentiation would create greater administrative and compliance costs it would be difficult to collect individual taxes on each factor. The increased administration costs could end up outweighing the savings. On balance, it may not be worthwhile to pursue a differentiation policy.

As distortions that inhibit efficiency cannot be eliminated completely from the tax system, it should be as neutral as possible to people’s choices. We explain the concept of neutrality next.

**NEUTRALITY**

Neutrality as a principle of tax system design means that the tax system should not discriminate for or against any particular economic activities people may value.

Observing the neutrality principle is very important for making fair and efficient tax policy because taxing any sort of activity will cause people to do less of it. So if taxes are levied on some income sources and not others, it will encourage people to minimise the amount of tax they have to pay by organising their affairs in such a way as to avoid tax. A tax system can be described as neutral when government taxes income sources comprehensively across as many bases as possible so that people will have fewer incentives to minimise their taxable income.

Neutrality has been a general tax reform objective in OECD countries since the mid-1980s as countries have generally moved to broaden their tax base and lower rates. At present, New Zealand’s tax system departs from the principle of neutrality in two main ways—an uneven tax base and the use of tax incentives and concessions. We can see evidence of New Zealand’s uneven tax base in the way that some sources of income remain lightly or inconsistently taxed. For instance, New Zealand does not have a tax on the gain in value which can be earned from owning capital, like housing or other buildings, or shares in a company. The absence of such a comprehensive capital gains tax means that New Zealanders are bound to favour investing in capital that appreciates in value as this appreciation is not a form of taxable income.

Land is another example of a tax-free asset that is highly valuable. New Zealand’s total land (excluding conservation and public land) was valued at $461 billion in 2006 terms and it generally appreciates in value. As long as these bases remain lightly taxed (capital and land is already taxed, for example through rates) people will always be biased towards investing in these sorts of assets. This distortion could be removed if the gains from owning property could be taxed in some way, though capital gains taxes have limitations, which we will discuss further in section 4.

At present our tax system also discriminates for or against certain activities by the use of taxpayer-funded incentives and tax concessions. One obvious example is how different forms of savings and investment are taxed differently, such as the different tax rate for cash Portfolio Investment Entities (PIE) compared with regular savings accounts that incur resident withholding tax. Further, with the introduction of KiwiSaver in 2007 some retirement savings are subsidised directly by the government. Granting tax incentives to certain forms of savings accounts, unsurprisingly, increases savings in those tax-favoured accounts. Tax incentives and concessions also narrow the tax base, meaning it might be necessary to have higher taxes on other bases to raise a given amount of revenue.

There might be legitimate reasons for using tax incentives or concessions as a policy tool. They may be used, for instance to improve welfare in cases where a market economy or communities on their own cannot or they may be used to gain some value to society from incentivising a certain activity, such as research and development. However, as noted by Inland Revenue, while there may be some role for tax incentives, “[t]he more often the tax system is used for providing incentives, the more murky will become its guiding principles.” They should therefore be used sparingly.

**MAINTAINING THE FAIRNESS OF THE TAX SYSTEM**

In discussions about tax policy there are two broad schools of thought about the meaning of fairness. In New Zealand, the view that has dominated tax policy is that fairness is about everyone paying tax according to their ability to pay. This has meant that New Zealand, like every other OECD country, has
adopted a progressive personal income tax system.\textsuperscript{41}

Progressive taxes are supposed to reduce the concentration of money among taxpayers who earn higher levels of income.\textsuperscript{42} In other words, after paying their taxes, taxpayers at the top of the income distribution are left with a smaller share of all income than before, and those at the bottom a larger share. Progressive taxes are also understood to introduce high marginal tax rates that cause serious economic distortions, as we have discussed, but the distortions are accepted if it helps iron out income inequality.\textsuperscript{43}

The idea of a progressive tax is based on sacrifice theory.\textsuperscript{44} The argument is that an extra dollar of taxation is worth less to a better-off person than a less well-off person. In practice, this means that if you collect more taxes from the better-off person, then total society-wide sacrifice is minimised—and welfare is maximised—until the point when the marginal sacrifice of the last tax dollar paid by each person is equal. Proponents of progressive taxes argue that they help to promote equality of social opportunity, to reflect how in life our income is not only due to our own efforts but also to circumstances beyond our control, such as family background or luck.\textsuperscript{45} This has meant that government has required the poor to pay relatively less tax and everyone else to pay tax at rates and relative burdens that increase with income.

Progressive taxes therefore depend on treating people differently to achieve (more) equal outcomes. But is this really fair? Elsewhere we have argued that fairness depends on treating people equally according to the same just processes without trying to create a favoured pattern of outcomes.\textsuperscript{46} This means that taxpayers should not be treated differently, for instance according to how much they earn or how much wealth they have. The same principle of formal equality that we are used to under the law should set the standard of justice for tax policy.

This is similar to the horizontal equity principle which means that people in a similar situation should be treated in the same way. Taken to its conclusion, it might mean everyone should pay tax at the same rate and bear the same relative tax burden.\textsuperscript{47}

Major theoretical and empirical developments in tax research have also helped to change perspectives about how fair progressive taxes are. For instance, Scottish economist James Mirrlees made an influential theoretical contribution in 1971 when he modelled an optimal non-linear income tax. One implication of Mirrlees’ findings was that increasing marginal tax rates near the top raises very little (if any) revenue relative to the created distortions.\textsuperscript{48}

Arguing that justice requires (more) equal tax treatment does not mean that the less well-off should not receive help when they are in need. Alongside the requirements of justice, we respond to need out of compassion, driven by our obligation to care for the well-being of others in our community: what some have called attributive, or social, justice. This is an understanding of compassion that requires us to care for our fellow man—a suffering with people in our community who are in need.\textsuperscript{49} This implies compassion requires a personal, human response to social ills.

Preferably compassionate responses will spring from people meeting the needs of others in their community, but often it will require a response from government, which should be limited to the duration of the need. Attending to need this way may be a reasonable use of taxpayers’ money if the community cannot meet the need and it threatens the community’s well-being.\textsuperscript{50}

This, however, is primarily an issue related to the government’s role, not tax system design, which should be focused on raising revenue.

**DESIGN SIMPLICITY AND ADMINISTRATION**

Simplicity is an important design principle because simpler tax systems reduce the administration cost of the tax system as well as encourage taxpayers to pay the right amount of tax voluntarily. Under a simpler tax system, more taxpayers will find it easier to work out how much tax they should pay, and there is less likelihood that, intentionally or not, they will pay less tax than they should. More complex tax systems, on the other hand, are not as easy for taxpayers to understand and to use to pay tax. They breed more complicated rules and require more intensive administration which may cause governments to levy higher taxes to pay for the more costly administration.\textsuperscript{51} If higher administration costs lead to higher taxes, this can also create pressure for more exemptions that treat people differently, while higher administration costs add to the deadweight costs associated with collecting tax.
New Zealand's tax system is becoming more complex to administer. Inland Revenue has to spend a lot of time and money helping taxpayers to understand how much tax they should pay. Further, Inland Revenue has to do more than just collect the tax government needs; it also has to administer transfers, like Working for Families credits, straining the resources and personnel it has to commit to administration, thereby raising costs. Tax incentives also make it more difficult for Inland Revenue to apply anti-tax avoidance measures because of the raft of exemptions and concessions to consider in each case.

Receiving transfers through the tax system can also make life more complicated for the taxpayers who receive them. For example, not only Inland Revenue but also recipients of Working for Families transfers have to work out whether they have been underpaid or overpaid. This depends on whether Working for Families recipients' circumstances have changed throughout the year. If their circumstances have changed, this means they may either have to claim or pay back what they owe to Inland Revenue. Whenever taxpayers have to spend more time or even pay an accountant to work out how much tax they have to pay, it increases the costs of raising revenue. These are costs borne by the taxpayer rather than costs associated with the design and administration of the tax system.

These complexities and costs aside, an advantage of tax credits is that they allow assistance to be provided in a relatively targeted way — although less targeted than main benefits. Nevertheless, as we have said, they should be used sparingly since they create incentives for taxpayers to reduce their taxable income and increase deadweight and administration costs.

CONCLUSION

In this section we have discussed the principles of contemporary tax system design, describing what the features of a fair, efficient and simple tax system would be. The McLeod review’s opinion was that:

The tax system should apply the same or similar rates to closely substitutable investments or activities, suggesting a broad tax base. This would be consistent with goals of simplicity of design and administration, and creating certainty for taxpayers.

We share a similar view — the tax system should be based on a principled framework that reflects what taxation is and how it should function. We have outlined several principles that we think are important for guiding tax system design, including:

- raising revenue;
- enhancing efficiency;
- neutrality;
- maintaining the fairness of the tax system; and
- design simplicity and administration.

Following such a set of principles would also reduce the possibility of ad hoc change to the tax system. A tax system that possesses these features is less likely to distort people’s choices; will be more efficient at gathering revenue; and will help taxpayers to be more certain that everyone is paying their fair share of tax. This kind of tax system should be easier for taxpayers to understand and is likely to encourage more people to pay tax voluntarily.

ENDNOTES

5 This is discussed in more in detail in the first paper in the series, S. Thomas, “Governing for the Good: What does it really mean?” 75-76.
7 Inland Revenue Department, “Briefing for the Incoming Minister of Revenue - 2008” (Wellington: 2008), 9.
10 NB. The aggregation of company income normally includes all separate legal entities, for example, insurance funds, trusts, and collective investment vehicles.


16 The NZIER noted that besides a nominal increase in total taxation from $17.5 billion in 1987 to $58.4 billion in 2007, there were clear “structural changes in the design of the tax system.” New Zealand Institute of Economic Research, “Quarterly Predictions. December 2007” (Wellington: 2007), 21-24.


20 Inland Revenue Department, “Briefing for the Incoming Minister of Revenue - 2005” (Wellington, 2005), 33-34.

21 Inland Revenue Department, “Briefing for the Incoming Minister of Revenue - 2008,” 37.


38 Inland Revenue Department, “Briefing for the Incoming Minister of Revenue - 2008,” 13.


40 Inland Revenue Department, “Briefing for the Incoming Minister of Revenue - 2008,” 13.

41 The technical definition of a progressive tax system is that the average tax rate rises with the tax base. A. Auerbach, “Directions in Tax and Transfer Theory.” Paper prepared for the “Australia’s Future Tax System” conference, Melbourne, 18-19 June (2009), 10.


48 Alan Auerbach discussed the significance of Mirrlees’ research in A. Auerbach, “Directions in Tax and Transfer Theory,” 11–12. Mirrlees’ simulations showed that, for a bounded income distribution, the optimal rate structure possessed a flatter marginal tax rate schedule than the progressive structures typical of the day. This relative flatness of the rate structure did not reflect distaste for income redistribution, but was the result of carefully considering the costs and benefits of high marginal tax rates near the top of the income distribution. In the 1970s, top marginal personal income tax rates of over 70 cents in the dollar were common in OECD countries. They have since dropped to below 50 cents today in the majority of countries. C. Heady, “Directions in Overseas Tax Policy.” Paper prepared for the “Australia’s Future Tax and Transfer...”


52 Inland Revenue Department, “Briefing for the Incoming Minister of Revenue – 2008,” 48ff.


In earlier sections, we considered the importance of economic growth for New Zealand's well-being. We also noted that there is room for improvement in our growth performance. This section therefore considers what drives increases in economic growth. This will help us assess various tax policies for their effects on growth, an issue we discuss in the following section.

The challenge of growing our economy after the recent recession means there has never been a better time to get to grips with what the fundamental drivers of growth are and what kind of changes we need to make to our economy and the way we organise our lives, work and businesses. The task is difficult, for even in more prosperous economic times the previous Government commented that raising our economic growth rate to get back into the top half of OECD economies would require "New Zealand's growth rate to be consistently above the OECD average growth rate for a number of years." Having discussed how economic growth is measured in section 1, we outline here what some consider to be the key drivers of economic growth, including the relationship between productivity and economic growth.

THE DRIVERS OF ECONOMIC GROWTH

We begin by considering an OECD discussion, begun in the context of structural reform during the recession, about what some of these drivers might look like. While the recent recession gave new urgency to understanding the mechanisms that drive GDP per capita growth, these sorts of policy solutions could be just as readily applied in times of prosperity. These sorts of policy solutions would increase the likelihood of sustaining higher growth and using labour and capital in the most productive way. The OECD concluded that there are certain structural reforms which could potentially enhance short-term GDP per capita growth, to help struggling economies out of the recession, as well as helping
out with long-term growth in most countries. They are discussed below.²

**Infrastructure**

Introducing value-adding infrastructure projects or upgrading existing value-adding infrastructure is an effective way of stimulating overall demand in the short-term while producing assets that contribute to growth in the long-term. The OECD specifically mentions that it is worthwhile to invest in educational infrastructure. In New Zealand’s case, the OECD has advocated that we spend much more on improving investment in public infrastructure which can add value to the economy because infrastructure like motorways or rail can help capital and labour to be used better.³ Deciding whether such projects are worthwhile should be done with a consideration for what is good for society.

**Training and skills**

Investing in policies or schemes that will help provide workers with more education or better skills while the economy is weak is important for stimulating growth for when the economy recovers. Generally, boosting children or adult’s education levels helps to boost productivity by broadening people’s opportunities and opening up possibilities for further study or training. In the short-term, having workers in training also increases the range of jobs where those workers can find employment. Workers may spend much of their income on consumption. Helping more workers to find employment helps to keep spending up throughout the economy by enhancing the "spending power of those that are likely to have a high propensity to spend."³ If workers have up-skilled during an economic downturn they become better equipped to work at jobs which will add value to the economy in the long-term.

**Reducing personal income tax**

Reducing personal income tax is good as a short-term recessionary response because it helps us to keep more of our own money which we can spend, stimulating the economy. Although the tax cut effect is not as large for them since they pay less tax on the next dollar they earn, with a positive effect on economic output. High average and marginal tax rates are also strong deterrents to workforce participation, especially for second earners in a household. The OECD recommends a general policy prescription of reducing the tax burden on labour.⁵

**Market regulation**

Ensuring that regulations are light and barriers to entering markets are few is critical for stimulating new products and firms. This has positive effects for demand in the economy, stimulating growth. This is because regulatory barriers reduce innovation by firms and distort their decisions to enter or exit the market.⁵ In the long-term, easier market entry for more firms is good for competition, contributing to cheaper and better products and higher productivity. In New Zealand’s case, the OECD has recommended that we need to carry out substantial reform to certain market sectors, including energy as the top priority, followed by transport and water distribution.⁷

**PRODUCTIVITY AND ECONOMIC GROWTH**

While finding the right way to grow the economy during a recession is vital for saving jobs, we also need to think about what particular strategies are good for firming up New Zealand’s medium- to long-term future economic growth now that the economy is recovering from recession. Higher economic growth in better times relies on the same sorts of strategies we have discussed above.

For New Zealand, the problem at the heart of increasing economic growth is improving our productivity growth. This means we should think of economic growth not just in terms of the inputs into the economy—such as labour, physical capital and human capital—but also in terms of the way these input factors can work together better (what economists call multi-factor productivity).⁸ This means thinking about getting the most output out of every hour each New Zealand worker works and the most value out of our natural resources, every good or service we produce, and our intellectual property.⁹ Policies to improve productivity—for
example, to invest in physical, human or intangible capital—should help to reduce inefficiencies in the use and allocation of resources.

But enhancing New Zealand’s productivity also requires the presence of quality institutions, such as a sound legal framework that protects property rights and well-functioning markets. When institutions are sound, individuals and firms have the confidence to make future plans for investment. Since investment is a form of ownership, property rights, for example, are critical so that people will invest in capital and innovation. Besides these concerns at the wider macro-economic level, improving productivity growth requires sound lower level micro-economic policies to be in place so that it is easy for firms to take advantage of opportunities as they arise. Removing unnecessary regulation and lightening the tax burden, for example, are important for rewarding enterprise and innovation, and thus improving productivity growth.

How does New Zealand’s productivity currently stack up? Although it can be argued that New Zealand has improved its relative income per capita by more people joining the workforce over time, this has not added to productivity growth. This is either because labour has not been used more efficiently or because people are working in ways that are not adding very much value to the economy.

A few statistics indicate the depth of our productivity problems. In 2008, the Treasury published analysis that showed:

- our incomes were about 30% to 40% lower than the leading countries in the OECD;
- New Zealand was ranked 22nd out of 30 countries in terms of GDP per hour worked, as well as GDP per capita; and
- the average Australian earned a wage approximately one-third higher than they would have in New Zealand.

In terms of the quality of New Zealand’s institutions, we can be pleased that New Zealand ranks highly in terms of its general economic freedom (a measure of how free individuals are “to work, produce, consume, and invest in any way they choose under a rule of law, with their freedom at once both protected and respected by the state”). The 2010 Heritage Foundation Index of Economic Freedom ranked New Zealand fourth out of 179 countries, meaning New Zealand could be considered economically free.

However, the Treasury has identified a number of ways in which the quality of our institutions could be improved that could help to boost New Zealand’s productivity growth. In particular, Treasury highlighted improving regulatory quality and “the public institutions that support business investment.” It suggested regulatory quality could be improved by decision-makers having access to better information and improving decision-making processes by, for example:

- tightening up the policy-making processes so there is less fragmentation of decision-making across government that could lead to waste and incoherent regulation; and
- ensuring that decisions are consistent with the government’s high-level priorities, such investment in public infrastructure.

While enhancing the use of capital and labour is vital, these suggestions reiterate how important institutional quality is to boosting productivity growth.

**PRODUCTIVITY GROWTH DRIVERS**

Improving labour market productivity is also at the heart of what the OECD has identified as important for New Zealand to improve its economic growth. If we aspire to higher living standards, then becoming more productive about how we work has to be a priority. How can this be done? What does theory and research indicate are the key drivers of productivity growth?

Realising that there was little for New Zealand to gain by pursuing higher rates of workforce participation as a productivity growth strategy, in 2008 the Treasury published a thorough review of the international evidence that discusses what the other main drivers of productivity growth are. There are many similarities between the Treasury’s list of drivers and what the OECD identified as important drivers for stimulating economies during the recent recession. The Treasury identified five inter-related drivers of growth that provide a foundation for higher growth rates:

1. innovation;
2. investment;
3. enterprise;
4. skills; and
5. natural resources.

Innovation

Innovation is an important productivity driver because new ideas and new ways of combining labour and capital can improve output, boosting incomes and living standards. This may involve developing new products and/or ways of producing them. For a developed country like New Zealand, innovation is a way to compete with countries that have lower labour costs or greater quantities of current goods and services at a lower cost. Entrepreneurs are important to innovation. They use new ideas and develop new products and technologies to help drive the development of new business opportunities. The development of new and better technology is, in part, determined by the level of investment in innovation, capital and skills.

Research and development (R&D) is a form of innovation that involves the development of new ideas and technology. There is evidence which suggests that when R&D activity causes new technology to be adopted by more and more firms, the return to the individual is between 20% and 30% and the return to society is as much as 90% to 100%. In New Zealand, the public sector has invested in innovation from time to time, such as with the axed R&D tax credits and the $700 million "Fast Forward Fund" for agricultural development. Relative to what the public sector has done, private commercial investment in R&D could be more substantial, pointing to weaker links between business and the research community. The OECD has also commented that R&D investment could be improved and has recommended that more could be done with tax policy to make R&D more attractive.

Without innovation, new products and services cannot be developed to grow markets and jobs for more people. Innovation is therefore vital for securing long-term productivity growth.

Investment

Besides the capacity for innovation, the amount of investment in firms is another crucial productivity driver. There are perhaps three ways we can think about how investment contributes to productivity and economic growth. First, the amount of investment influences productivity growth by increasing the amount of capital and technology that can assist each worker to be more productive. Entrepreneurs and firms play a crucial role in increasing the amount of investment by sourcing capital and developing new ideas and opportunities. Innovation and investment are, therefore, closely linked productivity drivers. A stable economy and institutional environment with predictable and straight-forward rules and regulations is conducive to raising investment levels by making it attractive for entrepreneurs and firms to source investment, either from home or abroad. This helps to reduce the risk associated with investment.

New Zealand’s investment performance is currently somewhat shaky. One indicator of this is how investment levels as a share of GDP are below what is common in the higher-performing OECD economies. The effect of lower investment rates means New Zealand is more capital-shallow than desirable. It has lower levels of capital per worker compared to similar countries. This is one of the reasons why there is a growing productivity gap with New Zealand and some overseas countries we could aspire to be like, such as Australia.

Further, since 1992, the Treasury notes that investment has been most concentrated in residential and non-residential construction. This means that less investment has been occurring in other types of capital and technology, such as factories, machinery or transport equipment.

Another weakness is that according to the recent final report of the Capital Market Development Taskforce, our small and medium enterprises (SMEs) rely too much on bank financing. If they are to expand in New Zealand and abroad—and contribute more to New Zealand’s economic growth—the Taskforce concludes that they need better access to capital markets.

In summary, investment is important for boosting productivity because it is strongly related to expanding the things which contribute towards higher economic growth. Investment has a role in growing the amount of capital in the economy, facilitates entrepreneurs’ innovation and makes it more worthwhile for people to expand their skills.

Enterprise

Enterprise refers to the important economic activity of entrepreneurs and firms who seek to make use of...
economic opportunities. Entrepreneurs in particular are valuable to the economy and a vibrant civil society because they create new businesses and new investments. An entrepreneur may be considered as anyone who discovers a market opportunity and moves to take advantage of it, whether they are starting a new firm or innovating and creating new products in an already established firm. Investments made by entrepreneurs and firms also “create new jobs, intensify competition and can increase productivity by introducing new technologies or working practices.” Entrepreneurs are therefore the lifeblood of an economy.

The level of entrepreneurial activity in a country is affected by how friendly the business environment is. How friendly the business environment is may be determined by how the regulatory, competition and tax frameworks influence the risks which entrepreneurs are willing to take to innovate and expand their businesses. The Treasury notes that “[w]hile New Zealand scores relatively well in these areas internationally by some crude measures, there remains significant scope to sharpen incentives in each of them.”

These sorts of concerns are shared more broadly, too. James Manzi, a senior fellow at the Manhattan Institute, was more frank about whether or not tax affects entrepreneurial activity:

Some people start companies because they’re driven by a dream that transcends rational economic calculation. But most successful entrepreneurs are pretty serious about comparing risks with opportunities. Higher tax burdens raise the price of entrepreneurship. When you raise the price of something, then, all else held equal, you usually get less of it.

United States research also shows that taxes have a negative effect on entrepreneurial activity, including:

- the decision to become an entrepreneur;
- entrepreneurs’ decisions to invest in capital; and
- entrepreneurs’ decisions to employ labour.

The research has also illuminated how progressive taxation acts like a tax on successful self-employment, a state in which many entrepreneurs find themselves. It has been found that reducing the tax rate an individual may face as an entrepreneur increases entrepreneurial activity, while reducing the tax rate an individual expects to face in a wage job decreases entrepreneurial activity. The first effect has been found to be larger than the second. This means the marginal tax rate can reduce overall firm growth (as measured by receipts), investment expenditures, and the probability of hiring employees.

Another effect found by the research is that the probability of self-employment increases as tax becomes less progressive. As entrepreneurs are often self-employed, this sort of evidence suggests that broad tax cuts could increase the entrepreneurial start-up and survival rate.

That said, empirical research has not always found convincing evidence that higher taxes affect self-employment. The most recent time-series evidence has not found a significant effect of taxes on self-employment rates. Panel data and repeated cross-sectional studies, which have focused on individuals’ decisions about self-employment, have also not been as conclusive as earlier research. For example, higher tax rates on self-employment income have been found to either increase or decrease self-employment rates. This is because a higher tax rate reduces “not only the expected return from self-employment, but will also alter the risk involved in self-employment.” The tax effect also depends on whether the self-employed are facing increases in particular taxes or an aggregate increase.

While the research on tax effects on self-employment might caution us from saying that taxes always have a negative effect on entrepreneurship, we should also be careful about assuming that entrepreneurs and self-employed people are the same. Starting a franchise, for example, would count as being self-employed but might not carry the same amount of risk as an entrepreneur starting a brand-new business. Some research suggests that there is a positive relationship between higher aggregate tax rates and higher self-employment rates. But this is probably not a case of increased entrepreneurship. Rather, this is because individuals might choose to become self-employed so that they can structure their affairs in a way that means they do not have to pay higher personal income taxes.

There is also still a question in the international research literature about whether it is the level of taxation or how progressive tax rates are that has the greatest negative effect.

In New Zealand, entrepreneurship and enterprise
appear to fare well, although there is still some room for improvement. Recent evidence shows that one in seven New Zealand adults can be considered as entrepreneurs, one of the highest levels worldwide. Another positive indicator is that the share of self-made multi-millionaires in New Zealand (rather than those who inherited their wealth) is higher than in Australia, Britain or the United States. However, a pressing barrier to enterprise in New Zealand is that we do not have very many large firms, as found in other OECD countries, and that our large firms perform poorly by international standards.

As we have discussed, unlocking restrictive regulations, lowering high marginal tax rates and encouraging capital formation might be solutions to these issues.

Skills
Investing in human capital can be a vital productivity driver, as education and training can make an important contribution to the accumulation of knowledge and ideas in the economy. Better education, therefore, strongly supports innovation, which is vital for supplying the ideas that create new opportunities for firms’ growth. Evidence also suggests that a large proportion of the differences between countries’ GDP per capita growth rates is due to differences in human capital accumulation.

It is also thought that higher skills foster greater levels of innovation and entrepreneurship and help ideas to spread and be adopted among firms. This is because higher skills add to a “firm’s ability to adopt new technologies and confidently invest in capital in the expectation of returns.” The challenge for New Zealand is to lift the level and utilisation of skilled workers across the workforce to make a difference to productivity growth.

Since skills can be developed from childhood and over the course of a person’s life, the consensus is that the greatest returns to productivity occur when children have access to quality education in their early years and then throughout their schooling and further training. In New Zealand, our top-achieving pupils do very well by international standards, but serious concerns remain: the under-achievement of between 15% to 20% of pupils; under-participation in education or training among 15 to 20 year olds; and fewer students completing tertiary qualifications. Concentrating on ways to raise educational achievement and keep more young people at school or in training for longer is not only critical for improving New Zealand’s productivity, but also for giving people the hope of a better job and quality of life for themselves and their families.

Natural resources
Alongside its people, one of New Zealand’s greatest resources for productivity growth is the natural resources at our disposal. Chief among them is the agricultural sector and the contribution it makes to New Zealand’s economic growth. In the near future there will be challenges to higher productivity growth as climate change policies, like New Zealand’s Emissions Trading Scheme, take effect. The Treasury and the OECD believe that the Government should balance the development and good stewardship of our natural resources with reducing the regulation facing our entrepreneurs and firms so it is not difficult for them to access the resources they need to do business.

Despite their importance, these issues are not directly relevant to our concern with revenue-raising taxes.

HOW DOES GOVERNMENT AFFECT PRODUCTIVITY GROWTH?

Another driver cannot be ignored either: the role and performance of government and the public sector. As we have mentioned, through the various arms and agencies of the state, central government operating spending is about 36% of New Zealand’s economic output. The quality of our public sector institutions, therefore, has a direct impact on New Zealand’s productivity. The public sector has an effect on productivity because it is involved in providing services which affect New Zealanders’ well-being, like the public health and education and justice systems. In its role as the protector of a legal-institutional environment where individuals and communities can come together to associate and pursue common ends, government has a major impact on economic and productivity growth. Measuring the quality of public institutions and services is outside the scope of our discussion, but we will return to some of the ways government size and spending affects growth in section 5.
CONCLUSION

The lesson from theory and research seems to be that higher economic growth is driven by a number of different factors, including value-adding infrastructure, a highly-skilled workforce, a light regulatory environment, higher investment levels, more innovation, better use of natural resources and lower taxes. These factors also contribute towards higher productivity growth. The role of the entrepreneur is particularly important for bringing together a number of these factors, including investment, new ideas and new technology and highly-skilled workers. A policy framework which helps entrepreneurs and firms to combine new ideas, capital, technology and labour in ways that can produce more valuable goods and services by using labour and capital in smarter ways should help to boost productivity growth.

As discussed, productivity growth is important so that every worker can earn higher wages at more satisfying jobs. It also means we are more likely to have access to better quality goods and services at lower prices. How taxes are designed influences the various growth drivers, either to the detriment or benefit of entrepreneurs, workers and firms. We now turn to examine specifically the relationship between taxation and GDP per capita growth.

ENDNOTES

1 New Zealand Government, "Growing an Innovative New Zealand" (Wellington: 2002), 12.
8 The 2025 Taskforce notes that productivity is "the ability of the economy to generate higher income per head of population." They also say, "[I]n a mechanical sense, one can think of economic growth as arising through some combination of an increase in labour inputs, increases in capital inputs, and improvements in the efficiency with which those two inputs are combined. Getting the most out of the labour and capital together is what is known in the jargon as growth in multi-factor productivity." 2025 Taskforce, "Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce" (Wellington: New Zealand Government, 2009), 15, 59-60.
17 This framework is presented succinctly in The Treasury, "Briefing to the Incoming Minister of Finance. Economic and fiscal strategy - responding to your priorities" (Wellington: 2008), 3-4. For a more considered discussion of how these drivers are thought to contribute to productivity growth, see The Treasury, Productivity Papers Series (Wellington: 2008), http://www.treasury.govt.nz/publications/research-policy/tpprp.
18 The Treasury, "Briefing to the Incoming Minister of Finance. Economic and fiscal strategy - responding to your priorities," 3.
23 The Treasury, "Putting Productivity First," 23.
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The Treasury, "Briefing to the Incoming Minister of Finance. Economic and fiscal strategy - responding to your priorities," 3.


Economist Robert Reed cites several sources that provide evidence substantiating these points. See W.R. Reed, "Comments on "Tax and Economic Growth" at the Centre for Accounting, Governance and Taxation Research and Institute for the Study of Competition and Regulation Tax Policy Conference, Victoria University, Rutherford House, Lambton Quay, Wellington (2009) A good general survey of the affect of taxes upon entrepreneurial activity may be found in H.S. Rosen, "Venture Capital, Entrepreneurship and Public Policy," MIT Press, 2004.


Economists Herbert Schuetze and Donald Bruce conclude that it is difficult to identify whether higher taxes generally affect entrepreneurship and self-employment rates because tax may not be the direct motivating factor behind a person's decision to be an entrepreneur or self-employed. Some studies say tax has an effect, some do not. Schuetze and Bruce summarise the the dilemma in the following way: "... while magnitudes, signs, and statistical significance levels have been anything but conclusive, the previous literature suggests that tax policies can be important determinants in the decision to work for one's self. However, whether the impacts found in these studies pertain to "entrepreneurship" as opposed to 'self-employment' is less clear. This distinction is important because the normative implications differ significantly depending on which activity is being influenced by policy. ... individuals (may) respond to changes in risk which is most likely to be associated with "entrepreneurial" activity. On the other hand, results which suggest that individuals start their own businesses to avoid taxation imply a response in terms of activity that would almost certainly be classified as 'self-employment.' It is clear from this discussion that more research on this topic is needed to better understand the various mechanisms available to policy makers and to determine the precise nature of the responses to policy." H.J. Schuetze and D. Bruce, "Tax Policy and Entrepreneurship," 3-4, 20.


Research, 2004).


48 The Treasury, “Briefing to the Incoming Minister of Finance. Economic and fiscal strategy - responding to your priorities,” 3.


51 The Treasury, “Briefing to the Incoming Minister of Finance. Economic and fiscal strategy - responding to your priorities,” 4, 17.

52 The Treasury, “Half Year Economic and Fiscal Update” (Wellington: 2009), 33.

53 The Treasury, “Putting Productivity First,” 5.

54 The Treasury, “Putting Productivity First,” 1.
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SECTION 4

Research findings: How taxes affect our lives and our prosperity

FOCUS POINTS

- Taxes can distort individuals’ and firms’ choices, and can cause them to choose less of the activities which contribute to economic growth, such as entrepreneurialism, education, or technological innovation.
- Personal income and corporate taxes are likely to be the least growth-friendly taxes, while consumption taxes (like GST) are likely to be the most growth-friendly.
- It is not just the rate, level or deadweight costs of tax that affect economic growth, it is also the mix of taxes by which governments choose to gather revenue.

SURVEY DATA: WHAT DO NEW ZEALANDERS THINK ABOUT TAXES?

According to a UMR Omnibus telephone survey of a representative sample of 750 New Zealanders aged 18 years and over, with a margin of error of +/- 3.6%:

- 56% of participants oppose increasing GST, if personal income taxes were lowered at the same time; and
- 62% of participants oppose an annual tax being charged on the value of land, if personal income taxes were lowered at the same time.

Having considered some of the underlying drivers of economic and productivity growth, this section will consider specific taxes and their potential impact on growth. As well as thinking about individual taxes, it is important to consider the tax system as a whole, as research indicates that the mix of taxes selected can make a difference to growth. In this section we will briefly highlight some of the general findings of the tax-growth research, including the finding that there appears to be a hierarchy of the taxes in relation to their impact on growth, before discussing issues surrounding the growth effects and design issues of specific taxes.

WHAT RESEARCH SAYS ABOUT TAX-GROWTH EFFECTS

We believe there is evidence to suggest there is a “tax and growth ranking” of the tax instruments with regard to their long-run effect on GDP per capita.”

In other words, different tax types have different growth effects. Understanding these effects can provide us with a framework for determining which taxes are more or less growth-inhibiting.

To illustrate tax-growth effects, a 2008 OECD study, “Taxation and Economic Growth,” classified the various taxes into four broad groups—consumption, property, personal income and corporate income tax—and then organised them into a “matrix.” The matrix allows someone to see whether individual taxes have a positive or a negative impact on the drivers of GDP per capita (figure 4.1 overleaf). Each matrix entry shows the impact of increasing one tax...
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(assuming other taxes are unchanged) on economic performance. A negative (or positive) sign in each cell shows that a tax is likely to have a negative (or positive) effect on a growth driver. The relationships described by the matrix might not be linear, however, since some taxes can influence several growth drivers at the same time and in different ways.

Since the matrix describes cross-country data, as a policy tool it is subject to weakness. This is because empirical findings generated from cross-country data only reveal what could be expected to happen on average. What might happen in a specific country is likely to differ from the general patterns found in cross-country analyses. For example, if a country relies heavily on one type of tax a shift in the tax mix might adversely affect its revenue more than it would in another country. This means before changing policy on the basis of empirical analyses, policy-makers need to consider the specific situation of their country, including:

- the existing level of taxation and tax mix;
- how tax policy interacts with the wider policy context, for example, labour policies; and
- how effective tax administration is.

We also note some limitations with the general result. First, there are some complications with the finding that firms are responsive to marginal corporate tax rates. Firms are also sensitive to personal rates, since this contributes to attracting and retaining staff. Another complication is that average tax rates, as well as marginal tax rates, may also be relevant to firms. While marginal tax rates are important determinants of hours a person chooses to work, a person’s average tax rate may also influence workforce participation decisions.

Besides this specific OECD study, the tax-growth research literature suggests there are four possible conclusions which may be drawn about what the general effects of taxation are on growth:

1. Economic theory supports the idea that the overall level of taxes, that is the share of GDP consumed by tax, could affect growth. Because the empirical evidence is often mixed or in some cases not convincing for this effect, more recent research has also concentrated more on how specific taxes and the kind of expenditure financed may affect growth.
2. Firms’ and entrepreneurs’ choices are sensitive to marginal corporate or personal tax rates, respectively. (However, New Zealand’s and Australia’s dividend imputation systems reduce the sensitivity to marginal tax rates since they eliminate the double taxation of earnings. Other OECD countries do not have imputation systems.)

3. Personal income and corporate taxes are the least growth-friendly taxes.

4. Because the effects of specific kinds of taxes on growth is clearer, how much tax the government chooses to collect from different bases might affect growth as well as changing tax rates or the level of tax.

This suggests to us that governments should look carefully at the mix of taxes they use to collect revenue in a way that is least harmful to growth. This is because different sorts of taxes distort people’s behaviour in different ways. The research indicates it could be better to replace corporate and personal income tax revenue partly with more revenue from less distortionary taxes, like consumption or property taxes. Many of the studies we discuss in this section which reach these sorts of conclusions are regression analyses—a form of analysis that considers the strength of associations between variables. While these studies indicate how some taxes may affect growth more than others, the findings are also subject to limitations associated with inferring policy recommendations from the use of cross-country data (we elaborate why in section 5). These issues aside, we assume there is explanatory power in the way some research has said different kinds of taxes “drive” behavioural responses and distort economic decisions in both positive and negative ways.

Changing the tax mix is not the only policy strategy that matters, however—reducing the tax burden, lowering and flattening tax rates and broadening tax bases also matters if the tax system is to become fairer, more efficient and less inhibiting of growth.

We develop these ideas further below, discussing what the research literature has said about the effects of specific taxes and some design considerations relating to each. This provides a framework for considering possible changes to the design of various taxes and the tax structure in later sections.

**EFFECTS OF SPECIFIC TAXES**

In this part we take seriously the research finding that the emphasis placed on certain kinds of taxes—the tax structure—seems to make a difference to the growth rate. A body of research is increasingly focusing on the tax structure because looking at the tax structure focuses attention on the effects of specific taxes on those things that influences growth—the growth drivers discussed previously—rather than looking just at the total tax revenue effect.

However, the total tax burden is still relevant, as is shown by the discussion of deadweight losses. Every dollar the government takes in taxation is one less dollar in the productive part of the economy. Accordingly, we will discuss the total tax burden in section 5, but the major focus of this part is how the various taxes we pay everyday affect economic output. We consider personal income taxes, corporate taxes, consumption taxes and property taxes.

We draw some conclusions about how these taxes influence GDP levels and the growth rate, and how they could be designed so that they raise revenue more fairly and efficiently. We also highlight how the tax structure could be changed to enhance economic growth. The effects we describe, drawn substantially from the latest OECD research, are partial because the effects of each tax were analysed by assuming other taxes were not changed. This approach suffers from the limitation that neither the magnitude of the different tax effects can be compared, nor can the joint effects of different taxes. It is difficult to know with complete certainty how a specific tax policy change may affect economic output performance. There may be three reasons why:

1. Changing a single tax is likely to have an effect on several determinants of GDP per capita at once. For example, reducing the typical personal income tax might increase employment (because it is a tax on earnings from employment), but it could also reduce how attractive higher education is because there would be more incentives to work rather than study. Less education could in turn reduce projected productivity.

2. Tax reforms often mean changing several kinds of taxes or tax instruments at once that might support or inhibit the positive growth effects of specific taxes.
3. The effect of tax policy changes is related to the design of other policies which interact with tax. To use the example of personal income taxes again, the degree to which these taxes have an adverse effect on employment depends on labour policies like what the minimum wage rate is.

With these caveats in mind, we now examine the effect of consumption taxes.

**Consumption taxes**

Consumption taxes include sales taxes on goods and services, value-added taxes, like GST, and excises and import duties.

*Consumption taxes and economic growth*

Consumption taxes can impede growth less than other taxes because they are reasonably neutral to savings and investment decisions—two critical factors in the formation of capital, and thereby key determinants of the innovation and investment growth drivers.

A consumption tax is like an indirect tax on labour income, as it reduces the basket of goods and services that people can purchase by working an extra hour. Assuming consumption tax rates stay much the same over time, and the same tax rate applies to expenditure now and in the future, consumption taxes may neither increase nor discourage savings. For example, if a person spends $100 instead of saving it, they would pay $10 in consumption tax, if our GST were applied at a 10% rate. If a person invests $100 for a year at a 10% interest rate, they will earn $10. If they spend the $110 at the end of the year, they would pay GST of $11. If the time value of money is allowed for, then this is the same as $10 in present day terms. All things being equal, this means consumption taxes are neutral between spending now or in the future. Consumption taxes do not penalise saving because the tax applies only when money is spent.

Income taxes on the other hand discourage savings. For example, if a person invests $100 for a year at a 10% interest rate their interest earned in one year would be $10. With, for example, a 25% tax rate on the interest, the after-tax income would be $7.50. The tax wedge (the difference between before and after-tax income) discourages savings. As the consumption tax is more neutral to savings (ignoring income tax) it can leave the taxpayer better off over time. We can therefore say that "like a tax on labour income only, the GST drives no wedge between the pre-tax and the post-tax return to saving. By contrast, with a general income tax the after-tax interest rate is less than the pre-tax interest rate." The same argument holds for decisions about investment.

However, there is a caveat. The OECD has cautioned that "the empirical evidence on the sensitivity of private savings to after-tax interest rate changes is inconclusive: some studies found sizeable effects of interest rates on savings while other studies found no effects at all." In this instance, care should be exercised with how evidence is used to influence policy.

As consumption taxes do not discriminate much between present and future choices, relying more on consumption taxes might make it more favourable for people to pay for further education—an important growth driver.

Another benefit of consumption taxes is that they are also held to be more efficient, and therefore growth-friendly, because they are often set at a single flat rate with no or few exemptions, making them easy to administer and encouraging compliance. When the costs of collecting and administering tax are less this can allow money to be spent on more productive activity. However, the efficiency benefits of consumption taxes may not last if a government chooses to rely too heavily on the consumption tax base. The consumption tax base is generally smaller than the income tax base, and raising more money from consumption taxes may mean higher rates, creating pressure for exemptions.

*Evaluating consumption taxes*

Opinion is mixed about whether consumption taxes encourage work. When consumption taxes are included in the overall labour tax wedge, a rise in the wedge (however it is comprised) can reduce work. Research has not estimated the separate effects of consumption taxes on the tax wedge. This means there is not very much direct empirical evidence on whether consumption taxes affect decisions to work more.

It stands to reason that an increase in consumption taxes could adversely affect labour
force participation of marginal, low-skilled workers. This is because low-skilled workers already have low wages and personal income taxes, so they might gain little from cuts to personal income taxes but would lose from higher consumption taxes, reducing their workforce participation. A revenue neutral shift from an income tax to a consumption tax, such as the Tax Working Group examined, for example, may not improve work incentives. Because income is greater than consumption, the average consumption tax rate would have to be higher than the average income tax rate to make a difference. These labour effects could "offset (part or all of) the growth-enhancing effects of the tax shift." Forecasting exactly what would happen to work incentives is, therefore, difficult without knowing what the nature of the tax change is.

It is possible that consumption taxes could ultimately reduce labour supply if they lowered real after-tax wages. This is because increasing consumption tax rates would reduce the basket of goods or services that could be bought from working an extra hour. Further, by lowering real after-tax earnings, consumption taxes affect work incentives in the same way as a flat income tax and reduce firms' demand for workers if they increase wage and labour costs.

Without a compensation package, lower income earners, like beneficiaries, would also be likely to experience worse work incentives if consumption taxes were used more. This effect also depends on the form of compensation. If compensation were in the form of a benefit, incentives may still be adversely affected.

On the other hand, the relative return from labour would stay the same even if income purchasing power drops as a result of a consumption tax increase. This may increase the labour supply. It is also possible that some work incentives would improve, if, for example, a change towards consumption taxes allowed higher marginal income tax rates to be reduced more than proportionately, since changes to marginal taxes can make a bigger difference than average ones. If rates were reduced less than proportionately, work incentives could be worse for some taxpayers. Ultimately, labour participation incentives improve if effective marginal tax rates fall. This can only happen if total tax payable is reduced (which would benefit every taxpayer) or some taxpayers pay higher marginal tax rates while others' rates decline (which would only benefit the latter group).

There are also potential distributional issues with consumption taxes. In New Zealand, a GST increase would impose a one-off tax on accumulated wealth, since when it is spent it will be taxed at a higher than anticipated rate. Moreover, consumption taxes pose distributional concerns because they are often perceived to be regressive. Regressive taxes take a higher proportion of tax from lower income earners than they do from higher income earners. It is argued that lower income earners, like superannuitants, will tend to spend more as a proportion of their income and save less than those who earn higher incomes. Thus the tax will take a greater proportion of the lower income earner's wealth than the higher income earner's. For example, if someone has $10 of income, spends it, and must pay a 10% consumption tax, this is 10% of their income. However, if someone else has $20 of income and spends $10, a 10 percent consumption tax takes just 5% of their income.

On an annual income basis, the argument about regression might certainly be true, but not necessarily so when annual expenditure is considered. Typically, we will spend almost all of our income over our lifetime (excluding bequests), in one form or another. Further, the income distributional impact of consumption taxes does not consider money saved in one year but spent in another which evens out consumption. Higher income earners, who tend to have higher savings, will also pay more tax over a lifetime in the form of resident withholding tax. This means that over a person's lifetime the distributional impact of consumption taxes is less than what might be initially expected.

That said, a rate increase could increase dis-saving among lower income earners. Dis-saving is negative saving where spending is greater than income, perhaps funded by existing saving or from loans. The Tax Working Group's analysis found a significant amount of dis-saving among people in lower income deciles.

Because of these sorts of effects of a GST increase, government assistance may be required in the short-term for people such as lower income earners in order to cushion the immediate effects of a GST increase. This assistance could be better delivered through government spending, than through the tax system.

The Tax Working Group used Household Economic Survey (HES) data to estimate the distribution of
GST across 2,500 households.\textsuperscript{32} The HES is useful because it provides detailed information about households’ income and expenditure. If the GST paid by equivalised disposable income decile is calculated as a proportion of total disposable income, lower income households pay more GST. However, looking at total expenditure, as one possible indicator, used by the Tax Working Group, the burden is flatter across the income spectrum (figure 4.2).

However, if we consider the average GST paid distributed according to age of the household head, we will see a general increase in GST paid in line with an increase in the household head’s age. That is, GST paid as a share of expenditure is more even over the...
age distribution than GST paid as a share of total or disposable income (figure 4.3). The Tax Working Group considers this may be because the share of “rent and house payments to expenditure” decreases as household heads’ age increases, meaning “GST paid as a proportion of income is highest for those in the 65–69 bracket.” This confirms what the research literature suggests—GST is less regressive as a proportion of total expenditure than if measured as a share of income.

Sometimes, it is suggested certain goods should be exempt from consumption taxes on distributional grounds; that is, to improve the relative position of lower-income earners. For example, following the likes of Australia and the United Kingdom, the Maori Party suggested a bill in August 2009 to exempt food from GST as a way to reduce the cost of food and help low-income families. If food were removed from the tax base, it would reduce GST revenue by up to 20%. In some countries either reducing rates or making certain products and services exempt, like some foods (bread, fruit, vegetables and more), is standard practice.

However, making exemptions to consumption taxes is not an efficient way of reducing distributional inequalities. Firstly, there are administrative and compliance costs involved with deciding and enforcing which products are exempt. Another issue is that higher income families are likely to consume relatively more low-taxed goods on the whole because it is more attractive for them to spend more. This means higher income households would actually benefit more from the exemptions than lower income families, which would not contribute to reducing inequality. Exempting products from GST is a cumbersome way of addressing distributional concerns.

### Raising New Zealand’s GST rate

Increases to our major consumption tax, GST, could be used to raise additional revenue or to help lower other taxes such as personal income or corporate taxes. It could also save money if the deadweight cost of collecting GST at a higher rate was less than the cost of lowering personal income taxes. Since GST is difficult to avoid, relying on it more would be likely to improve the tax system’s revenue-raising integrity.

At 12.5%, New Zealand’s GST rate is low so there is scope for increases perhaps to between 15% and 20%. The Tax Working Group investigated the implications of raising the GST rate to 15%, 17.5% or 20%. Without considering potential changes to people’s behaviour caused by a GST increase, such as different spending patterns or tax avoidance, the Tax Working Group estimated the increase in revenue from GST (from the private sector) at these rates could be between $2.15 billion and $6.17 billion (table 4.1). The additional revenue from a rise in the GST rate to between 15% to 20% could (without considering behavioural changes), for example, generate enough revenue to lower the top two marginal personal income tax rates to 27% or all rates by 2%.

<table>
<thead>
<tr>
<th>Table 4.1. Estimated increase in revenue from change to GST rate*</th>
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<tr>
<td>($ billion)</td>
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<tr>
<td>Increase in net GST revenue:</td>
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<tr>
<td>Increase in revenue</td>
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<tr>
<td>Increase in revenue from private sector</td>
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<tr>
<td>Automatic flow through to benefits:</td>
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<td>Automatic benefit adjustments**</td>
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* Figures assume a 1% increase in consumption and that consumers are budget constrained (e.g. that their nominal consumption is unchanged, but their real consumption falls).

** Includes automatic adjustments to benefits and to New Zealand Superannuation but does not include Working for Families adjustments since payments are not updated annually for price changes.

The Tax Working Group stated there is little empirical evidence about how people's behaviour responds to changes to consumption tax rates or how sensitive consumers are to price changes. The best evidence we have is that if there were a 1% increase in disposable income, GST revenue would rise by 1%. However, as this finding considers income and not prices, it cannot be assumed the change would be the same with a change to the GST rate.

Figure 4.4 illustrates the effect on income deciles of a GST rate increase to 15%.

Some sort of compensation would most likely be required for lower income earners during the transition. If the research literature is correct, however, over time the change should contribute to higher living standards across the board through increased growth, so long as either other taxes or total taxes come down.

**Conclusion: consumption taxes**

Consumption taxes satisfy some important criteria for boosting growth, including increasing investment and the flow of financial capital. All things being equal, consumption taxes are not as hostile to savings or investment as other forms of tax. A tax change which taxed capital more lightly and consumption more heavily may help to increase the amount of capital and technology available to each worker. Increased investment is closely tied to higher rates of innovation and entrepreneurialism.

Consumption taxes may also be considered fair because they tax each taxpayer at the same flat rate. New Zealand’s GST is a good model of such a consumption tax, especially since it has very few exemptions.

All of the above demonstrates that there is a strong case to be made that consumption taxes should be used more to collect government revenue. Importantly, consumption taxes could make a contribution to growth if an increase in consumption taxes was used to finance a reduction in other, more growth-inhibiting taxes, such as personal income taxes. Our UMR research showed, however, that 56% of New Zealanders, with a margin of error of +/- 3.6%, oppose increasing GST, if personal income taxes were lowered at the same time. If it chooses to raise the GST rate, then the government would have to explain how the GST change would be fair for most taxpayers and could help encourage more savings and investment.

**Property taxes**

Property taxes were devised in the nineteenth
century to tax highly visible assets. They were easier to administer than income taxes, and they were a good proxy for wealth during a time when most people's wealth was tied up in immovable property. However, taxing property is a very contentious issue today, as was shown by the UMR research that we commissioned (62% of participants, with a margin of error of +/- 3.6%, oppose an annual land tax being charged on the value of land, if personal income taxes were lowered at the same time). A land tax would be difficult to introduce unless the government could convince the public that one was necessary for raising revenue. But even if they are unpopular, in theory property taxes can raise tax without causing too much drag on economic performance since they may not affect productivity growth as much as personal income or corporate taxes do.

There are different forms of property taxes because property can vary from land and buildings to shares, monetary wealth or gifts and inheritances. As comprehensive income tax theory suggests that income derived from these forms of wealth in property could be taxed, we will discuss whether the government should tax land, buildings and capital.

Evaluating land and buildings taxes

Taxes on the value of land and buildings are one form of property tax. The OECD's research suggests ongoing taxes on land and buildings, like rates, have only a small negative effect on economic performance. This is because these taxes do not have such a direct impact on the key growth drivers, like whether or not we choose to work, train, invest, innovate or produce more. Another advantage of property taxes is that because property is immobile and its value generally does not fluctuate widely, it is easier to predict how much taxation can be raised from property taxes each year. Further, as property is easily identifiable, property tax cannot be evaded easily.

However, we note some issues with the finding that recurrent taxes on immobile property appear to be very growth-friendly, when they are used to finance lower personal income taxes.

First, income taxes are generally progressive, while property taxes are not (wealth distribution considerations aside). If a progressive tax is replaced with a flat(ter) tax it is not surprising that the result is an increase in growth. If this is how the result is explained, then it may be doubtful whether it is the property tax by itself which is producing the growth effect.

Second, since property taxes generally are set at low marginal rates and raise comparatively little revenue, it is difficult for them to have a large negative impact on growth. If there was a tax change towards taxes on immobile property so that rates and revenue shares increased, there is no guarantee that the small effect found in the cross-country studies would continue in practice.

The OECD research, therefore, provides some interesting data on property tax growth effects, but its findings should not be read as unequivocal support for rebalancing the tax system towards property taxes. There is no guarantee that a tax change towards taxes on immobile property would produce the same result in practice as in the OECD's research. Further empirical study is warranted.

Nonetheless, in New Zealand, the tax treatment of housing is a particular issue. Few or no taxes on housing "relative to other investments" can distort the flow of capital out of other channels and into housing. New Zealand research by Michael Littlewood of the Auckland University Retirement Policy and Research Centre shows that over the period between 1999 and 2007 net housing assets grew more than net financial assets as a multiple of disposable income (table 4.2 overleaf). In 1999, net housing assets were 2.41 times disposable income, and they rose to 4.36 times disposable income by 2007. By contrast net financial assets did not rise above 1999 levels (1.67 times disposable income) over the same period. This shows that during a real estate boom we have favoured investment in housing compared to other sorts of financial investment.

While it is good for people to own a fixed asset like a house to provide income in retirement, for example, New Zealanders' long-standing passion for housing means that we do not have diverse investments which, as the recession has shown, means households are more vulnerable to economic shocks that affect house prices, and to over-optimistic assessments of the potential capital gain from housing.

Some consider that too much investment in housing can reduce labour mobility as households become tied to their property—a "lock in" effect. By contrast, a workforce with more people who rent can move more easily to seek new or better jobs. This suggests raising more tax from immovable property
could contribute to improving economic growth. The distortion between housing and other potentially more productive investments, like venture capital, is an obvious target for change. That said, we still believe that it is important for families to own a house if they wish so that they can have an asset that increases in value and can be used to pass on wealth to future generations.

This distortion could be removed by taxing housing more like other investments, for instance by using a system of imputed rent. Imputed rent is the amount of tax that would have changed hands had the owner and occupier of a house been different persons. It is supposed to allow for the fact that people who own their home are not liable for tax, unlike landlords. If imputed rent were taxed, then people who own their own home and owners of investment properties would both be taxed. Measures like these could make housing a less favourable investment and may encourage investment instead in capital markets, an engine of growth. However, arguably imputed rent threatens a family’s private property rights. While a rented home is someone else’s property, taxing the family home like a rental property could be argued to deny families the dignity of ownership. Conflicting concerns about investment distortions, ownership and whether assets like the family home should be exempt from taxation are not easy issues to resolve.

If taxes on land and buildings were ever introduced, some design concerns would have to be considered too. The first is the tax base the rate applies to, which should be either a property’s expected annual rent or its expected sale value; the majority of countries with property taxes have opted for the latter. The second is whether the owner or the occupier should be responsible for paying the tax, if these are different people. Again in most countries the owner is responsible.

There are also some tricky issues relating to how fair taxpayers think land and buildings taxes are. For example, one reason why taxpayers in countries with property taxes do not like them is because they think property values are arbitrary. To solve this problem, taxes must be calculated according to current property valuations. However, this may be difficult because it would be costly for governments to revalue properties all the time. Most of the time, however, there is likely to be a strong relationship between income and a property’s value, especially for residential homes.

In New Zealand, problems exist with establishing the true value of land and the expected revenue derived from land. First, estimates of the unimproved value of different land do not exist and second land is currently overvalued so introducing a land tax would cause land values to decline—by how much is difficult to tell.

Another issue is that if the property owner pays the tax, it could act like another form of rent and not take into account the property owner’s actual situation, especially if there is a discrepancy between the value of their house and their income.

In theory, firms would also be penalised by a land tax since the land they own may not generate revenue associated with their business. Firms could respond to a land tax by incorporating it into their property’s value, causing it to become a tax on capital. This could saddle firms with unnecessary costs, with the tax perhaps driving some small firms under for reasons unrelated to their market competitiveness. A land tax would thereby have a

| Table 4.2. Household assets, liabilities and wealth as multiple of disposable income—1979 to 2007 |
|----------------------------------|--------|--------|--------|--------|
| Gross financial assets           | 1.38x  | 1.47x  | 1.76x  | 1.90x  |
| Non-housing financial liabilities| n.a.   | n.a.   | 0.09x  | 0.23x  |
| Net financial assets             | n.a.   | n.a.   | 1.67x  | 1.67x  |
| Gross housing assets             | 1.92x  | 2.55x  | 3.27x  | 5.85x  |
| Housing liabilities              | n.a.   | n.a.   | 0.86x  | 1.49x  |
| Net housing assets               | n.a.   | n.a.   | 2.41x  | 4.36x  |
| Net wealth                       | 2.85x  | 3.49x  | 4.03x  | 6.04x  |
| % p.a. increase since 1979       | -      | 2.0%   | 1.4%   | 2.6%   |

Note: The financial liabilities for 1979 and 1989 were not divided in the data between housing liabilities and other liabilities.

negative effect on entrepreneurship and a negative growth effect from acting as a capital tax.

Governments overseas have tried to ameliorate some of taxpayers’ difficulties with land and buildings taxes with a variety of reliefs. These include, for example, statutory limits on the share of income that land and buildings taxes take; rebates for taxpayers for whom the tax payable for a year exceeds a certain percentage of an owner-occupier’s income; or relief for taxpayers in financial hardship. In some jurisdictions, deferred payment is also possible for those who cannot afford to pay the tax straight away. However, exemptions like these undermine the case for collecting a land or buildings tax by opening up gaps in the tax base and adding to administrative costs.

A final design concern of land and buildings taxes is whether or not they are progressive, proportional or regressive. Opinions differ on this. In terms of a total tax package, taxing land and buildings might be considered fair in terms of treating taxpayers in the same income position in the same way because it taxes those who derive income from an asset like a residential property as well as those who derive income from their salary. Another view is that land and building taxes are regressive, since poorer taxpayers could pay more tax as a proportion of their income if they own their own home. This is not always the case because the tax regressivity depends on how it could be shifted and who finally bears the incidence. Generally speaking, if property taxes are paid by the owner, and not the occupier, they will be more progressive. To determine whether or not property taxes are more regressive or progressive requires finding out whether the tax can be shifted and who is made worse off because of the tax. One source declares, “This question is unsettled.”

So, in theory introducing land or buildings taxes sounds simple, but in reality they can be very difficult to implement, not just because they can be unpopular, but because it is difficult to collect the taxes since they involve taxing assets. The value of an asset is usually most readily apparent upon its purchase or sale. The tax either has to be collected upon the asset’s sale or at a share of some predetermined value while it is owned. Introducing a property tax, especially where none exists now is therefore a decision not to be taken lightly. It means confronting the thorny issue of whether the family home should be included in the tax base. It also means deciding whether higher administration and collection costs, perhaps consuming or exceeding the efficiency gains made by broadening the tax base, are worth the benefit of improving the tax system’s revenue integrity by taxing another income source. While a tax on the value of land or buildings is attractive in some respects, there appear to be too many difficulties to make introducing one, on balance, worthwhile. However, if research could produce better evidence that land and buildings taxes are more growth-friendly, then this might warrant a reconsideration of this position.

A New Zealand land tax

Inland Revenue examined the implications of introducing a 1% annual tax on land for the Tax Working Group. The land tax they considered would only be levied on the value of land, excluding the value of any buildings or structures built on the land. A land tax would be simpler to administer and comply with than would say, a capital gains tax.

Inland Revenue estimated that if only public, conservation and Maori trustee land were excluded from the tax, $3.8 billion of gross revenue could be raised. Other estimates put the figure at $4.6 billion. These figures are not insignificant sums, representing between 15% and 18% of the $24.9 billion income tax revenue forecast for 2009–10. The land tax revenue would easily pay for rate alignment of the top marginal tax rates.

Provided the base was broad, this land tax would be very efficient. A land tax would not be viable unless most land were included in the base. This suggests it would not be desirable to exclude residential or agricultural land because they form a significant share of the tax base. Irrespective of which land would be included or excluded, the introduction of the tax would cause a one-
Evaluating capital gains taxes

Capital gains taxes are a way to tax increases in the value of an asset. In the absence of a capital gains tax, investment decisions can become distorted, creating a major hole in the tax base and investment inefficiencies. Without a capital gains tax, investment is more likely to occur in assets that appreciate in value (for example, residential housing) rather than assets which earn taxable income (for example, savings or shares). This means capital gains taxes on residential housing sales are favoured by some to remove savings and investment distortions.

New Zealand is unusual compared to most other OECD countries in that it does not have a capital gains tax. One limitation of not having a capital gains tax is that “taxing income from capital is inconsistent, and that a number of capital gains are taxed under different rules. This is resulting in the same form of income being taxed in different ways, at different rates, or not at all.” Some land, personal shares and intellectual property, like patents, are taxed on the gain made from the asset to a degree, when ownership changes, while some transactions of those things are not taxed. One could argue there are holes in the capital gains net. A big concern is how the zero tax on owner-occupied housing has created a distortion. There is also a blurry line between ordinary and non-taxable income. A comprehensive capital gains tax would help to solve these problems.

On these grounds, capital gains taxes could help lift productivity growth because they would encourage New Zealanders to invest in different, potentially more productive, investments and would
tap more capital currently locked up in housing. A capital gains tax is also consistent with the idea of comprehensive income tax. Exempting capital gains from tax undermines this principle and erodes the integrity of income tax—at the moment there is a 38 percentage point gap between the top marginal personal income tax rate and the zero rate on many capital gains. This creates incentives for tax avoidance. A capital gains tax plugs this hole in the tax base.

High capital gains taxes, however, can be a problem if they reduce the supply of venture capital and entrepreneurs’ return from risk-taking. For instance, in a time where start-up firms often need to invest a lot in technology, capital gains taxes could hinder access to capital. If this results in fewer new firms, this could reduce productivity growth. Yet empirical evidence supporting this proposition is sparse. More important is how capital gains taxes can reduce capital mobility if investments are taxed upon realisation. These are known as “lock-in” effects, and they are a very common distortion. “Lock-in” effects occur when investors either sit on their assets or shares or sell bad ones more quickly to reduce their loss.

In principle, it would be best to tax capital gains on an accrual basis—that is, at a share of an estimated value of the asset while a person owns it, just like personal income tax—so that everyone’s income would be taxed the same way. However, it would be difficult to value investments or for investors to pay tax on their investments before they have been realised. This may explain why no country has an accrued capital gains tax. Instead, the norm is to have a capital gains tax on investments when they are realised, that is, when an asset is sold. But a realisation-based capital gains tax encourages a “lock-in” effect.

A realisation-based capital gains tax could also risk the double taxation of corporate income. Inland Revenue warned that this could discourage companies “from retaining and reinvesting profits” because of the more favourable tax treatment of shares relative to dividends (with New Zealand’s dividend imputation credit system). Inland Revenue recommended “imputation credits with bonus share issues” could be one way for companies to distribute dividends “without reducing their retained earnings.”

A New Zealand capital gains tax?

In its paper prepared for the Tax Working Group, Inland Revenue investigated capital gains taxes and reported that New Zealand would have to deal with a number of practical problems to make one work here. The paper summarised several vexing design questions related to making a capital gains tax work. These included:

- Whether or not owner-occupied property would be exempt from a capital gains tax, like in other overseas tax systems—the choice is between preventing “lock in” effects from taxing housing or reducing investment distortions.
- Whether or not the dividend imputation scheme would have to be modified—if capital gains on corporate income were taxed on a realisation basis it would introduce double taxation that might require relief.
- Whether capital losses should be ring-fenced—so that they could only be offset against capital gains to protect income tax integrity.

To resolve some of these issues, Inland Revenue suggested capital gains could be taxed by a “hybrid approach” that taxed assets on a realisation basis if cash flow or valuation was an issue, while in all other cases capital gains would be taxed on an accrued basis. However, there is a risk that this could encourage companies to delist from the stock exchange to avoid tax if shares in publicly listed companies were taxed on an accrued basis while shares in unlisted companies were taxed on realisation.

There are also distributional issues to consider with capital gains taxes. Australian and United States evidence suggests that capital gains taxes are highly progressive and that reported taxable capital gains increase in absolute terms and as a share of reported taxable income. The distribution of real property and financial assets is clustered among higher
Inland Revenue has also investigated whether other tax changes could improve the tax treatment of property without introducing some of the problems of capital gains taxes. Two proposals were that the 20% depreciation loading for new buildings be eliminated, and that building owners who claim depreciation deductions on buildings they own should be taxed on the sale proceeds when they exceed the building’s
decimals of family income. This means higher income earners would be likely to bear the burden of capital gains taxes if they were introduced.

This might give high income earners another reason to leave New Zealand. Data weaknesses with declared capital gains make it difficult to know precisely what the effect of a capital gains tax would be, however. In New Zealand, most wealth is held as real property (figure 4.6), with owner-occupied housing making up the heavy share. Because housing ownership is spread more evenly throughout the population, including owner-occupied housing in the tax base could reduce how progressive a capital gains tax would be. However, if it were exempted for whatever reason, a large investment bias would remain in the economy. Inland Revenue concluded that there would be increased administration and compliance costs with a capital gains tax, and that the advantages of the tax did not outweigh the disadvantages.77

Design questions aside, a capital gains tax would perhaps raise about $9.1 billion per year if owner-occupied housing is included and capital gains are taxed on an accrued basis at the same rates as ordinary income tax. The estimate includes land and shares and assumes stable inflation and that 30 year growth rates continue on the expected path.78

These estimates are very sensitive to investments’ appreciation rate, however. For instance, a one percentage point change in the real property appreciation rate would create a $1 billion revenue difference.79 Even if owner-occupied housing is excluded there is potential to raise about $4.5 billion dollars per annum.80 A realisation-based tax would be expected to raise less than an accrued tax. The Treasury’s estimate was much more conservative, at $1.5 billion per year.81 Nevertheless, they believed this would be enough revenue to offset the cost of aligning marginal tax rates at 30%. Since we do not know exactly how taxpayers would respond to a capital gains tax here, these figures should not be treated as indicative of what the reality would be.


Figure 4.6. Mean value of property by family income decile

cause an increase in land values immediately inside the perimeter ten times that of that outside. Changing such restrictive regulations could deal with the problems of overvalued property at their source without using the tax system or raising new taxes.

In summary, while a comprehensive income tax framework suggests we should consider taxing all income sources, it is difficult to believe that a comprehensive capital gains tax could be implemented given its limitations. If the real problem in New Zealand is dealing with over-investment in housing and overvalued land, then instruments should be designed to deal with that issue rather than taxing all capital gains. While meant to encourage the flow of capital to better investments, a capital gains tax could also work against this objective. This would be undesirable given the importance of capital formation to entrepreneurship, business and innovation.

Evaluating capital income taxes

Capital income taxes tax the income derived from assets like personal investments or savings, as well as corporate income. Like capital gains taxes, they also have an effect on entrepreneurship as well as investment through reducing capital available to finance firms. Theoretically, collecting tax from a person's capital income reduces the after-tax return from saving, affecting private savings rates.

A problem is proving that taxing capital income has this effect. As economist Gareth Myles notes, theoretical economic growth models cannot accurately predict how taxation will affect saving. The models estimate how the tax rate affects savings behaviour, but how much people save is ultimately an empirical question. Myles also considers other evidence that the relationship between savings and tax incentives which lock-in participants, like the KiwiSaver ones, is contentious. Tax incentives are supposed to boost saving, in particular so that more of us are saving for retirement. Such savings could also help to raise economic growth by increasing investment levels.

However, behavioural economics suggests that it may be the commitment involved rather than the tax effect which may explain the popularity of the savings plans. Given the choice it seems that often people discount the future, choosing to consume their income immediately and put off saving. Awareness of this means policy makers have deliberately denied members of savings programmes access to their funds until retirement. This is why it is difficult to argue that it is necessarily the tax incentive that is causing more savings; it may be the rules that are responsible. However, higher (or lower) marginal tax rates do make it less (or more) attractive to save. What the evidence from studies trying to understand the tax effects on savings indicates is that empirical studies have not cleared up yet what the precise tax effects on savings are when savings programmes, like KiwiSaver, are considered; even after subjecting them to considerable investigation.

Another issue is how capital income taxes interact with personal or corporate taxes to make it easier or harder for firms to access equity, again affecting risk-taking and productivity growth. Since most OECD countries (but neither New Zealand nor Australia) tax corporate profits and then tax them again at the personal level when dividends are paid out, giving personal tax credits for taxes paid at the corporate level has become less popular. This is because “double taxation can create a bias towards financing investment with debt rather than equity.” This kind of double taxation can reduce the amount of domestic funds available from investors, and it gives firms which can access foreign capital an advantage.

It has also been argued that introducing a light capital tax would encourage people to use their assets—like land, their home or a factory—more productively. Taxing all assets at a single flat 0.8% rate (with a $1 million deduction for households) and abolishing corporate income tax, this argument contends that the tax might encourage more people to shift resources into more productive investments in the economy, rather than letting resources accumulate in often poorly utilised assets, like land and private dwellings.

In summary, as with capital gains taxes, from the perspective of comprehensive income tax theory, all income derived from capital should be taxed. The precise effect of capital income taxes on savings is not clear. Since capital formation is important for entrepreneurship, business and for financing innovation, it would be prudent for governments to tax capital income lightly.
**Conclusion: property taxes**

From a theoretical perspective, property taxes can be considered to be an extremely efficient form of taxation because they make it more difficult for asset owners to shift the tax burden onto something or someone else. Taxing some property forms more could be considered good for boosting growth, since taxing assets like housing could help channel more money into savings and investment. This would facilitate higher productivity growth as workers got to enjoy more capital and better technology, and entrepreneurs would have more funds to start businesses and create jobs. Raising more revenue could, in theory, help to reduce more growth-inhibiting taxes, like personal income and corporate taxes. In a time when New Zealand’s workforce is highly mobile and the personal and corporate tax bases are under pressure, property taxes could be an attractive option. However, policy makers would have to be certain that the extra revenue raised from property taxes was not consumed by the extra administration costs involved in collecting them. Difficult issues like whether land or the family home should be taxed would also need to be considered, since this would cause property values to fall.

In addition, owning land and housing is ingrained into New Zealand culture. The idea of property taxes strikes at the heart of ownership; taking something away from what we own or in what we have invested our money. Public opinion also causes politicians to flinch at the thought of introducing housing or capital gains taxes, even if there are some good reasons to do so. Public opinion alone would not discredit property taxes but it compounds on the central concern, previously mentioned, of higher administration costs. Property taxes do not have everything going for them, but as our discussion has shown, the merits of different forms of property tax—and in particular, land tax—are still worth debating.

**Personal income taxes**

Personal income taxes form the greatest share of tax revenue, so it stands to reason that these taxes will have an impact on GDP growth. We consider a handful of the most important ways personal income taxes can affect GDP: average and marginal tax wedges; tax progressivity and top marginal income tax rates; and effective marginal tax rates (EMTRs).

When studying personal income tax-growth effects, we should be careful to bear in mind that it is still an open question as to whether it is the level of taxation or how progressive taxation is that makes the most difference to growth.

**Average and marginal tax wedges**

The most obvious way that personal income taxes can affect GDP growth is by reducing how much labour is used by firms and how much workers want to supply their labour. Lower taxes reduce labour costs, allowing firms to afford to employ more staff. Personal income taxes affect labour supply because of how they influence people’s decisions as to whether and how much to work. Some may opt to work more when faced by lower taxes because the gain from extra work is comparatively greater than when taxes are higher. There could also be an income effect whereby higher income taxes create incentives for taxpayers to work longer to earn a desired amount of income. For example, those working at a higher-paying job might be required, or enjoy, working longer hours to earn the salary associated with that position without worrying about how much tax they have to pay.

Empirical studies show that hours worked have only been modestly responsive to personal income taxes on labour, while participation, that is whether people work or not, has been more responsive. Women, for example, are often the secondary household earner and are usually involved with childcare. Compared to men, women, then, may be more sensitive to tax when they choose whether or not to work. Finally, studies that have examined unemployment have found that high labour tax wedges curb employment by making labour more expensive. Though the magnitude varies across studies, one 2004 study found that a “10 percentage point rise in the tax wedge reduces employment by around 1% to 3% of the working age population.”

Higher labour taxes could mean that some productive firms or industries—which could help shift the economy to a higher output level—might not be able to afford the capital and labour they require. The risk is capital and labour could be reallocated into less productive firms or industries, or not used at all.

An international dimension to this issue is how a host country’s higher labour costs can make it
less attractive for foreign firms to invest there. For example, a 2006 study found that labour taxes have a larger impact on foreign investment than cross-border corporate tax rates. When this happens, countries not only miss out on investment but also from the sharing of information and expertise that it brings. This reduces how much technology transfers and innovation can contribute to productivity growth.

Progressive taxes and top marginal tax rates

Progressive taxes are a double-edged sword. Progressive tax systems are widely used to make the income and consumption distribution more equal. However, they make us more sensitive to choices about earning more money, meaning that they can discourage us from working longer or more productively. This is why there is concern that high tax rates and lower after-tax incomes in New Zealand might be causing more of us to migrate—the “brain drain”—to places like Australia which has lower taxes (although a more progressive tax schedule). In New Zealand, the situation got a little better when the top marginal personal income tax rate came down from 39% to 38% in April 2009 and the threshold for that rate was increased from $60,000 to $70,000. But compared to Australia, for example, our top threshold is still low ($70,000 against $180,000).

The 2025 Taskforce’s first report in November 2009 noted that “… in the last decade alone, a net 260,000 more New Zealand citizens have left than have come home again (to New Zealand): the overwhelming majority of that net outflow has been to Australia.” The Taskforce also notes that “the net loss of New Zealanders to other countries tends to be disproportionately higher skilled” citizens. Thus, one reason why high personal income taxes are not good for growth is because it is possible that “high top marginal rates will increase the average tax rates paid by high-skilled and high-income earners,” contributing to the brain drain. When more skilled workers migrate, it lowers productivity by reducing innovation throughout the economy.

Progressive income taxes also cause sizeable adverse effects to GDP per capita. This is illustrated by the following finding: in 2004, the average OECD country “had an average personal income tax rate of 14% and a marginal income tax rate of 26%. If the marginal tax rate were to decrease by 5 percentage points … thus decreasing the progressivity of income taxes the estimated increase in GDP per capita would be about 1%.”

This could be caused by people working more as progressive tax rates are rolled back. However, the result could also be caused by more risk-taking or more entrepreneurs entering business since an entrepreneur’s decision to start a business is sensitive to higher tax rates. High top statutory income taxes can have two serious implications for prospective entrepreneurs:

1. they reduce the capital which entrepreneurs can access from their own wealth, and
2. they undermine the rewards that make the risk of starting a new business worthwhile.

This means high top marginal rates can substantially lower entrepreneurial activity and can therefore negatively affect productivity growth.

On the other hand, it could also be argued that income tax allows entrepreneurs to share risk with the government, if the government allows losses to be offset against other income. Tax acts a bit like an insurance policy in this case since reducing risk could potentially, but not necessarily, encourage entrepreneurialism, perhaps more among the most risk-averse. There is some empirical evidence which supports this idea.

However, the research cited before still strongly suggests that the higher the difference is “between the marginal tax rates when successful and unsuccessful (a measure of tax progressivity) the lower is risk-taking.” This is because the tax on high profits is often greater than tax savings from losses. This reduces the benefits associated with risk-sharing.

Cross-country evidence at the industry level, covering a small group of OECD countries, from a study by economist Laura Varita, also suggests that “there is a negative relationship between top marginal personal income tax rates and long-run productivity growth according to how they affect entrepreneurs.” The effect was found to be stronger when entrepreneurial activity was higher in a particular industry. The impact increased when there were more industries with structurally high firm entry rates (entry of firms into the marketplace was used in this study as a measure of entrepreneurial activity).

Varita concluded that the estimates suggest that reducing the top marginal rate by “five percentage
points would increase the average yearly productivity growth rate by 0.06 percentage points more* in an industry with a high level of firm entry (that is, the 75th percentile of the firm entry rate distribution) than in an industry with a low level of firm entry (the 25th percentile).  

Varita’s findings concur with the empirical work cited earlier that suggests highly progressive taxes discourage people from becoming entrepreneurs. A policy implication of Varita’s research is that “countries with a large share of their industries characterised by high firm entry (or wishing to move in this direction) may gain more from lowering their top marginal tax rate than other countries.”

The effect of tax on entrepreneurship and growth is also affected by policies that make it easier for firms to enter the market or lighter product market regulations. For example, empirical evidence also shows that countries with tighter product market regulations suffer stronger negative productivity growth effects from top marginal tax rates. This might be because potential entrepreneurs are likely to weigh the total cost of starting a business against the potential return. Taxes increase the overall cost by adding to regulatory costs.

Effective marginal tax rates

Another issue of concern is effective marginal tax rates. An effective marginal tax rate (EMTR) is the tax rate in practice “on each additional dollar earned by all individual taxpayers.” An EMTR can be calculated by adding together the marginal tax rate and the rate of reduction of a means-tested benefit (like Working for Families payments). EMTRs therefore often differ from straight marginal tax rates. For example, a taxpayer facing a top income tax rate of 33% and receiving Working for Families will have any extra income they earn reduced by 53% (33% plus the 20% abatement rate of Working for Families).

If a taxpayer’s EMTR exceeds 100%, then an increase in gross income actually reduces a taxpayer’s disposable income. An income reduction can happen in some rare cases if taxpayers have to contend with Working for Families abatement, abatement of the unemployment benefit, student loan repayments and KiwiSaver deductions. When taxpayers face high EMTRs their work incentives are affected because there is less to gain by working more hours or earning more money. When low income earners are affected, EMTRs create “poverty traps.” There are also problems with EMTRs that relate to family form—so-called “marriage penalties,” which come about “when two parents (or spouses) have a higher total income (net of income transfers and living costs) when separated than when a partnered unit.” This can be because income taxes are assessed on an individual basis but social assistance programmes are assessed jointly.

It is impossible to eliminate EMTRs completely from the tax-transfer system. The issue for decision-makers is where along the income spectrum they should occur and how steep they might be. Decision-makers should also consider whether the key priority is raising work participation rates or hours in work when designing income assistance packages and considering EMTRs.

In need of repair—issues with New Zealand’s personal income tax structure

New Zealand’s progressive personal income tax system is facing a number of challenges for raising revenue and maintaining fairness. We highlight here some of the issues Treasury flagged in a recent paper, “Medium Term Tax Policy Challenges and Opportunities.”

New Zealand has the third lowest per capita income, compared to the average of 15 OECD countries, but the sixth highest ratio of income taxes to GDP (including social security). The ratio is also high relative to Australia.

The personal income tax system creates penalties for many taxpayers, with high marginal and average tax rates that discourage workforce participation and skills acquisition and make tax planning and avoidance attractive propositions. For instance, Treasury projections indicate that someone earning 67% of the average wage will face the current second-to-top marginal tax rate of 33 percent in 10 years’ time. Without change, fiscal drag will increase individuals’ average tax rates (ATR). By 2018, Treasury forecasts that many taxpayers will face ATRs at 20-year highs (figure 4.7). This would encourage even more tax

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Lifting the Bucket: Tax policy and economic growth
planning, worsen investment in tax shelters and further widen the gap between New Zealand and Australian wages, encouraging emigration.

Families with children face an additional penalty thanks to the abatement of Working for Families as income increases. The current design of the package means that when a family’s income exceeds $36,827, an abatement rate of 20 cents in the dollar applies. EMTRs for recipients are often in the region of 53% to 58%. Lower income earners do better, however, as they may face abatement at only 21%. Figure 4.8 shows that some income groups have experienced significantly higher EMTRs since Working for Families was introduced in 2006.

Another issue is that because of Working for Families, primary household earners’ ATRs up to about the average wage are negative “since they receive, rather than pay, income tax.” Moreover, because secondary earners generally face higher marginal tax rates, their average tax rate is usually higher than the primary household earner, in the 30% to 40% range even though they do not earn very much. Treasury estimates that a large number of primary and secondary earners are affected.

Treasury’s figures probably under-estimate the number of taxpayers for whom these rates are relevant since an unknown number will have responded by changing their earned or declared income to avoid them. Including Working for Families, about 35% of primary earners faced marginal tax rates greater than 39% by 2009, before the top marginal rate dropped to 38%. Coupled with fiscal drag many more taxpayers will be pushed into the 33% and 38% tax brackets in the near future.

Evidence suggests that the current personal income tax rate structure is encouraging more tax-planning activity which is eroding the tax system’s revenue integrity and efficiency. Inland Revenue has indicated:

- There are large “spikes” in the taxpayer income distribution around personal income thresholds, with corresponding ‘troughs’ above them.

- The numbers of taxpayers with annual income above $100,000 grew more slowly since 1999 than before 1999. This trend did not occur with taxpayers who earned less than $100,000 per year. “This could indicate the out-migration of some higher income earners and/or tax-planning (e.g. within a household) to keep individuals below higher tax thresholds.”

- More people derived an income from trusts. For instance, in the six years since 2001, trustee income grew by 400% compared to a rise in beneficiary income of only 50%. High income earners can pay tax at 33% instead of 39% if they shift income into a trust.
Lifting the Bucket: Tax policy and economic growth

The Treasury has also pointed out to the Tax Working Group how it is possible for taxpayers who are not middle- or low-income earners targeted by Working for Families to receive tax credits. Taxpayers can do this by reducing their taxable income by converting it into another income source not defined as "income" for the purpose of receiving Working for Families tax credits. Taxpayers currently have an incentive to "earn" under $36,827, the threshold where the benefit abates at 20 cents in the dollar. Two ways they can do this are by:

- accumulating income in companies (which are taxed at the corporate rate—lower than the effective marginal tax rate that taxpayers would face at the personal income tax rate); and/or
- accumulating income in trusts (which are taxed at the trustee income rate).

That is, taxpayers could take advantage of these loopholes by establishing a trading company owned by a trust where the "distributed company income is taxed as trustee income to the trustee with subsequent distributions of these amounts from the trust to the beneficiaries who may be claiming Working for Families credits." Working for Families recipients also have an incentive to lower their taxable income by maximising fringe benefit payments from employers and/or investing in cash PIEs. Further, Working for Families recipients' claims against losses from investment properties do not help determine Working for Families entitlements. It is estimated that there are "over 9,700 families with rental losses offsetting other income, who receive Working for Families tax credits." These issues suggest that the current progressive rate structure is not doing a great job of collecting tax in a fair and efficient way. Policy change is required to reduce distortions, restore revenue integrity and remove excessive penalties for earning extra income.

A strategy of flattening taxes at lower rates and broadening bases could be valuable. This lowers taxpayers' top marginal tax rates and so their EMTR. This would help to address work incentives for secondary earners and reduce the complexity of the tax-transfer system so that it is fairer for more recipients. A flatter income tax structure would also solve the problem of fiscal drag since more taxpayers would be taxed at the same rate. Lower, flatter rates, combined with broadening the tax base, would also address tax planning issues since it would close the loopholes and reduce the incentives for taxpayers to reduce their income tax liability. Not only would this improve the tax system's revenue integrity, it would also improve its perception among taxpayers as being even-handed. This is critical since the personal income tax system currently contributes about 53% of tax revenue.
Income splitting for families

One other relevant reform is the Government’s proposal to introduce income splitting for families with children.\textsuperscript{133} Under a progressive personal income tax system (where the average tax rate increases with income), income splitting is a way for families to reduce their personal income tax liability by assessing tax on a family basis, rather than an individual basis. This allows families to keep more after-tax income. It can also help families most where the primary earner earns more than the secondary earner or where there is no secondary earner, since it allows family members to split their income, often on a 50/50 basis, so that their taxable income falls into a lower tax bracket.

We have elsewhere supported income splitting for all families, not just families with children. This was on the basis that income splitting:

- “is a fairer and more consistent way to tax”;
- “gives appropriate recognition to the interdependence of the family unit,” rather than conceiving of families as a collection of individuals; and
- is consistent with the approach to benefits, which are assessed on a family basis.

However, we placed a caveat on our support for income splitting, that if more fundamental personal income tax reform is likely, then income splitting should not be considered.\textsuperscript{135} If such reform is contemplated, income splitting becomes a second-best option. While income splitting allows a family’s income to be taxed at lower rates, significantly lowering and flattening tax rates across the board reduces the overall progressivity of the tax system. This has several advantages for families which satisfy a number of major income splitting objectives, but in a way which also benefits every taxpayer.

1. It reduces high marginal personal income taxes which are a barrier to the factors which influence the productivity growth rate, like entrepreneurship and investment. Higher productivity growth has the potential to raise families’ income and living standards.

2. It is simpler to drop taxes—allowing families to keep more of what they earn to begin with—than to require more families to register for a tax credit which Inland Revenue would have to administer. Inland Revenue’s latest officials’ paper on income splitting indicated that the capital costs for this would be between $2 to $3 million, with on-going costs of $3 or $4 million over the first five years.\textsuperscript{136} The fiscal cost of the credit is estimated at $450 million each year (accessed by as many as 300,000 families with children up to age 18), and would be greater if all families could receive it.\textsuperscript{137}

3. It reduces EMTRs that are harmful to work incentives for both primary and secondary earners in a family (and research suggests secondary earners—who are often women—are especially sensitive to higher EMTRs). For example, scenarios prepared for the Tax Working Group showed that reducing the top marginal personal income tax rate to 30%, aligning it with other rates and increasing GST to 15% would allow 99% of taxpayers to enjoy a drop of up to 10% in their EMTR.\textsuperscript{138} By contrast, income splitting does not result in a major reduction in EMTRs overall, since while EMTRs for primary earners may fall, this may be cancelled out by an increase in secondary earners’ EMTRs.\textsuperscript{139}

Some might support income splitting on the basis that it provides assistance to families in need. But this is to treat income splitting as a welfare measure rather than as a principled tax reform. Further, it represents poor targeting of income assistance to families in genuine need as there is no link between need and taking advantage of income splitting. In this case, income splitting would add to the deadweight costs associated with collecting tax, and cause more churning of taxpayers’ money (collecting tax and redistributing it straight back to those who paid the tax). If income splitting is to be a welfare measure, it should be assessed explicitly on that basis, in which case it is harder to support.

In summary, we believe lowering and flattening personal income taxes makes more sense as a first-best policy for improving families’ after-tax incomes. Rate reductions should reduce the progression of income tax and also reduce the harmful effects on work incentives and productivity growth caused by high EMTRs. The firm prospect of rate reduction signalled by the Prime Minister in his Statement to Parliament—a feature of more fundamental tax reform—would also appear to reduce the priority for introducing income splitting.\textsuperscript{140}
Conclusion: Personal income tax systems

Highly progressive tax schedules should be avoided in favour of lowering and flattening tax rates, to make the tax system friendlier to GDP growth. In the end, how a country decides to set personal income tax rates depends on how much distortion to the income tax base is acceptable to achieve a degree of redistribution.

Corporate taxes

Corporate taxes make up 17% of forecast tax revenue, through taxes on companies' income. Firms are responsible for generating a lot of economic activity, and it would be wise for corporate taxes to be designed to limit the harm to this activity. Corporate taxes are especially important if capital gains taxes are not collected, as corporate taxes are like a backstop to the personal income tax system, reducing the opportunities for individuals to shift their income into a company to avoid paying tax. Corporate income tax therefore reinforces the integrity of personal income taxes and contributes to the goal of a comprehensive tax system.

Because firms also carry out a lot of investment in physical capital and in R&D, which spurs innovation, firms' choices are central to growth assumptions. This is because firms are driven by the expected costs and returns from their investment in new projects or products. An important policy question, therefore is, how does taxation affect firms' choices?

The magnitude of tax effects on investment depends on the size and openness of a country's economy. The size of a country's economy is important because economies which are larger, like the United States or the United Kingdom, attract more firms together in the same place so location-specific factors are less critical in those economies. This is not the case in smaller economies like New Zealand's.

Owners of capital are likely to invest in countries where they will be taxed less. When corporate tax rates are high, it encourages capital flight. Right now, New Zealand's small, open economy is at risk of capital flight, because corporate taxes are at the upper end of the scale by OECD standards (above the 2008 average OECD statutory corporate income tax rate) and in comparison to other small, open economies (figure 4.10). Figure 4.11 also shows the downward trend in the corporate tax rate throughout the OECD, as statutory corporate tax rates fell by 7 percentage points, from 33.6% to 26.6%, between 2000 and 2008.

How corporate taxes affect productivity growth

There are several ways that corporate taxes affect productivity growth. Similarly to personal income taxes on labour, they may distort the price of inputs.
into the production process, causing investors and firms to plough resources into less productive activities. Some evidence of this effect may be found in the World Bank’s 2008 “Doing Business” study, which found that a 10 percentage point increase in the 1st year effective corporate tax rate reduces business density by 1.9 firms per 100 people (the average is 5), and the average entry rate by 1.4 percentage points (the average is 8). Another issue is how complex the corporate tax code is. The more red tape there is, the higher firms’ compliance costs become. Higher compliance costs also absorb the resources firms can put towards new technology that could raise their productivity.

Corporate taxes also have a huge impact on how investors choose to invest their money in firms, affecting productivity. For instance, if interest can be deducted from taxable profits, firms are more likely to finance with debt rather than equity. This can affect productivity growth because industries that find it easier to raise debt finance can attract more investment than those that rely more on equity. This adversely affects knowledge-based industries, which may find it harder to secure debt-financing, since they require investment in intangible property to thrive. It can also have an impact on innovative young firms because they can rely a lot on risk capital.

Empirical evidence from a 2008 OECD study of firm-level data, covering 14 European OECD countries, and industry-level data, covering 21 industries in 16 OECD countries, suggests that corporate taxes make it difficult for firms to build up capital. This decreases the returns to investors from investment. The key empirical findings at the firm level were that statutory corporate taxes appear to have:

- a smaller negative impact on productivity growth in firms that are younger and smaller; and
- a stronger, negative impact on productivity growth in profitable firms that are performing well and growing their business.
- One possible reason why there was a difference between younger firms and older ones was that younger firms are generally less profitable than older ones meaning there is less money and activity that is affected by tax. Younger firms can also benefit from targeted exemptions or reduced rates.

Similar results were found at the industry level:

- corporate statutory or effective taxes affect investment negatively because they increase the user cost of capital;
- corporate statutory or effective taxes have a negative impact on productivity and matter the most to highly profitable or risky businesses; and
- R&D incentives appeared to increase productivity and mattered more in industries which rely more on R&D to be productive.

The reference to R&D incentives is significant as they have been the subject of controversy in New Zealand. The OECD holds mixed views on the value of R&D tax credits, conceding that while they might help boost R&D in R&D-intensive industries, their effect is small and is second-best to a policy of lowering corporate taxes. The OECD recommends that the decision as to whether or not to use a tax credit to encourage R&D should be based on its cost-effectiveness relative to other tax changes.

Thus it may be simpler, more cost-effective and better for New Zealand’s economic performance if the government concentrated on rebalancing the tax system so as to rely less on the growth-inhibiting taxes—personal income and corporate taxes—that discourage the flow of capital and business and technology growth. It should also support a regulatory environment that makes it easy for entrepreneurs and firms to carry out business.

Apart from what the government can do, industry also has an important role to play with incentivising R&D. Being successful in business is partly about taking a risk on developing a new product or service. This requires convincing a bank or a backer that a business idea is sound. This is a reason why good businesses succeed. Too much government support might weed out these powerful incentives for businesses to be sharp and to perform well to attract investment and support. Ideally, industry should match or exceed government investment.

**International tax competition**

Foreign investment adds to capital and increases technology and knowledge transfers that can boost domestic firms’ productivity. Further, when domestic firms face foreign competition, they may...
be encouraged to improve their own productivity. It is therefore important to consider whether taxes affecting foreign investment are competitive—the phenomenon of international tax competition. International tax competition matters to productivity growth because higher corporate taxes reduce foreign investment and technology and skills transfers, thereby dampening innovation.\textsuperscript{153}

International tax competition refers to how companies (usually larger ones) wanting a competitive edge often choose to stream their profits or locate their capital and/or functions offshore in countries with lower corporate tax rates, creating a “taxodus”; a flight from high tax rates in their home country.\textsuperscript{154} Of course firms consider many things affecting cross-border incomes—like the cost of labour and the regulatory environment—but domestic tax rates and other tax arrangements are highly important considerations. Firms’ home country tax codes also matter, as well as bilateral and multilateral tax agreements, because of withholding taxes that firms’ home countries apply to firms’ revenue from operating in a foreign country, for example.\textsuperscript{155}

Another factor in international tax competition is whether or not a multinational firm’s home country “exempts foreign dividends from tax, or subjects them to domestic taxation while providing a credit for taxes already paid in the source country.”\textsuperscript{156} The reason for a credit system like this is that it should, in principle, treat domestic and foreign investment the same by removing the tax advantage domestically-owned firms might enjoy from investing overseas rather than in their home country.\textsuperscript{157}

Firms’ decisions about where to invest or people’s decisions about where to live therefore cut across countries’ borders, so how high corporate taxes are is important for determining whether a country’s economy will be sluggish or highly innovative and more productive. If New Zealand’s corporate tax rate is significantly higher than other countries’ rates, we will fail to retain and attract skilled workers, innovative businesses and more investment.\textsuperscript{158}

**Conclusion: Corporate income taxes**

In summary, corporate income taxes are likely to distort:

- the levels and kinds of investment that individuals and firms are likely to underwrite;
- where firms can get their finance from, such as debt, or newly issued equity; and
- where firms to choose to locate for tax purposes.

New Zealand should be a place where business creates and sustains our prosperity. The way corporate taxes are designed can affect opportunities for entrepreneurs and firms. Because firms contribute so much to productivity growth, the government should be careful to limit the way tax distorts firm investment. However, tax policy experts also agree that neutrality and consistent treatment of firms is important, for example, by treating firms the same so that investment capital can naturally flow to the most efficient firms.\textsuperscript{159} This suggests that countries should levy lower corporate taxes with few exemptions. This is consistent with a comprehensive low-rate, broad-base tax policy strategy.\textsuperscript{160} We prefer this approach because it should reduce tax-induced distortions, raise revenue efficiently, and treat firms similar to other taxpayers.

**CONCLUSION**

This section has considered the various ways that consumption, property, personal income and corporate taxes can affect economic growth. The major issue we have considered is to what extent these taxes cause individuals and firms to choose less of the activities which contribute to economic growth, as indicated by the growth drivers analysed in section 3. Research shows that individuals’ and firms’ choices are most sensitive to personal income and corporate taxes and that consumption and property taxes are more likely to be associated with higher growth because they create fewer distortions. This suggests that it is not just the rate, level or deadweight costs of tax that affect our prosperity; which taxes we choose to rely on the most also makes a difference. These findings have implications for how the tax system could be changed so that the economy can grow at a faster rate.

As New Zealand relies heavily on growth-inhibiting personal income and corporate taxes, we should seriously consider making changes in the future, or we risk being unable to sustain good living standards as the world’s markets open and our population ages. At the same time, it is not just the design of the tax structure which is critical for raising
growth: how government spends our tax dollars also matters. Government can spend money in ways that can either increase or decrease growth—but always at a cost. We consider these issues in the next section.

ENDNOTES


4 An average tax rate (ATR) is the total tax paid as a share of each taxpayer’s total taxable income. The average tax rate is calculated by dividing total tax liability by taxable income. P. Nolan, ‘Targeting Families’ Assistance: Evaluating family and employment tax credits in New Zealand’s tax-benefit system’ (School of Government, Victoria University of Wellington, 2005), 16.

5 In other words, it is possible that all taxes could have short- and long-run total tax-growth effects. Cf. A. Lico and H. Sameen, “Taxation, Growth and Employment” (London: Policy Exchange, 2010), 14.


8 Regression analysis is a kind of statistical technique for modelling and analysing numerical data in order to understand the relationship between some dependent variable and one or more independent variables. The dependent variable in the regression equation is modelled as a function of the independent variables, corresponding parameters (‘constants’), and a random variable term. The random variable term’s purpose is to represent unexplained variation in the dependent variable. The ‘best fit’ of the results from regression analyses are often presented. For instance, “the dependent variable might be a state’s level of welfare spending and the independent variables measures of public opinion and institutional variables that would cause the state to have higher or lower levels of welfare spending.” Some economists use regression analyses to produce factual “empirical” evidence from country data to test whether or not there is a relationship between taxation and growth. This might be more reliable than making predictions based on theoretical models. Econometrics Laboratory Software Archive, Regression Analysis (Berkeley University, 2009), http://elsa.berkeley.edu/sst/regression.html (accessed August 2009).


14 Victoria University Tax Working Group, “Changing the Rate of GST: Fiscal, efficiency, and equity considerations” (Treasury, New Zealand, Inland Revenue Department (IRD); Centre for Accounting, Governance and Taxation Research, Victoria University, 2009), 5.


16 Personal communication with Greg Dwyer, 12 September 2009.

17 Personal communication with Greg Dwyer, 12 September
20 Tax economist John Creedy argues that consumption taxes are efficient at raising revenue because the costs of raising each tax dollar by consumption taxes, at average total expenditure, are lower than those for income tax revenue using a progressive rate structure. J. Creedy, “Distributional Properties of GST and other Indirect Taxes.” Paper prepared for NZ Treasury (2009), cited in Victoria University Tax Working Group, “Changing the Rate of GST: Fiscal, efficiency, and equity considerations,” 6.
21 Personal communication with Greg Dwyer, February 23, 2010.
26 “For decisions at the margin we would think of the marginal rate of tax as being important.” G.D. Myles, “Economic Growth and the Role of Taxation. Prepared for the OECD,” 89.
27 Personal communication with Greg Dwyer, 12 September 2009.
41 Note, too, the Treasury’s 2009 medium- to long-term policy advice, in which they recommend moving towards taxing less mobile tax bases, such as land and property, and reducing the amount of tax collected from distortionary tax bases because of concern that New Zealand is collecting too much revenue from personal income and corporate taxes. The Treasury, “Medium Term Tax Policy Challenges and Opportunities” (Wellington: 2009), 18.
45 Personal Communication with Sinclair Davidson, 16 February 2010. Davidson also comments: “If the analysis included quadratic terms it could estimate the optimal impact of the tax shares on economic growth. It could also work out the overall optimal revenue share of the economy overall. These things haven’t been done, and of course may be very difficult to do.” And “… the study … finds that taxes raised at the local government level are superior to taxes at the national level—yet the conclusions don’t suggest that national government stop taxing and leave that sort of thing to the states. Rather it argues that taking taxes off the sub-national government may be politically tough.”
55 2025 Taskforce, “Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce,” 104.
57 Inland Revenue Department and The Treasury, “Land Tax,”

62 So tax commentator Professor Craig Elliffe, of Auckland University, has recently commented on the potential reduction in land values a land tax would inevitably cause: “It is difficult to see that the efficiency of a land tax would outweigh the potential destructive loss in value to a sector of the economy.” C. Elliffe, “The $1.6b Question – How to Fill Tax Hole”, The New Zealand Herald, January 7, 2010.
64 Inland Revenue Department and The Treasury, “The Taxation of Capital Gains,” 2.
69 Inland Revenue Department and The Treasury, “The Taxation of Capital Gains,” 34.
70 Inland Revenue Department and The Treasury, “The Taxation of Capital Gains,” 2, 31ff.
71 Inland Revenue Department and The Treasury, “The Taxation of Capital Gains,” 2.
72 Inland Revenue Department and The Treasury, “The Taxation of Capital Gains,” 40.
73 Inland Revenue Department and The Treasury, “The Taxation of Capital Gains,” 40.
74 Inland Revenue Department and The Treasury, “The Taxation of Capital Gains,” 40.
78 Inland Revenue Department and The Treasury, “The Taxation of Capital Gains,” 6, 46.
80 Inland Revenue Department and The Treasury, “The Taxation of Capital Gains,” 6, 46.
84 2025 Taskforce, “Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce” 121-122.


105 2025 Taskforce, “Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce,” 19.

106 2025 Taskforce, “Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce,” 19.


116 The evidence suggested that a negative relationship exists between top marginal personal income tax rates and long-run productivity according to how tax rates affect entrepreneurial activity (as measured by firm entry rates). Varita tested whether industries that have high rates of firm entry suffer most from tax. Varita’s estimates of a change in top personal income taxes differed depending on how industries in different countries were structured. One experiment indicated that the effect of reducing the top marginal tax rate from 55% to 50% on the average annual productivity growth rate (over 10 years) ”would be 0.05 percentage points larger for industries with the median firm entry rate than for those with the lowest level of firm entry.” Varita assumed this was a median effect since the top marginal rate effect is nearly zero in industries with the lowest level of firm entry. Further, the size of this effect is different depending on whether or not industries in different countries have strong firm entry rates. L. Vartia, “How Do Taxes Affect Investment and Productivity? An industry-level analysis of OECD countries,” 29. Also cited in A. Johansson et al., “Taxation and Economic Growth,” 27.


125 The Treasury, “Medium Term Tax Policy Challenges and Opportunities,” 8f.

126 The Treasury, “Medium Term Tax Policy Challenges and Opportunities,” 5. The 15 OECD countries (the “OECD-15”) are Canada, Denmark, Finland, France, Germany, Greece, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Sweden, the United Kingdom and the United States.


133 These proposals are indicated and discussed in IRD Policy Advice Division, “An Income Splitting Tax Credit for Families with Children” (Wellington: Inland Revenue Department (IRD), 2009); and IRD Policy Advice Division, “Income Splitting for Families with Children” (Wellington: Inland Revenue Department (IRD), 2008).


135 Maxim Institute, “Submission of Maxim Institute on Income Splitting for Families with Children,” 1.


146 For example, see A. Boersch-Supan, “Capital’s Contribution to Productivity and the Nature of Competition,” Brookings Papers on Economic Activity. Microeconomics (Brookings Institute, 1998).


154 The term “taxodus” has been used by the United Kingdom’s Taxpayers’ Alliance organisation to describe the international tax competition phenomenon. McDonalds joins the Taxodus (The Taxpayers’ Alliance, 2009), http://www.taxpayersalliance.com/research/2009/07/mcdonalds-joins-the-taxodus.html (accessed September 2009).


157 Such credit systems have never been implemented in a way that fully achieves this. Countries usually limit the credit to the tax that would have been paid under domestic law and most countries exempt business income by taxing it when it is repatriated. This is supposed to protect fair competition within host countries and also means that if a firm changes hands, from one multinational group to another, the corporate taxes levied on its profits are not affected. However, in this case theory is not the same as practice and most countries do not employ a ‘pure’ exemption system like this, only applying the credit system in certain situations. The OECD notes that during the past 15 years, countries have moved from a credit to an exemption system, because this gives resident multinational firms a competitive edge. A. Johansson et al., “Taxation and Economic Growth,” 39–40.


SECTION 5

Research findings: The link between taxation, government spending and prosperity

FOCUS POINTS

• The quality of a country’s institutions, including government, matters for growing the economy.
• If government spending is curbed to 2004-05 levels, the amount of tax we have to pay could be lowered.
• It is also important to make sure required government spending really does add value to people’s lives and the economy so as to ameliorate its negative effects, such as the deadweight costs of raising taxation.

SURVEY DATA: WHAT DO NEW ZEALANDERS THINK ABOUT GOVERNMENT SPENDING?

According to a UMR Omnibus telephone survey of a representative sample of 750 New Zealanders aged 18 years and over, with a margin of error of +/- 3.6%:

• 50% of participants think the government should spend about the same as it presently spends on KiwiSaver incentives;
• 47% of participants think the government should spend about the same as it presently spends on New Zealand Superannuation;
• 47% of participants think the government should spend about the same as it presently spends on “20 hours free” early childhood education;
• 46% of participants think the government should spend about the same as it presently spends on Working for Families; and
• 48% of participants think the government should spend about the same as it presently spends on interest-free student loans.

Most participants favoured about the same spending on each of the programmes surveyed, except for interest-free student loans. On this issue, opinion was more divided. 25% of participants, with a margin of error of +/- 3.6%, think the government should spend more, while 24% think the government should spend less.

Up to now we have focused on how tax can affect productivity and economic growth. However, leaving the discussion there would miss out something else extremely important to a country’s productivity growth: the government. Productivity is determined not only by factors like the quantity of capital investment but also by the environment in which that production and investment occur. Business, work and the economy all exist in the real world of countries with laws and regulations. These environments will have an impact on the ease or difficulty businesses have when they operate and on people’s incentives to use resources well. This means a lot hinges on the quality of a country’s institutional
structures, such as business’s legal and regulatory framework, which are largely the government’s responsibility. Also relevant is the public sector’s size and efficiency.

The relationship between government spending and growth has also played a big hand in the economy for much of our post-war history. From the 1946 Fraser Government until the 1984 Lange Government, there was a “commitment to state planning, management and regulation, and an egalitarian redistribution of wealth from the relatively rich to the relatively poor through the taxation and social welfare systems.” The prevailing economic wisdom at the time was “Keynesianism,” named after the British economist John Maynard Keynes. Among other things, Keynes believed that when an economic crisis occurs and markets are not growing or social inequalities are rife, then the government should spend money to stimulate demand and provide jobs—funded by running deficits. Recent years have seen a drift back to a larger role for the government in the economy. Keynes’ basic ideas are still attractive to politicians today. The Prime Minister’s national cycleway plan is just one example. However, evidence suggests that Keynesian-style spending, funded by debt, may not be effective and can actually harm long-run economic growth, particularly if it becomes the norm.

As well as institutional questions, this section considers government spending issues by discussing what the features of a growth-friendly fiscal structure could be. This is a framework for how government can tax and spend our money in the most efficient way so that it can make a positive difference to productivity and long-run growth, for the sake of the people and institutions of a country in the long-term. The fiscal structure is a way of thinking about what determines government spending, including: the composition of government spending; the tax structure; and the size of government. Looking at matters from a fiscal structure perspective has the advantage of being able to demonstrate the way that government spending may affect the growth drivers.

Our UMR research suggests, however, that there is currently little appetite among the general public to change current government spending patterns as most participants favoured spending about the same on the existing government spending programmes they were asked their opinion of. If the government were to reduce spending, it would have to explain why the changes are necessary and important.

The first specific question we consider is how much government we need. If there is scope to reduce government spending from its current levels, then that is one way that we can lower how much tax we have to pay as well as the associated costs of collecting tax.

HOW MUCH GOVERNMENT DO WE NEED?

What is the relationship between government size, or amount of government spending, and economic growth? Even the most ardent supporters of limited government concede that we need some government to help create an environment where free exchange can occur, for example, by enforcing the rule of law and the value of money, and by protecting competition. We need government to enforce contracts and private property rights. We also need government to develop infrastructure which everyone uses but nobody else is likely to build. Without a proper and good government to perform these functions, economic growth is likely to be very low.

Institutions and economic freedom

Of course government has other legitimate functions not related to economic growth—such as maintaining and enforcing the criminal law and providing a social safety net when communities cannot—but the heart of what we are focusing on now is the relationship between the degree of institutional freedom and economic growth. By institutions we are referring not only to government structures, but also to the written and unwritten rules of human interaction that give us confidence that transactions are predictable and safe. Without trust in human institutions our capacity to relate and to conduct business would be severely reduced and life would be chaotic. For example, if growing an economy is like playing rugby, and the growth drivers are like the moves you can make, then institutions are like the rules of the game. They matter as much as how you decide to make a move with the ball because common rules and ways of doing things ensure not only that everyone can play the game fairly, but also that there is a game to play. This means the effects of government on growth are not only restricted to the
direct policies it makes about how physical capital is used, how much education it should provide or how much investment it may stimulate. Growth depends a lot on the government's role in protecting the conditions of a free society.

Broad surveys of the relationship between economic freedom and greater prosperity have found evidence that how free a society is has an impact on growth. For example, the Fraser Institute in Canada produces an index of economic freedom that began in the 1980s. It measures to what extent countries' policies and institutions support economic freedom. The index's measures of economic freedom include the capacity to make voluntary choices for ourselves and others, freedom of competition, and security of privately owned property. These are vital pillars of human flourishing.

Economic freedom fosters economic growth because it encourages wealth creation. Some reasons for this are:

- secure property rights and lower taxes encourage individuals to invest more, work more and generally be more productive;
- freedom of entry to and exit from markets and freedom of competition leads to more efficient business, higher quality products and services and better information about consumers' preferences; and
- an environment that is not overly restrictive allows entrepreneurial innovation and discovery of new technologies which help drive higher productivity growth.

Studies that have used the Fraser Institute's findings to explore the relationship between economic freedom and growth have found that economic reforms can have a substantial impact on long-run growth rates, as well as on growth during the transition to a new higher growth rate. Institutional reforms to simplify the tax system, deregulate the economy and to individualise employees' contracts, like those New Zealand undertook between about 1985 and 1995, contributed to growth rates 2% higher than otherwise would have been experienced.

New Zealand economist Tim Hazledine and Australian economist John Quiggin have questioned whether the institutional and policy changes of the 1980s and 1990s really improved New Zealand's economic situation. They argue that since 1984 the incremental approach to policy change in Australia and the presence of an upper house (which slows down the legislative process), as opposed to the deep and swift change in New Zealand and the absence of checks and balances on government, led to the 33% wage gap between the two countries by 2000.

It is worth noting that there are several problems with Hazledine and Quiggin's interpretation, however. First, we should remember that Australia's economy is much different to New Zealand's. For example, New Zealand has a smaller domestic market for products and services, which reduces the opportunity for growth, and firms operating in Australia invest more per worker than firms operating in New Zealand. Second, by the authors' own admission, when comparing outcomes in different countries you cannot test whether the outcomes would have been different by conducting an experiment. Hazledine and Quiggin have surmised that because Australia and New Zealand have broadly similar institutional structures things would have been different in New Zealand if government had followed a gradualist reform path. We are not in a position to test this given that we cannot turn back the clock and try again doing things differently.

In its 2009 report, the 2025 Taskforce asserted that structural problems in New Zealand's economy, like highly subsidised industry and a closed market, which have contributed to the income gap between Australia and elsewhere, began to develop in the 1930s—not 1984. They also noted that the period of accelerated reform to New Zealand's institutions and economy were required to bring skyrocketing inflation, government deficits and foreign debt under control and to create the conditions for capital and workers to move to more efficient industries. The restructuring caused economic upheaval which contributed to the wage gap. The really important issue is that New Zealand's growth performance improved after the restructuring. Economists who have analysed New Zealand's GDP data have detected changes in New Zealand's growth characteristics during the 1990s. In particular, GDP growth shifted to a new high growth path in 1993 and remained there for some time. This is thought to be caused by New Zealand's economic reforms of the 1980s that boosted the sustainable growth rate and the health of the economy. This shows how the effects of
institutional reforms that improve economic freedom and things like wages take time to filter through. It is difficult to pin the blame for the wage gap that has developed between Australia and New Zealand over the past decade on the reforms of 25 years ago. Rather it seems that those reforms may have helped, not hurt, the economy in the long run.18

Government size
Given that some government is good, but too much is detrimental, how much taxpayers' money should the government be spending? If the core responsibilities of the state are protecting the peace and security of a community, enacting justice through the legal system and providing a social safety net,19 then perhaps the government could be smaller than it is now. That said, the size of government will be a reflection of the pressures of economic cycles—recessions and periods of growth—and government spending priorities. Historically, New Zealand has not had as large a government as it does today. Between 1900 and 1972 government expenditure stayed roughly within the range of 14% to 25% of GDP.20 Between 1971-72 and 1996-97 total central government expenditure on administration, defence and foreign affairs, education, transport and communications and industry was 15% of GDP. A generous welfare safety net, including retirement savings, has also been estimated to cost between 10% and 15% of GDP.21 Taken together, these figures suggest government size could drop to somewhere around 30% of GDP, or perhaps lower, depending on the savings that could be made or whether the community and entrepreneurs could provide some welfare and services which the government currently does.

The 2025 Taskforce also believes that government spending could be reduced to about 30% of GDP.22 It could not understand why current spending levels were justified when only as short a time ago as 2004, the government did everything it does with a 30% of GDP share. The Taskforce therefore thinks it is possible—and necessary—to reduce spending levels back to 29% of GDP by the year 2012-13. The Taskforce believes this is possible both because the pace of the spending fall would be similar to its rise and because the adjustment required would be similar to what New Zealand achieved at the beginning of the 1990s. Once spending is brought under control, the Taskforce believes that total real spending could continue to increase, "but real per capita spending would be held constant."23 This would prevent real per capita core Crown operating expenditure from growing beyond a reasonable boundary.

There could potentially be significant growth gains from these sorts of measures. In major work published in 1996 based on his neoclassical growth regression studies, economist Robert Barro wrote that it would be possible to raise the long run per capita growth rate by a "few tenths of a percentage point by cutting tax rates and non-productive government spending."24 Even if they sound small, Barro argues that this magnitude of growth increases are "worth the trouble" for raising long-run growth, especially in wealthy, developed countries which do not appear to average long-run growth rates of higher than 2%.25

The message is that smaller government could be achieved by cutting back on taxes and government spending, and then not letting spending grow faster than the growth rate. However, general spending cuts to would also need to include social spending cuts, and lower taxes. This could be difficult since welfare spending is hard to roll back once recipients are locked in. Taxes are also difficult to lower when there is high demand for welfare. There will also be demographic pressures in the near future, such as a rise in the share of retirees to workers.26

The task is not easy, but it is crucial. Treasury Secretary John Whitehead had this to say about the amount consumed by the public sector:27

Over the past 5 years, output in the non-tradeable sector, which includes government, grew by 15%, but the tradeable sector—the part of the economy that really drives competition and national productivity—contracted by around 10%. To help New Zealand compete internationally and lower costs to exporters, we have to raise the quality of public spending and ensure the lion's share of increased national resources goes not to the public but to the private sector. Every dollar that is spent by the public sector is a dollar that is not spent on business investment, or left in taxpayers' pockets, or saved.

A recent study from the London-based think tank, Policy Exchange points out the overall negative effect of increased public spending on growth. They argue:28
TAX, GOVERNMENT SPENDING AND GROWTH MODELS

Considering how much government we need is the first step in informing us how much tax we should pay and where we could reduce government size. Further, the research looking at the deadweight losses of taxation alerts us to the fact that whatever the size of government and the level of taxation, raising revenue has its costs. Given the costs associated with raising taxation and government size, recent research and commentary about how the tax structure and the composition of government spending affects economic growth is important because it helps to illustrate how taxation and the government spending it funds could be designed so that it is the most growth-friendly. Having discussed the tax structure in section 4, in this section we examine what a growth-friendly fiscal structure is. This can give governments a framework which they might use to help prioritise spending so that it has the most positive growth effect.

The impact of fiscal structures on growth

To what extent can government expenditure raise the long-run economic growth rate? A 1990 study by Robert Barro showed that certain forms of government expenditure can, in principle, improve economic growth, although Barro also cautioned that financing that expenditure by taxation will usually have a negative impact on growth. Some early growth models predicted that while taxation and government expenditure could have an impact on savings and investment in human and physical capital, they did not make a difference when the economy transitioned to a new long-run steady-state growth path. This is because the source of long-run growth in these models is population growth or unspecified technology—factors “exogenous,” or from outside the model. These early growth models were nevertheless helpful for pointing out how increasing workforce participation could affect per capita income. If government spending can increase the inputs, like labour, into the production process it can impact growth, but only the growth path and the transition path. According to these models, taxation and government spending does not have an impact on raising the long-run growth rate at the new level.

More important for increasing the long-run
growth rate are constant or increasing returns to scale for production factors that are the product of investment and savings, indicated by the growth drivers of innovation, enterprise, investment and human capital. Long-run growth is therefore said to be "endogenous"—growth is explained from "within the model by knowledge spillovers, human capital," such as education and skills training, "and R&D activity." Investment decisions are related to all these sorts of inputs. Government can have an influence on these decisions by setting up a good legal framework for markets but beyond that, its hands are tied.

Government spending can also influence private decisions to invest by making it marginally more attractive to put money into a project that might be difficult for private interests to do on their own. For example, building a motorway provides work and opportunities for private road construction firms to invest in new technologies and human capital, encouraging capital accumulation in the inputs that lead to higher output growth that might not have occurred before. Government spending might also have an effect on how much people invest in education. If the returns do not decline over time, then education should contribute to long-run growth by improving (through innovation) the quality of production.

Empirical evidence of tax and government spending growth effects

These insights have had a considerable impact on empirical research. There is a strong and growing body of research that supports the proposition that the composition of government spending, and the taxes that finance it, make a difference to the long-run growth rate. We consider results from some of the most recent studies that have examined the effect of government spending and taxation on growth.

The government spending composition effect

A 1992 study by Robert Barro and Xavier Sala-i-Martin suggested that government money which was used for "productive" spending would help growth, while "non-productive" spending on consumable goods and services only affected the growth rate, "if financed by distortionary taxes." Later models went further and showed that the mix of productive expenditure was also important for growth.

It is now more common for studies to make a distinction between "productive" or 'unproductive' spending (where the former appear in private production functions). For example, spending on general public services like defence, education, health or transport and communication is categorised as productive. Non-productive expenditure refers to things like social security and welfare expenditure or recreation expenditure. It is not easy to neatly define the categories of productive and unproductive though, because "public spending has varying degrees of productive or unproductive elements," and therefore varying rates of return. For example, health, education and investment in public infrastructure can either help improve growth; be neutral to growth because they affect social welfare; or harm growth by fostering an entitlement culture. This means that over time the growth effects of government spending are very likely to vary in size and duration across different spending types.

Another area that has been studied is the effect of how government spending is financed. A 2001 study developed a model which examined the impact of budget deficits on growth. Assuming expenditures were financed by taxes, grants and three forms of deficit finance (domestic and international borrowing, and seigniorage) this study showed that the growth impacts of deficits are ambiguous. This is because they depend on both a government’s mix of current deficit-financing and its outstanding debt. Like this study, more economists now accept that to adequately test for the growth effects of different types of public expenditure, and other fiscal variables, models should accommodate the government budget constraint—that is, a closed system of expenditures, revenues and deficits. It is a closed system because "any change in one element must be balanced by an equal and opposite change in some other element(s)." For instance, "as [the] government must be able to pay back the debt which it raises, the budget constraint implies that the present value of the benefits of expenditure must exceed the present value of the costs of taxation."

In a 2009 study, Norman Gemmell, and economists Richard Kneller and Ismael Sanz examined expenditure composition effects that incorporated the budget constraint. They tested for the growth effects of different kinds of spending
in OECD countries from the 1970s to 2004. They made a distinction between ‘‘distortionary’ or ‘non-distortionary’ taxes (with respect to investment). That is, “taxes which distort accumulation decisions can affect long run growth,” such as income, capital and property assets, are said to be distortionary. Non-distortionary taxes are those like consumption taxes which are less sensitive to investment decisions.

Gemmell and others agreed that the recent literature shows that government spending on infrastructure and education tends to be growth-enhancing in both developed and developing countries. They also noted that the way spending is financed matters because this can involve raising revenue from reducing other areas of government spending or higher taxes and budget deficits that carry various distortionary effects. The effects of financing public expenditure from different sorts of taxes or deficits are summarised in figure 5.1, showing that non-distortionary taxes have a positive effect on growth, distortionary taxes can have a negative effect, and budget deficits can have a negative to ambiguous effect.

By using available long time-series data and data of short-term spending responses from across OECD countries, Gemmell and others’ own analysis considered these financing aspects. Their approach allowed them to examine the growth impacts of changes in total government spending along with changes in the amount allocated to various types of spending. Their initial results suggested that there were only small growth effects from increases in total expenditure financed by increased deficits and when all types of spending were held constant at current levels. Stronger evidence was found from switching spending to transport, communications and education, with support for smaller positive effects for health and defence. Positive growth effects were also found when spending was switched away from social welfare. These results emphasise that conclusions about the impact of different spending on growth is likely to depend on whether they are financed by taxes or budget deficits.

When they dug deeper into their data and examined whether it made a difference if spending was on consumption or investment, their results suggested that spending increases on productive public goods (defence, general public services, transport and communications, and recreational services) and merit goods (health, education, housing) on average had a small positive effect on long-run growth. Shifts towards transfers (social welfare and subsidies) and residual spending (mainly interest payments) reduced growth by a small amount.

While such findings shed more light on spending composition effects, governments may face other issues that could affect the composition of public expenditure at a given time. One is the important observation, which we have just witnessed in New Zealand, that lower growth may in fact cause governments to increase total public spending because a downturn increases short-term demand for income assistance. At the same time, spending on long-term projects can be difficult to pull back. This also shows how changes in the growth rate across time have an impact on how money is spent on different expenditure types. Slower growth might mean government spends more on social welfare to keep living standards up until the economy recovers. Ironically, the research suggests that this spending could create a further drag on growth. Finally, just because the growth-spending research might indicate that there is a category of potentially productive public expenditure, like capital spending on infrastructure, this does not mean automatically that every instance of that type

### Figure 5.1. Growth effects of taxes, public expenditures and budget deficits or surpluses

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<th>UNPRODUCTIVE</th>
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of spending will be productive or represent value for money. This means we should not fall into the ill-considered conclusion that just because some public spending might be more growth-friendly, it should be increased relative to current government spending.56

The timing and persistence of spending effects

Not all spending effects are realised at the time money is spent.56 For example, New Zealand’s first railway and electric telegraph networks rapidly expanded over their first 10 to 15 years of use; however they also experienced significant further uptake 20 to 25 years after the initial investment.57 The final question Gemmell and others investigated in their 2009 study was how long various types of spending took to reach close to their maximum growth effect and how observed changes in governments’ spending policies raised or lowered growth over the period 1990 to 2004.58 This analysis showed that the growth effects for spending on transport, communications and education took fewer years on average to reach 90% of their long-run value than those for health, social welfare and defence.

The consideration of time incorporated into Gemmell’s study showed that social welfare spending changed from having a negative impact on growth to being neutral to growth.59 This supports the view that different spending effects will be observed at different times depending on whether the economy is expanding or contracting. However, this result assumes “that total spending remains unchanged and increased social welfare replaces other spending on a pro-rata [proportional] basis.”60 Further, the growth effect, like all the others, also depends on how the expenditure is financed.

In a subsequent study, Gemmell and others investigated how quickly government spending impacts occur and whether or not they persist in the long term.61 They compared the results from studies which examined the effects of short-term fiscal shocks with those examining long-term effects. Their study is also interesting because it included an analysis of whether a budget deficit was used to pay for tax and government spending changes. Gemmell and others’ regressions showed that “there are small negative growth effects from distortionary (and other) taxes and small positive effects from productive (and other) expenditures.”62 Their findings indicated that distortionary and other taxes can be more harmful to economic growth than deficits.63 This shows that paying down the deficit and collecting tax from distortionary taxes is likely to have net negative growth effects. However, productive public spending that was financed from a deficit produced modest positive growth effects.

Gemmell and others also discovered that when the impact of deficit-financing was included in their regression analyses, non-distortionary taxes produced positive growth effects and non-productive expenditures produced negative effects. This indicates that when non-distortionary taxes finance spending, rather than a deficit, there are positive growth effects. It is also apparent from this study that when unproductive spending is financed by a deficit, this has a negative effect on growth. Gemmell and others’ findings are summarised as a ranking of these effects in figure 5.2.

Gemmell and others results suggest that long-run growth effects—in these sorts of studies typically five to ten years64—of government spending are achieved quickly. However, short-run spending effects—in these sorts of studies typically three to five years65—also persist, “in principle.”66 They say “in principle” because in practice government spending policies in OECD countries constantly change, meaning that it is difficult to see persistent increases or decreases in growth.

They also found that the positive growth effects of changes towards productive public spending

<table>
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<th>Figure 5.2. Ranking of tax or deficit financing on growth</th>
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<td><strong>Growth effects</strong></td>
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<tr>
<td>Best</td>
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SECTION 5  |  Research findings: The link between taxation, government spending and prosperity

have often been counteracted by tax changes that have negative effects and undo the good that was done.\textsuperscript{67}

As before, Gemmell and others also considered the potential impact on short- and long-run GDP.\textsuperscript{68} Looking at six countries (Canada, United States, France, United Kingdom, Australia and New Zealand) they found that GDP level effects were typically about 1\% to 2\% after 5 years, increasing to 2\% to 3\% after 10 years and 4\% after 15 years. Further, they found that when a 1\% of GDP distortionary tax increase was simulated with a 1\% productive expenditure increase, the effect would be mildly growth-inhibiting, so much that even after 20 years GDP stayed around 0.5\% lower than it would have been without the change.

Gemmell and others suggested that their empirical evidence means that the largest spending impacts on growth are relatively short-run and that these can be expected to persist; so long as the relevant spending policy changes also persist.\textsuperscript{69}

This is why observed government spending effects on "long-run output levels generally turn out to be small both because fiscal policy is volatile and because growth-enhancing and growth-retarding fiscal changes often occur simultaneously."\textsuperscript{70}

The result of financing spending through growth-inhibiting taxes, and of reversing spending decisions after a short period of time, is that the economic growth rate is likely to stay at basically the same level.

A better way of thinking about government size and expenditure composition effects might be to consider the size and composition effects of government spending together.\textsuperscript{71}

A 2001 OECD study found that about one half of a percentage point increase in government consumption (the expenditure to GDP ratio) could cause a 0.6 to 0.7\% direct reduction in per capita output.\textsuperscript{72} The same OECD study found that welfare transfer payments have an even more negative effect on growth than government consumption.

Driving the point home—Auckland’s Northern Motorway

The recent development and extension of the Northern Motorway is a great study of the growth effects that can accrue from infrastructure. In this case, not just from benefits brought by improved productivity for industry using the motorway, but also for the communities clustered along the motorway. Between 1995 and 2000, Auckland’s Northern Motorway was extended from near Albany, linking with Silverdale and Orewa. The major extension ran over time and it cost (excluding land) approximately double its budget. Nevertheless, when the motorway project was evaluated before construction began it was found to be a worthwhile investment, in terms of vehicle operating cost savings, reduced travel times, reduced maintenance costs and environmental benefits.\textsuperscript{73}

This evaluation did not consider benefits like the extra vehicles carrying more employees to more firms, or more residents to amenities like beaches, parks or swimming pools. New Zealand economist Arthur Grimes revised the benefits by considering how land values changed to assess the motorway’s productivity and amenity benefits.\textsuperscript{74} Grimes also examined population, employment and income changes around the new motorway exits.

Grimes’ analysis showed that between 1991 and 2006 population and employment increased rapidly at both the new North Shore and Rodney motorway exits and just north of the Orewa exit at Warkworth. Population and employment grew by 57\% and 67\%, respectively, within three kilometres of the new North Shore exits; while in the Orewa-Whangaparaoa they were 80\% and 120\%, respectively. This compared with growth of 38\% and 55\% for the same variables within the Auckland region. As one would expect, areas further from the nearest new exit also grew but the growth rate tapered away as the distance away increased.

The motorway development reveals how sometimes investing in public infrastructure can improve the livelihood of more people than just those who already use the new investment. We should also think about how the infrastructure can produce benefits above the generated extra output. This example should also prod us to think about whether new “infrastructure is a down-payment on the option of developing new opportunities as they present themselves, since without the infrastructure the new opportunities would not be (privately) profitable.”\textsuperscript{75}
When taxes fund this kind of spending the economic costs are greater. It is not unreasonable to ask whether it is possible to reduce income taxes and welfare spending.

**To what extent should we rely on regression studies to inform government spending decisions?**

Many of the studies we have discussed in this and the previous section are regression analyses—a form of analysis that considers the strength of associations between variables. While the findings of the most recent regression studies are much more robust than earlier models from the 1990s, we should still be cautious about relying on these studies’ results for designing tax or fiscal policy. The issue is that policymakers should not assume that the findings of regression studies using cross-country data can be reproduced exactly in their country. As we have discussed a few times, the particular fiscal and tax situation and the social objectives of government in each country are important for determining the design of specific tax policies. The interpretation of results from cross-country growth regressions can also be limited if it is difficult to establish causality if one or more of the explanatory variables in the regression are jointly determined (known as simultaneity).

Results of studies examining tax effects across a broad range of OECD countries would therefore benefit from confirmation by micro-economic and/or time-series evidence. These kinds of studies could study more precisely how people respond to taxes and spending over time in particular countries.

We should also be careful about inferring too much from studies using standardised data from across different countries that have different levels of wealth, tax and expenditure. Policy changes in particular countries are not easily detectable with the kind of techniques that Gemmell and others have used to explain tax and spending growth effects.

The same sorts of considerations apply when considering what will count as productive and non-productive spending. The inference of the studies we have discussed is that to increase growth, governments should concentrate on designated categories of productive spending like education, transport and communications and public infrastructure. However, in some situations spending normally categorised as unproductive will actually be productive. Take security, for example. It might be the case that spending on security helps provide the stability required for growth, such as in states that have been racked by civil war like Nigeria or Rwanda. New Zealand’s history also shows that sometimes supposedly productive expenditure does not always lead to higher growth. Robert Muldoon’s “Think Big” infrastructure programmes of the 1970s and 1980s—meant to make New Zealand more energy- and resource-sufficient—actually contributed to public debt.

While regression studies point out where the relationship between taxation, spending and growth may be strong, we should not become too taken with correlations derived from abstract models. For example, while endogenous growth models show that capital formation and technology are important for raising growth, they cannot flourish without a favourable regulatory and tax environment that fosters business. We should not be quick to forget that there is strong potential for government spending to “crowd out” individuals’ and firms’ investment as well. For example, while education is a public good and it may be just to subsidise state schools, this might also reduce incentives for independent school proprietors to expand or start new schools.

Despite these limitations, the results obtained from the kind of regression studies described here still provide a useful framework for policymakers to consider the growth trade-offs of different taxes or using deficits to finance public spending. This is because this research shows what kind of spending could generate better opportunities for entrepreneurs and firms, who will create jobs, thereby reducing government dependency and raising living standards. They also indicate what kind of taxes government should rely on to fund that expenditure and caution reliance on deficit financing. An implication of these studies is that the government should drive down government size and pay attention to the fiscal structure to boost New Zealand’s per capita income.

**CONCLUSION**

This section has discussed how government can either have a positive or a negative effect on economic growth. We believe it has been shown that both the
composition and quality of government spending and government size and institutional quality matter for improving economic growth. We have discussed how institutions are essential for protecting the freedoms that foster higher growth. Government has a job to provide those institutions, such as the rule of law and a light, transparent regulatory framework.83

However, once government exceeds a certain size it will almost surely reduce growth. Big government may be the result of too much social welfare spending. This does not mean we should have next-to-no government. Instead government spending should be set at the level required for it to perform its core functions and no more, which may allow taxpayers to enjoy lower, growth-enhancing tax rates.

Because we pay tax to fund government it is also important for us to consider what kind of spending is value for money and will produce economic growth and raise living standards. For instance, we have discussed research findings that show government can play a positive role by spending money on education, or certain kinds of infrastructure.84 The empirical evidence also strongly suggests some important implications for designing tax and fiscal policy. First, the composition of taxes and expenditures is crucial for sustaining higher long-run growth. Growth-friendly taxes should be used as much as possible to finance growth-friendly government spending. If this does not happen then it is likely government spending could offset any positive growth gains from changing the tax structure. Second, since the long-run growth effects of fiscal policy are usually achieved within a few years, the fiscal policy effects on growth may be considered significant in the short-run and also persistent in the long-run, so long as the initial fiscal policy changes are not reversed.

There are times when government should spend money to cushion the blow of untimely events like economic recessions, or to provide public goods which the communities of civil society cannot provide by themselves. However, these are not reasons to believe that government spending always has beneficial growth effects. We suggest government size could be reduced by cutting unnecessary or wasteful spending and lowering taxes, without necessarily harming the overall welfare of society. This would ensure government acts as the institution responsible for protecting the freedoms which are conducive to higher growth, better living standards and the integrity of the social fabric.

ENDNOTES


6. The Heritage Foundation, “Index of Economic Freedom” (Washington D.C.: 2009), 1. For example, in a paper arguing for a much lower growth-maximising tax rate, economist Gerald Scully wrote that, “it is recognised that government expenditures contribute to economic growth, while taxes retard growth. Some goods and services provided by government such as a legal system, enforcement of property rights and contracts, a set of measures and standards, an infrastructure, the provision of national defence, public


13 2025 Taskforce, "Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce," 36-37.


15 2025 Taskforce, "Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce," 37.

16 2025 Taskforce, "Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce," 36-37.


18 2025 Taskforce, "Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce," 37.


22 2025 Taskforce, "Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce," 85.

23 2025 Taskforce, "Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce," 85.


25 R.J. Barro, Determinants of Economic Growth: A cross-country empirical study, 45-46.


32 The Treasury, "Half Year Economic and Fiscal Update" (Wellington: 2009), 33.


35 See the discussion of this point in Felicity Barker and others: "According to neoclassical growth models, while taxation and government expenditure initiatives that influence the savings rate or incentives to invest in physical or human capital may affect the equilibrium factor ratios, they do not affect steady-state long-run growth. The source of economic growth in these models is exogenous, being unspecified technological change." F. Barker, R.A. Buckle and R.W. St Clair, "Roles of Fiscal Policy in New Zealand," 15.


52 For example, a one percentage point increase in the share of transport and communications spending generates, on average, a 0.12 percentage point increase in the long-run growth rate. By contrast, when the share of health spending was increased it boosted growth by only 0.05 percentage points. N. Gemmell, R. Kneller and I. Sanz, “The Composition of Government Expenditure and Economic Growth: Some evidence from OECD countries,” 11.


55 Personal communication with Bryce Wilkinson, 22 March 2010. In a 2003 study, a New Zealand economist, Arthur Grimes, examined New Zealand’s fiscal structure to investigate whether our government has retarded economic growth. Grimes found that overall government revenue came more from income taxes, while government budgetary flows were skewed against production according to two different measures. First is the difference between expenditure on economic affairs, which can assist production, and the direct cost to firms created by corporate taxes. Second, the difference between government investment expenditures (interpreted here to cover economic affairs, health and education) and taxes on production, including personal and corporate taxes (these figures remained stable irrespective of whether single-year data was used for the 2001 year or average 5-year data). Using the first indicator, Grimes found that the OECD had a positive 1.1% of GDP subsidy for production, while New Zealand had a 1.2% negative figure that is, a net tax. On the second indicator, the OECD figure revealed a positive average 2.4% of GDP subsidy to production, while New Zealand had a negative figure of 5.1%, again revealing a net tax on production. Grimes believed this situation was likely to be growth inhibiting. Grimes’ study has been the subject of some criticism, however, relating to whether government size only has a minor effect on long-run growth. New Zealand economist Bryce Wilkinson argues that Grimes does not appear to take account of the distorting costs of taxation and spending to output that contemporary studies for New Zealand and the OECD have put at anywhere between 0.5% to 0.7% of GDP (with a 1% rise in the share of tax to GDP). Wilkinson also questions whether Grimes’ study of government spending is consistent. He argues that Grimes disputes whether the share of spending to GDP matters, but accepts that the share of tax to GDP does. Thinking about it logically, both measures of government size matter because they are related. Changing the tax structure or the spending mix does not and should not, rule out reducing government size if money can be saved. See A. Grimes, “Economic Growth and the Size and Structure of Government: Implications for New Zealand,” Motu Working Paper, 03-10 (Wellington: Motu Economic and Public Policy Research Trust and Department of Economics, University of Waikato, 2003), 26-27; and B. Wilkinson, “Restraining Leviathan. A review of the Fiscal Responsibility Act 1994,” 28, 35, 47.


59 N. Gemmell, R. Kneller and I. Sanz, “The Composition of


64. Gemmell and others note that “regression tests for long-run fiscal growth effects in OECD countries have typically relied on cross-section or panel data using 5- or 10-year averages to smooth out short-run effects,” of, for example, 5-yearly averaged data. Scholars may, however, use different techniques to preserve data heterogeneity and impose different time lags on the data to test the persistence of various expenditure composition effects. See the discussion in N. Gemmell, R. Kneller and I. Sanz, “The Timing and Persistence of Fiscal Policy Impacts on Growth: Evidence from OECD countries,” 5-7.

65. For instance, some newer short-term structural vector autoregression (VAR) methodologies consider the long-term to be 20 quarters, which compared to earlier studies is quite a short period of time. Generally, the short-term may be considered as 5 years. N. Gemmell, R. Kneller and I. Sanz, “The Timing and Persistence of Fiscal Policy Impacts on Growth: Evidence from OECD countries,” note 3.


78. See the discussion in A. Lilco and H. Sameen, “Taxation, Growth and Employment,” 19.


In this final section, we introduce a range of recommendations that draw on some major implications of the international and New Zealand research we have discussed. These recommendations indicate the types of changes we believe the research shows are desirable. Moreover, we believe our proposed tax changes could make an important contribution to a “functional economy,” where people and communities can thrive. This is because our tax changes would be favourable to work incentives, innovation, business, and entrepreneurship activities that are important for all of us as they generate wealth, technology, job opportunities and investment opportunities. This activity serves to protect human flourishing and the social fabric.

Our recommendations outlined here are not costed and so should be regarded as introductory, not final. The next and final paper in this series will present costed, recommendations for specific policies. These recommendations will bring together the research in this paper and the previous two papers in this series.

The central theme of the recommendations in this paper is that government should not only flatten and lower personal income tax rates and lower corporate income taxes, but also that government should rely more on a more growth-friendly tax and fiscal structure. The recommendations for change are set out and briefly discussed according to the different tax bases. We believe the changes recommended are achievable together over the medium-term (five to ten years time).

We note at the outset that changes to the tax system must not only take account of theory and data, but also of distributional concerns and other questions of political economy. Changes will inevitably require policy-makers to make trade-offs between revenue and productivity objectives and tolerable distortions to people’s behaviour. This serves as a reminder that there is no “perfect” tax system. The objective should be to limit distortions and inefficiencies so that people are generally better off than before. The same is true when it comes to implementing a more growth-friendly fiscal structure.

Unlike the Tax Working Group, we are not constrained by a requirement that tax reform should be “fiscally neutral.” However, our UMR research survey results suggest that there is currently little appetite for change in government spending patterns (most participants favoured spending more or about the same on certain existing government spending programmes). We believe there is still a case for reducing spending. The government will have to be careful to explain why it is important to change New Zealand’s public spending habits so people understand why they are necessary. Part of this relates to explaining how these changes to government spending can pay for a rebalancing of the tax system that should leave most taxpayers better off. We begin our recommendations by describing how personal income taxes could change.

**Personal income taxes**

The personal income tax base is the largest source of government revenue, at 53% of total tax revenue, but the way government raises that revenue with a progressive rate structure is harmful to economic growth. Our current progressive personal income taxes make living and working in New Zealand less attractive and probably contribute to the fact that 24% of our skilled workforce is currently living overseas. These are good reasons to consider making
New Zealand’s personal income tax rates flatter and simpler.

To make New Zealand’s personal income taxes flatter and simpler over the medium-term, we recommend that a two-step progressive rate structure should be introduced, where:

- the top marginal personal income tax rate is approximately 27%; and
- a low income tax rate is retained for taxpayers who earn up to a threshold set according to a relative measure of low income.

The Tax Working Group did not consider changes to the personal income tax structure beyond the issue of aligning the top marginal tax rate with the corporate and trust rates. We believe the personal income tax structure could, and should, be simplified more than this so that rates are lower and the structure is flatter. We therefore recommend a two-step progressive rate structure, with a top rate of about 27%, effective at an individual income threshold about equivalent to what a low income is. As discussed, this would have the advantages of making work and entrepreneurship more attractive, should reduce the costs of raising income tax and would allow taxpayers to keep more of their own money, for example, by reducing EMTRs.

We recognise that a pure proportional flat tax, while efficient and fair in terms of process, may reduce the disposable incomes of lower-income earners more than is desirable. We also recognise that the personal income tax base will remain one of the major tax bases from which government sources revenue. A two-step progressive tax system would help ensure that government can raise required revenue. It is also likely that the personal income tax revenue loss would be offset by growing the tax base.

We believe that reducing the top marginal tax rates of 38% and 33% could be partly funded by a GST increase to 15% (see the discussion of consumption taxes below). The Tax Working Group costed a reduction in the top personal income tax rates to 27% at $4.05 billion, with a GST of 15% estimated to provide $2.15 billion of additional revenue ($1.9 billion after compensation). However, as this change retained a 10.5% and a 19% rate on personal income, the package we propose would be likely to cost more than this. We believe our proposals are affordable because government spending would also be reduced at the same time as tax changes would be introduced. Figures prepared by the Treasury for the 2025 Taskforce showed that a 20% rate alignment policy across the personal, corporate and trust bases would probably cost $7 billion per annum. The Taskforce believed this was affordable because government spending could be lowered to 29% of GDP by 2012-13—less than five years away.

We also recognise that international tax competition may require New Zealand to reduce its corporate tax rate further in the near future. In this case, if it were affordable we would recommend the top personal income tax rate also fall and align with the new company tax rate to keep the tax system as simple, fair and efficient as possible.

With changes to personal income tax rates, we also believe it is important to reduce the tax rate on income derived from trusts to align with the top personal income rate. This would close another loophole in the tax system whereby some taxpayers derive what is effectively personal income from a trust that holds property for a beneficiary. There are also efficiencies and cost savings to be gained from closing this loophole by aligning rates (see discussion below). It would also improve the fairness of the tax system by requiring more sources of taxpayers’ income to be taxed in the same way at the same rate. Reducing the trust tax rate to 27% is estimated to cost $490 million under the Tax Working Group’s 27% rate alignment package.

In summary, making the rate structure flatter and simpler would improve the efficiency of the tax system by eliminating many of the distortions to taxpayers’ choices. Reducing the most harmful top marginal tax rate would help to improve work incentives for more people on middle incomes and make starting a business more attractive.
to entrepreneurs. Thus a flatter tax structure would encourage more of the activity that drives productivity growth. Along with rate alignment, it would also help to reduce incentives taxpayers have at the moment to reduce their taxable personal income by shifting it onto other bases. Lower top personal income tax rates can also reduce the bias towards consumption and help to boost domestic savings.

A tax-free threshold

We do not recommend that a tax-free threshold should be introduced.

We do not recommend making the first income bracket exempt from tax. A reason for having a tax-free threshold is to help alleviate poverty and income inequality. However, while a tax-free threshold could help lower income earners to keep more of their money it would also do the same for higher income earners.

Further, not all of the very lowest income earners are necessarily the poorest in society. For example, this income bracket may include secondary household earners, and those with wealth in forms other than income, such as superannuitants who often own their home mortgage-free. Analysis of low income taxpayers’ characteristics has shown that different low income earners are likely to be treated quite differently by aspects of the tax-transfer system. Further, only about 60,000 out of 1.4 million low income earners (in 2006-07) earned below $20,000 per annum.

For all these reasons, tax-free zones would not appear to be as beneficial a tax change as more targeted welfare assistance to those in need or lower initial tax rates. The best way to support low income earners who cannot earn enough and are in genuine need is through the welfare system rather than the tax system.

Income splitting for families

We do not recommend that income splitting for families should be introduced.

We have elsewhere supported income splitting for all families. However, we do not think it is now necessary to introduce income splitting for families alongside other changes which would substantially lower and flatten personal income tax rates. In this context, income splitting quickly becomes a second-best option. This is consistent with the caveat which we placed on our support for income splitting: if more fundamental personal income tax reform is likely, then income splitting should not be considered.

Corporate taxes

Corporate taxes are the third largest source of government revenue, contributing about 17%. Corporate taxes should not be unduly high since firms and entrepreneurs are one of the most important engines of economic growth. They create business opportunities and jobs, and encourage technological innovation and higher levels of training and education. Low corporate taxes are also vital for encouraging more foreign investment, a factor which assumes added importance at a time when New Zealand has a shrinking supply of foreign capital to help finance business expansion.

While there is a risk that lowering the corporate tax rate might short-change New Zealand of tax revenue by giving a tax concession to foreign companies operating offshore (discussed in more detail below), we believe there are compelling reasons for lowering corporate taxes and that government should commit to a rate reduction policy while minimising the inefficiencies and incentives to dodge tax that deep, unaligned corporate tax rate cuts could introduce.

To lower the corporate tax rate, we recommend that:

• the 30% rate should be reduced and aligned with personal income and trustee rates at approximately 27% over the medium-term; and

• the corporate tax rate should be further reduced if the top marginal personal income tax rate is also reduced over the medium-term.

The Tax Working Group recommended to the Government that New Zealand’s corporate tax rate should be competitive with other countries’ rates, and that this concern should be balanced against the benefits of rate alignment. We agree, and suggest that both objectives could be achieved if rates were aligned at a lower rate than the Government’s current 30% objective.
We recommend a corporate tax rate of about 27% since this would put us on a more competitive footing with OECD countries. The OECD average corporate tax rate in 2008 was 27%, while for small OECD countries like New Zealand the average corporate tax rate was 24%. It is also possible that Australia will drop its corporate tax rate in the short-term. The Tax Working Group estimated that dropping the corporate tax rate to 27% would cost $500 million under its 27% rate alignment package.

In recommending a rate of about 27%, we considered whether New Zealand needs to drop its corporate tax rate significantly. For instance, if foreign firms locate in New Zealand as a matter of necessity to serve the market here, then they will not be as sensitive to taxes. It is not clear whether foreign firms operating in New Zealand are doing this or not. Perhaps the best proxy measure we have of this activity is foreign-owned firms’ after-tax returns on New Zealand assets. Inland Revenue and Treasury have estimated an average after-tax return on foreign-owned firms’ total New Zealand assets of 16%, compared to 10% for domestic firms. Inland Revenue thought that it was possible this indicated economic rents were present, commenting, “rents could exist because firms have established plants in New Zealand from which to sell goods into our region rather than to sell goods to New Zealanders only.” We cannot tell from the data available to us if they are firm-specific or location-specific. While acknowledging the risk, we believe, on the whole, it is better to have a lower corporate tax rate to stimulate capital and drive higher economic growth.

Further, there is currently a big problem with the wide gap between the top marginal personal income tax rate and the corporate and trustee tax rates. This encourages taxpayers to channel their income into companies and trusts and undermines the tax system’s integrity. A quick fix could be tightening the rules to require both profits and losses of loss attributing qualifying companies (LAQCs) to flow through to company partners to make it less attractive for individuals to use an LAQC to reduce their taxable personal income. However, this is not enough by itself as it does not solve the problem with the wide gap between different marginal rates.

A rate alignment policy, at around 27%, in concert with a full dividend imputation system, is also a good idea for making sure that corporate income earned by domestic shareholders is taxed at an appropriate marginal rate. Further, taxpayers would have much less reason to defer or avoid tax by funnelling their personal income and assets into closely held companies or trusts, though some taxpayers will still avoid higher EMTRs caused by the abatement of income assistance, like Working for Families payments. Generally, though, rate alignment should improve the efficiency of the tax system by boosting its revenue-gathering integrity and lowering administration and compliance costs.

We also believe that a rate alignment policy is sensible because it could eliminate the gaps that exist now between the rates on different tax bases which make the tax system more complex. For example, making deep cuts to corporate taxes, such as below 20%, would probably mean measures such as the double taxation of firms’ profits, surcharges on after-tax investment income and a capital gains tax would be required to reduce incentives for taxpayers to derive their personal income from a firm. Even a small unaligned rate reduction would promote this sort of behaviour. These sorts of measures would increase administration and compliance costs and would make the tax system more of a hassle for domestic business owners, investors and employees.

We recognise that firms and industry may require financial support that only the government can provide to develop new, innovative productivity-enhancing technologies. With respect to whether government should use R&D tax credits, we believe that their use should be weighed against the likely deadweight and activity reclassification costs that such credits are likely to generate. If used, the credits should be designed and targeted at the kind of R&D required to have the most innovative potential. This would require government and industry to dialogue about whether a tax credit is the most effective means of support.

In summary, we generally prefer a rate alignment policy over a single deep cut to the corporate tax rate. Nevertheless, we believe that New Zealand should consider dropping its corporate tax rate further when it becomes affordable to drop the top marginal personal income and trustee tax rates at the same time. This would help New Zealand to enjoy more of the important benefits that flow from lower corporate taxes while avoiding some of the risks of a race to the bottom in the international tax competition stakes. However, since both personal
income and corporate taxes are significant workhorses of the tax system, it is likely that government will still rely on them heavily in the future to raise most revenue. If deep rate reductions across both bases were considered in the short-term, that is less than five years, they would depend on raising enough replacement revenue from other bases. It is probably unrealistic to expect that we can make dramatic cuts to these taxes below rates of between 27% and 25%, at least in the short- to medium-term.

Savings and investment taxes

Savings have received much attention by recent governments. A reduction of the PIE tax rate from 33% to 30% and the introduction of KiwiSaver, with its raft of employer and employee tax relief and investment incentives, have somewhat distorted investment choices. We believe that the different tax rates on savings have become too complicated, encourage tax planning and are not allowing capital to flow to the most efficient investment options. In the case of KiwiSaver, taxpayers’ money is used to encourage and help fund this activity.

To correct these complexities and distortions, we recommend that:

• the trust tax rate should be lowered from 33% to align with the personal income and corporate tax rate over the medium-term;
• the PIE tax rate should align with personal income, corporate and trustee tax rates over the medium-term; and
• KiwiSaver tax incentives for employers and employees should be removed over the medium-term.

The Tax Working Group discussed options for how the Government could align tax rates on PIES and other savings vehicles to protect the tax system’s revenue-raising integrity. We agree, and recommend pursuing a rate alignment policy among PIES, other savings vehicles, and personal income, corporate and trust tax rates to close a loophole in the tax system that encourages tax avoidance. This is another way to help ensure taxpayers pay the amount of tax they should. It would also eliminate the tax advantage PIES have over other forms of savings.

KiwiSaver tax incentives, such as the employer tax exemption and the government’s $1,000 kick-start and matching contributions, should also be removed because they encourage workers to invest in certain types of investments, which distort the capital investment market. Removing the employer superannuation contribution tax (ESCT) for employer contributions to KiwiSaver schemes would alone save $170 million per year.

It is also doubtful how much new savings KiwiSaver has fostered since it was established in 2007. Instead, existing investors are taking advantage of the investment option that allows them to reduce their tax, with the support of public money. This was not the intended purpose of KiwiSaver. Further, when it is considered that many New Zealanders have a lot of money saved in assets like housing, the need for KiwiSaver incentives to promote more savings is dubious—New Zealanders are already saving.

For these reasons we believe KiwiSaver tax incentives are costly, poorly designed and not a wise use of taxpayers’ money.

Property taxes

Tax treatment of property is very favourable in New Zealand. Unlike other countries, central government does not tax land, owner-occupied housing or capital gains. Taxpayers enjoy this freedom and arguably it protects the principle of ownership over private property. However, this may be considered a weakness of the tax system, as it leaves income from a potential tax base untapped and creates distortions to investment choices.

While collecting tax from the income derived from property, as a form of wealth, is consistent with a comprehensive income tax approach and would widen the tax base, we do not believe it is necessary to introduce new forms of property taxes, such as a land tax or a capital gains tax. While there may be good reasons for taxing these bases, we do not believe they are necessary given our recommendation that government spending should be lowered, requiring the government to collect less tax (see below). There is also good reason to think that these taxes could be difficult to administer and possibly harmful to economic growth.

If the Government believes it is nonetheless important in principle to close certain holes in the
tax base, such as the zero tax on residential rental property, we believe it could do so by changing the law. During its deliberations, the Tax Working Group considered such measures, including ring-fencing the losses rental property owners can offset against other forms of taxable income (estimated to raise $165 to $195 million of revenue); and reducing the 20% depreciation loading to 15% on new assets, and taxing the sale proceeds on assets when they exceed its book value for building owners who claim depreciation deductions. They also considered removing the depreciating loading completely (estimated to raise $140 million or $600 million of revenue, respectively).

Land taxes

We do not recommend that a land tax should be introduced in the medium-term.

While the Tax Working Group suggested that the Government should consider a land tax as one possible option for broadening the tax base, we do not believe one is necessary because the large amount of revenue a land tax would generate (in the order of $2 billion at a 0.5% rate) would not be needed over the medium- to long-term if government spending is curbed. Our UMR research also illustrates how unpopular land taxes are, as 62% of participants, with a margin of error of +/-3.6%, oppose an annual tax being charged on the value of land, if personal income taxes were lowered at the same time. A land tax would be difficult to introduce unless the government could explain why the change would help to broaden the tax base to fund reductions in personal and corporate taxes. A land tax would also extend the tax base.

However, we have pointed out that there are some practical difficulties with introducing a land tax. First, problems exist with establishing the true value of land and the expected revenue derived from land. New Zealand does not have estimates of the unimproved value of different land. Further, when the Tax Working Group considered the idea of a land tax, it received an estimate of the value of all land, except for public and conservation land, of $461 billion. After taking into account an expected 16.7% drop in land values after the announcement of a land tax, this would be reduced to $384 billion, meaning a 0.5% land tax could generate $2.13 billion of new revenue per year. However, this figure is subject to an assumption about land values and the expected fall in value caused by the tax. It is difficult to know what would happen, which would be a problem as ongoing land values would affect annual tax revenue. Land owners might also not have enough cash flow to pay an annual lump sum land tax.

Second, businesses would be penalised if they had to pay a land tax since the land they own may not generate any revenue. Businesses would respond by incorporating a land tax into their property’s value, causing it to become a tax on capital. This might have a distortionary effect.

Third, a land tax might very well discourage investment that would improve the quality and use of land, such as laying drainage in farm land.

Fourth, it would be tempting for governments to create exemptions for certain property. For example, there is an issue about whether owner-occupied land or Maori trustee-owned land should be exempt from a land tax. Maori trustee land could be excluded from the base because at an estimated value of $0.6 billion after the expected fall in land values it would not significantly impact the revenue base. However, residential land is estimated to be worth much more, $248.2 billion after the anticipated fall in value is allowed for (comprising $156.6 billion in owner-occupied land and $91.6 billion in investor-owned property). Limitations of estimates aside, this would generate revenue of about $1.2 billion at a 0.5% rate. If it were exempted—as a government could decide to do in order to make a land tax more attractive to the public—this would create a large hole in the land tax base.
There is also concern that existing research is not sufficiently strong to support the contention that property taxes are more growth-friendly. If more, better empirical research could determine that a rebalancing of the tax system towards recurrent taxes on immobile property could actually reap the kinds of predicted growth gains, then we suggest this might provide more support for taxing land. The government would have to consider carefully who may be allowed exemptions against the possible revenue costs and distortions that exemptions would create as well as the issues associated with determining the accurate value of the land base. We believe if government spending is curbed to historically sustainable levels, New Zealand’s broaching of these difficult issues would be unnecessary.

**Capital gains taxes**

We do not recommend that a capital gains tax should be introduced.

A tax on the gain made from the sale of an asset is another way New Zealand could extend the tax base. However, as we have discussed, it is probably difficult to make work in reality because of the problems of collecting tax on either an ongoing accrual basis or on a realisation basis when assets are sold. The former relies on having up-to-date asset values to calculate the tax, while the latter could produce distortionary “lock-in” effects that might cause people to retain their assets in unproductive investments to avoid the tax, rather than re-investing in different or new investment opportunities.

If deductions for capital losses were permitted, it would most likely encourage investors to realise riskier assets sooner and hold on to stable investments. It may also be difficult to define what an asset is, like whether or not intangible property should be included. For these reasons, we do not recommend introducing a capital gains tax in the short or medium-term.

Having said this, over-investment in property is an issue. But other discrete proposals suggested by Inland Revenue to the Tax Working Group might be better solutions. These proposals were to reduce the 20% depreciation loading for new assets to 15%, or to remove the exemption entirely, and ring-fenced losses on residential property. Moreover, the 2025 Taskforce’s suggestion that investment distortions in property could be solved with regulatory reform, for example, by changing the way local councils zone land, also merits serious consideration. Regulatory reform offers the advantage of dealing with the specific over-investment problem at its source without using the tax system or raising new taxes.

The Tax Working Group suggested that a capital gains tax could be an effective base-broadening strategy, however it did not offer unqualified support for its introduction because of the kind of difficulties we have noted. As with a land tax, we also believe a capital gains tax is unnecessary because the extra tax revenue would not be needed over the medium-term if government spending is curbed.

**Capital income taxes**

We do not recommend that a capital income tax should be introduced.

Capital income taxes could be good in theory because they would tax the value of capital assets, widen the tax base and plug a loophole in the income tax system. However, like a capital gains tax, they would be difficult to make work in practice as they would create administrative costs that could erode the extra revenue generated by the tax. Lock-in distortions could also make it difficult to collect the expected revenue on a regular basis. This suggests that it would not be worthwhile to introduce one when other tax changes could be more efficient, like personal income or consumption tax changes. For these reasons we do not recommend a capital income tax.

**Consumption taxes**

New Zealand’s GST is one of the most efficient consumption taxes in the world, collecting the required tax at a C-efficiency ratio of 93.5% in 2006. Inland Revenue commented in its 2008 government briefing that, “It is clear that the breadth of the New Zealand base allows substantial amounts of GST to be raised at a relatively low rate.” Currently, it is also the second most important tax base, contributing 21% to government revenue. This makes GST an extremely reliable tax base. It is also a fair tax because it taxes every taxpayer at the same rate in the same way. We believe this suggests that there is a strong case for relying more on GST to raise revenue.
We recommend that the GST rate should be increased from 12.5% to 15% over the medium-term.

The Tax Working Group supported the idea of increasing GST to 15%—provided that compensation could be paid to lower income earners—because it would be an efficient tax change, "reducing the tax bias against savings and investment." Research also suggests that increasing GST should have a positive effect on economic growth, since consumption taxes do not distort taxpayers’ investment decisions like progressive personal income taxes do. We therefore agree with the Tax Working Group and recommend boosting GST revenue to help fund a reduction in personal and corporate taxes.

Our UMR research showed that 56% of New Zealanders, with a margin of error of +/- 3.6%, oppose increasing GST, if personal income taxes were lowered at the same time. If it chooses to raise the GST rate, this indicates that the government will have to build a strong case for showing that the GST change is on the whole fair for most taxpayers and can help encourage more savings and investment.

Figures produced by the Tax Working Group indicate that raising the GST rate to 15% could raise an extra $2.15 billion or $1.9 billion after automatic adjustments to benefit levels and superannuation payments, assuming people’s behaviour does not change. In theory, how much new revenue could be lost through behavioural changes in response to a GST rate rise largely depends on how responsive GST-related expenditure is to the GST rate and people’s ability to avoid GST. For example, there is a small risk that increasing GST could reduce the size of the base if people reduce their consumption as a share of their expenditure, and/or if more goods and services are purchased with cash (the so-called “black economy”).

On the face of it, a higher GST would also consume more of low income earners’ disposable incomes, widening the gap between income and spending. However, the Tax Working Group considered the likely distributional impact of GST and found that as a proportion of total expenditure (excluding bequests), GST is distributed more evenly, since expenditure stays more the same across income brackets and throughout a person’s life. This is because people tend to spend not only according to their current income but also their expected life-time income.

Given that there would still be an immediate reduction in lower income earners’ disposable income if GST were increased, we therefore share the concern identified by the Tax Working Group that the effect of the change on lower income earners should be cushioned, since GST falls more heavily on them. The most exposed income earners would receive assistance automatically through the benefit system, but there may also be a case for temporary increases to beneficiaries, superannuitants and lower income earners to help ease the effects of increasing GST. The associated costs of such a move would have to be considered, as would the possible risk that further targeted benefits might increase disincentives to work and potentially lock-in higher levels of income support.

To preserve the efficiency and fairness of GST, we do not propose that exemptions should be made for food or basic household items. As we have discussed, this creates too many administrative complexities, such as deciding which goods are exempt. While some argue that this could help compensate lower income households who pay a greater amount of their income in GST, it would also benefit higher income households who are not the intended recipients of such help. Further, the deadweight costs of administering the more complicated tax are bound to outweigh any benefits lower income households would receive. The Tax Working Group’s analysis of this issue showed that exempting food with an increase in GST to 15% would actually reduce GST tax revenue. This could reduce the possibility of personal income tax reductions and their associated benefits.

If we fail to make positive changes that can improve our economic performance, the long-term consequences are likely to fall most heavily on lower income earners. While there are distributional concerns associated with raising the GST rate, we stress that this should be seen as part of an overall package of policy change that would also deliver advantages to lower income earners through long-run benefits associated with greater productivity, higher growth and better wages.

Size of government and government spending

We believe that the current size of government and the level of government spending is a barrier to higher growth rates and better living standards. While the government has to raise a given amount
of revenue to fund its expenditure, research and analysis shows that bigger government is a drag on the economy because of the increased costs of raising tax and the share of output that bigger government consumes. Currently, the size of central government (excluding capital outlays and local government) in New Zealand is about 36% of GDP, or $64 billion, as measured by government spending. In 2010, core Crown expenses are forecast to be $65.5 billion.

To reduce government size and spending we recommend that over the medium-term:

- an upper limit benchmark for central government operating spending could be set at, for example, 30% of GDP; and
- accordingly, a benchmark for the size of core government expenditure and provision of a social welfare safety net could both be set at around 15% of GDP.

To improve the quality of government spending, we recommend that the government be mindful of the evidence relating to the composition, financing and value of that spending.

Given that there are questions about how much value ever-increasing government expenditure produces, it is worth contemplating an indicative benchmark for government spending, a target beyond which government spending should not generally grow. The 2025 Taskforce believes that government spending could be reduced to 29% of GDP by 2012-13 since spending was at this level in 2004.

We also believe that 15% of GDP is a reasonable benchmark for the share of social welfare spending. Historically, this has been the case, since as we noted, between 1971-72 and 1996-97, total central government expenditure on administration, defence and foreign affairs, education, transport and communications and industry was 15% of GDP. Another study posited that a generous welfare safety net, including retirement savings, should only cost between 10% and 15% of GDP. Finally, Tanzi and Schuknecht’s research suggests total government spending could be set around 30% of GDP.

We should also remember that the extent to which government spending funds more growth-friendly expenditure, like public infrastructure and education, can have a positive influence on economic growth. However, the implications of the growth research are estimates, based on assumptions and limited data about the world. They are not a crystal ball. Even with areas of government spending that are expected to generate high investment returns, there is controversy over the strength of the empirical estimates. Opinion is also divided about the impact of government infrastructure spending on rates of private investment and economic growth. Just because spending comes within a category that is potentially productive does not mean that every instance of that type of spending will actually be productive or represent value for money. For example, we should not fall into the ill-considered conclusion that just because infrastructure spending might be more growth-friendly it should be increased relative to current government spending. Each spending decision must be carefully assessed on its individual merits. What matters is that all forms of government spending should provide value for money compared to their alternative use.

Just like individuals and businesses, the government should be prepared to make cutbacks when spending is not worthwhile. Every dollar the government takes also reduces the money families, individuals and entrepreneurs have to spend productively. Of course, taxes should not be cut in a naive hope that expenditure savings can somehow be found in the future. The 30% and 15% figures we have suggested should therefore be considered as benchmarks rather than targets which must be met, since we assume that in times like the recent recession, the government may need to spend more than 30% of GDP, for a limited time, either to provide a temporary boost to the economy, or because a contraction in the size of the economy may temporarily inflate the spending-to-GDP ratio.

Government expenditure should be reduced in a methodical way, identifying how cuts to unnecessary or poorly performing programmes and services can be made without unduly reducing the quality of core public services. Without a strategy for reducing spending that is clearly signalled and transparent to the general public, a situation might come about where tax cuts would have to be reversed to meet expenditure requirements. Further, we believe the reductions we propose should happen gradually, to
allow time for people and the economy to adjust to the changes. That is why we have indicated this as a change to be enacted over the medium-term, not the short-term.

Given the growth and revenue challenges the government is facing in the post-recession world, like the need to pay off debt, there may be limited scope to reduce government size in the short-term. Therefore, changing the tax structure is also an important medium-term policy strategy because there is clear scope for change to make it fairer for more taxpayers. Changes to the tax structure could also improve the tax system’s revenue-raising integrity and efficiency to fund government for what we need it to do.

CONCLUSION

We have sought to recommend changes to the tax mix so that New Zealand can have a more growth-friendly tax and fiscal structure. Our approach has been to pursue a well-tested strategy of maintaining a broad tax base, where distortions can be contained, as well as lowering and flattening tax rates across bases as revenue demands allow. These changes are not revenue-neutral, either. We believe government spending should be contained and reduced over time so that we only have to pay for the government we need and so that government is more affordable for the next generation of New Zealanders.

We believe our suggestions for change will allow individuals and families to see more of their own income at the end of a day’s work; to have better incentives to pursue higher education and a better paying job; or to take a risk and start a business. Because so many of these recommendations would simplify the tax system, we also believe that they could improve its efficiency, thereby reducing the costs for taxpayers of raising the tax government needs.

These are all important drivers of higher growth. While growth is not the only determinant of well-being, it is a crucial element, as it creates the potential for our living standards to be sustained or even improved. This can help more New Zealanders to have a better level of social well-being. In time, this means government could reduce what it has to do to provide support to various families, individuals and communities through the welfare system, leaving civil society free to flourish on its own terms.

This is why tax policy is so important to the shaping of New Zealand. It is an essential factor in economic growth, affecting work, businesses and entrepreneurship. In turn, these things fulfil larger human purposes, and should be valued accordingly. With projections showing that we will have to reconsider the way government taxes and spends sooner or later, the time is ripe for genuine debate about these policies. This debate holds out the hope of a tax policy that plays its part in creating an environment for the development of true human flourishing.

ENDNOTES

7 The minimum wage increased from $12.50 to $12.75 on 1 April 2010. Employers Assistance Ltd. Minimum Wage Increase, http://www.employers.co.nz/minimum-wage-new-zealand.aspx (accessed 3 March 2010). Not every low-income worker works a forty hour week, since some are younger workers, who earn less, some work part-time or some are secondary household earners. It was reported in 2008 that there were 1.4 million workers with earnings of less than $18,000 per annum. At the time, this was roughly equivalent to per annum income from working 30 hours per week earning the minimum wage ($18,720). J. Creedy et al., “Equity and Efficiency Measures of Tax-transfer Systems: Some evidence for New Zealand,” Working Paper, 08/04 (Wellington: The Treasury, 2008), 21-22. The annual gross income for a person earning the minimum wage working 30
hours per week at the new rate is therefore $19,890.

8 Victoria University Tax Working Group, "Tax Reform Scenarios" (Wellington: 2009), scenario 2B.

9 2025 Taskforce, "Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce" (Wellington: New Zealand Government, 2009), 100.

10 Victoria University Tax Working Group, "Tax Reform Scenarios," scenario 2B.

11 Inland Revenue Department, "Briefing for the Incoming Minister of Revenue - 2008" (Wellington: 2008), 36.


17 Maxim Institute, "Submission of Maxim Institute on Income Splitting for Families with Children" (Auckland: 2008), 1.


24 Victoria University Tax Working Group, "Tax Reform Scenarios," scenario 2B.


26 Inland Revenue Department and The Treasury, "Company Tax Issues Facing New Zealand," 43.


28 Inland Revenue Department and The Treasury, "Company Tax Issues Facing New Zealand," 32.


32 Cf. Inland Revenue Department, "Briefing for the Incoming Minister of Revenue - 2008," 40-41.

33 Inland Revenue Department and The Treasury, "Other Base Broadening and Revenue Raising Ideas." Victoria University Tax Working Group Background Paper (Wellington: 2009), 5.

34 See for example, J. Gibson, C. Hector and T. Le, "The Distributional Impact of KiwiSaver Incentives," Working Paper in Economics, 02/08 (Hamilton: Department of Economics, Waikato University, 2008); and J. Gibson and T. Le, "How Much New Saving will KiwiSaver Produce?" Working Paper in Economics, 03/08 (Hamilton: Department of Economics, University of Waikato, 2008).

35 See for example, T. Le, "Does New Zealand Have a Household Saving Crisis?" (Wellington: New Zealand Institute of Economic Research (NZIER), 2007). A 2009 Treasury paper also reached the conclusion that overall the median savings rate in New Zealand was about 16% of gross income. "This is of the same order of magnitude as the long run average annual saving rate measured from the aggregate household balance sheet from RBNZ, which was 16% of disposable income, equivalent to about 12% of gross income." However, the study also cautioned that some individuals still have a negative savings rate. G.M. Scobie and K. Henderson, "Saving Rates of New Zealanders: A net wealth approach," Treasury Working Paper, 09/04 (Wellington: The Treasury, New Zealand, 2009). The McLeod review issues paper makes a similar observation. See R. McLeod et al., "Tax Review 2001: Issues Paper," 169-174.

36 The Treasury, "Medium Term Tax Policy Challenges and Opportunities" (Wellington: 2009), 11.

37 Inland Revenue Department and The Treasury, "Other Base Broadening and Revenue Raising Ideas"; and Victoria University Tax Working Group, "Tax Reform Scenarios: Cover note for session 5," 10.


42 Victoria University Tax Working Group, "Tax Reform Scenarios."

43 2025 Taskforce, "Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce," 104.


48 2025 Taskforce, "Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce," 121-122.

49 A Tax System for New Zealand's Future. Report of the
Inland Revenue defines C-efficiency according to how the OECD uses the term: “The OECD measures the breadth of the VAT/GST base and the efficiency with which taxes are collected using the “C-efficiency” ratio. This is the revenue collected from GST as a proportion of the revenue that would be raised if the standard rate of GST were applied to all consumption.” Inland Revenue Department, “Briefing for the Incoming Minister of Revenue - 2008,” 25.

Inland Revenue Department, “Briefing for the Incoming Minister of Revenue - 2008,” 25.


The Treasury, “Half Year Economic and Fiscal Update” (Wellington: 2009), 33.

2025 Taskforce, “Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce,” 85.


Personal communication with Bryce Wilkinson, March 22, 2010.

Cf. 2025 Taskforce, “Answering the $64,000 Question. Closing the income gap with Australia by 2025. First report of the 2025 Taskforce,” 105.
Maxim Institute contracted market research firm UMR Research to survey New Zealanders’ attitudes to certain issues relating to taxation and government spending. This was carried out as part of UMR’s regular Omnibus telephone survey of 750 people aged 18 and over, between 4 and 9 February 2010. A full breakdown and analysis of the survey results by question and population groups is available at Maxim Institute’s website, www.maxim.org.nz.

Maxim Institute is solely responsible for the way the survey results have been presented and interpreted in this discussion paper. The following description of the method used to carry out the survey is for UMR’s telephone Omnibus survey and is supplied by them.

DATA-GATHERING METHODS

UMR has a 35-line Computer Assisted Telephone Interviewing (CATI) suite based in Auckland. The survey polls a nationally representative random sample of 750 New Zealanders aged 18 years old and over each fortnight. This means the survey results have a margin of error of +/- 3.6%.

The sample frame used in all UMR fortnightly Omnibus surveys to achieve a nationally representative sample of 750 New Zealanders aged 18 years old and over each fortnight is detailed in the table below. It shows the number of respondents for each area surveyed for the sample size. New Zealand households were stratified into 23 telephone directory regions. The number of people 18 years or over was determined by cross-referencing the telephone directory regions with Statistics New Zealand 2006 Census data. Quotas were specified according to the proportion of the sample that was to be collected in each region. Additional quotas were included to control for age and sex within each region.

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A four question item-response survey was designed by Maxim Institute around the topics of interest (described in the earlier sections of this paper). The survey questions were field-tested in January 2010 to test for any problems before being added to UMR’s fortnightly Omnibus telephone survey of public opinion for the period between 4 and 9 February 2010.

UMR selects telephone numbers for calling by generating a random sample of numbers from all number ranges in the White Pages Residential Directory for New Zealand. Consecutive random digit dialling was carried out using this sample so that unlisted numbers were captured in the sample. To limit the sample frame to “private households with telephones,” telephone numbers from the Yellow Pages, disconnected or fax lines and other non-residential numbers were filtered out from the sample.

Respondents were called between 5.30pm and 9.00pm on weeknights, and from 9.30am to 6.00pm on Saturday and from 9.30am to 9.00pm on Sunday. Up to five call-backs were made to initially selected respondents so that non-responses had a minimal impact on the representativeness of the sample. Appointments were made to call back respondents if the time they were first contacted was inconvenient.

Potential participants were asked whether they agreed to participate in the survey on the understanding that it was voluntary and that their identity would remain anonymous. At the end of the survey, interviewers thanked participants, and gave them the opportunity to respond to the national fieldwork manager at UMR with any inquiries or complaints.

QUALITY CONTROLS

Interviews were conducted using the Qua facts CATI system. The Qua facts system is automated ensuring the interview process is efficient and data is high quality. This was monitored by the system’s complete sample and quota management system, its automated randomisation and question rotation system and its response type and question consistency checking features.

The UMR call centre has Interviewing Quality Standards (IQS) accreditation and is audited annually. As part of the IQS process all interviewers undertake a training programme and UMR supervisors monitor the quality of interviews while they are conducted, including monitoring individual calls and using a computer generated “real-time overview” of the survey.

DATA ANALYSIS PROCEDURES

Raw responses were collected along with demographic information, including age, gender, ethnicity, region, income, and occupation. This allowed the results to be presented by cross-tabulation with demographic indicators.

The results and an analysis of key findings were compiled by UMR and presented to Maxim Institute in a written report.

ETHICAL CONSIDERATIONS

Maxim Institute staff members were not involved with carrying out the interviews and have no knowledge of survey participants’ identity.
ABOUT THE AUTHOR

Steve Thomas is a Researcher at Maxim Institute. He was educated at the University of Canterbury, graduating with a Master of Arts with Distinction. Steve's background is in politics and history, and he has researched and written in a number of areas including New Zealand politics and New Zealand education. He is the author of Maxim Institute's Roll Play education report, which examined how access to Christchurch schools could be improved for more families, as well as two reports in the Institute's award-winning series of Parent Factor reports: Information for parents and Access to education. He has also been published in the journals Asia Pacific Journal of EU Studies and Urban Policy and Research, and recently published his first book, Cotonou and Pacific Regionalism.

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Responsibility for the final paper and the views expressed in it rests with us.