

Donald T Brash: Faster growth? If we want it

Address by Dr Donald T Brash, Governor of the Reserve Bank of New Zealand, to the "Catching the Knowledge Wave" conference, Auckland, 2 August 2001.

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Fundamentally, this conference is about economic growth, and how New Zealand can get more of it.

Many New Zealanders do not see increasing growth as a high priority objective. What we want is to have access to better housing, better health-care, and better education. What we want is to protect the relatively egalitarian society of our past from increasing income disparities. What we want is more attention paid to preserving our natural environment. What we want is less stress and more leisure time.

But the reality is that if we want better housing, better health-care and better education, we certainly need economic growth – we have difficulty funding our collective desire for health care and education now, and those costs look certain to rise in the years ahead. If we want to retain a relatively egalitarian society, we absolutely need economic growth – without it, too many of our highly skilled people will leave our shores, forcing up the relative incomes of the skilled people who choose to stay. Perhaps surprisingly, even if we want more attention paid to preserving our natural environment, we need growth – international experience suggests that it is the relatively affluent countries which can afford to spend resources on protecting the environment.

So a conference on economic growth is not "just about money" but concerns many of the issues of vital relevance to all of us. It also concerns issues which go well beyond the statutory responsibilities of the Reserve Bank, and for this reason I must stress that my comments this morning reflect personal views, and not necessarily those of the Bank.

Our growth performance: much improved

How have we been doing in the economic growth stakes? Unfortunately, not too well if we judge from the last three decades. Over that period, our growth in GDP per capita has averaged 0.8 per cent per annum, compared with an average of 2.0 per cent per annum in the countries of the OECD.¹ As a result, we have slid from 9th in the OECD "rankings" in 1970 to 20th in 1999 (comparisons made on a purchasing power parity basis, rather than at market exchange rates), and have also been well surpassed by some countries which are not OECD members at all (Singapore being the best example).

As recently as 1990, New Zealand's GDP per capita was roughly on a par with Ireland's and Singapore's. By 1999, both countries had very considerably surpassed us. In 1990, Australia's GDP per capita was only some 5 per cent above New Zealand's; by 1999, it was nearly 40 per cent above New Zealand's.²

What should we make of these figures? The first thing to say is that for a whole range of reasons GDP per capita is not a very precise measure of human well-being. We New Zealanders have more cars per capita than people in all but a tiny handful of countries. We have substantially more EFT-POS terminals per capita than any other country in the world. We have easier access to uncrowded beaches and countryside than people in most other countries. We spend much less time commuting, even in Auckland, than people in many other countries. Our life expectancy at birth is the same as that in, say, Germany, the United Kingdom and the United States, and infant mortality is identical to the developed country average. As Paul Carpinter recently observed, quality of life measures often show Auckland in the top ten cities world-wide³, something hardly consistent with New Zealand's being towards the bottom of the OECD "ladder".

¹ "Climbing the OECD ladder: what does New Zealand have to do?", a memo written by Grant Scobie and Peter Mawson to Alan Bollard, New Zealand Treasury, 4 April 2001.

² Ibid.

³ Speech to the annual conference of the New Zealand Association of Economists, Christchurch, 28 June 2001.

But having said that, there can be little doubt that there has been some relative decline in our living standards in recent decades.

At first sight, our relatively slow growth seems surprising. We have many characteristics which make for rapid economic growth. For more than a decade, we have had macroeconomic stability, with a sound fiscal position and monetary policy delivering consistently low inflation. We have a competent and corruption-free judiciary implementing a legal system based on British common law. We have a civil service which is also competent and corruption-free. We have a stable political environment, with a substantial measure of consensus across political parties on the important aspects of macroeconomic policy. We are an English-speaking society, and one where people tend to be highly receptive to the adoption of new technology. On several indices, we are ranked among the freest economies in the world.

And we've had an extensive period of economic reform, specifically designed to help us to grow more quickly. Doesn't our poor growth performance suggest that the reforms were seriously flawed? Not at all. I don't think there is much doubt that the reforms of the mid-eighties and early nineties have helped our growth potential a great deal. I have mentioned the decade of macroeconomic stability – which also delivered a huge reduction in the net public sector debt, from over 50 per cent of GDP in the early nineties to under 20 per cent at the present time. The reforms also delivered a very big improvement in the quality of service in areas such as banking, retailing, telecommunications, postal services, health-care, and airlines.

Recent years have also seen very rapid growth in a whole host of relatively new industries – wine, mussels, software, furniture, specialised manufacturing, education services – to say nothing of a rapid increase in the sophistication of some of our traditional industries.

Moreover, while GDP per capita grew at a rate of only 0.8 per cent per annum over the last three decades on average, it grew at almost 1.7 per cent during the nineties, virtually identical to the average OECD per capita growth over the same decade.⁴ So the reforms seem to have arrested our relative decline, but not, as yet, enabled us to begin the process of reducing the gap in per capita incomes which emerged over earlier decades. We are now keeping up, roughly, but not catching up.

Why have we not done better still?

Given that many of our reforms were, at the time, regarded as world-beating, why haven't we done better? I don't think anybody has a totally satisfactory answer to that question, but let me suggest a few factors which seem relevant.

First, New Zealand is a very long way from all of its export markets, and there is a growing awareness that this imposes a considerable handicap on our performance. As The Treasury observed in its *Briefing* for the incoming Government in 1999, "Draw a circle with a radius of 2,200 kilometres centred on Wellington and you capture within it 3.8 million New Zealanders and rather a lot of seagulls. Draw a similar circle centred on Helsinki and you capture within it a population of over 300 million, from 39 countries."⁵ And for Helsinki, The Treasury could equally well have said Dublin or Singapore.

Second, our natural resource endowment makes us extremely efficient at producing some things that we are effectively banned from selling to many of the consumers of the world. Thus for example, although we are one of the world's largest cheese exporters, and have developed a range of sophisticated cheeses in recent years, we are limited to a tiny quota of about 0.6 per cent of the US cheese market. If New Zealand producers want to sell butter to Japan, they find that Japan has limited total butter imports, from all sources, to less than 2,000 tonnes each year, with sales beyond that tiny quota facing a tariff of more than 500 per cent.

Our distance from world markets and a resource endowment which favours the production of goods which face major obstacles in international markets are facts of life. To make matters worse, we have compounded matters by creating some of our own obstacles to economic growth.

For example, as a country we squandered a large amount of capital investing in projects of very low or negative value in the late seventies and early eighties, most as a result of strong government encouragement – the Clyde dam, NZ Steel, and the synthetic petrol plant to name just three.

⁴ Scobie and Mawson, op. cit.

⁵ *Towards Higher Living Standards for New Zealanders: Briefing to the Incoming Government 1999*, The Treasury.

Second, because of very high effective rates of protection in many parts of the manufacturing sector, we probably squandered even more capital over several decades by investing in industries where New Zealand had no prospect of ever being internationally competitive. (Many studies have suggested that economic growth tends to be fairly closely correlated with the degree of openness of the economy, and, while New Zealand is now a very open economy, that was not true until about a decade ago.)

Third, we have paid a high price for years of encouraging investment in real estate while discouraging investment in plant and equipment – the result of the interaction between a period of high inflation and a tax system based on the assumption that prices are stable⁶, plus perhaps the bitter memories of the 1987 share-market crash.

Fourth, we have paid a high price for not encouraging the acquisition of education and skills – the result of decades of protection for industries requiring only a modest level of skill and, perhaps, a welfare policy providing benefits of unlimited duration.

Fifth, we have paid a high price for tolerating an education system which produces too many people with inadequate literacy and numeracy skills, unable to fill the jobs available in a modern economy.

And we have paid a price too for disdaining commercial success, with the consequence that too few of our youth aspire to make money growing a business and too many of our most able entrepreneurs have chosen to leave our shores. (It has to be a strange society which cheers somebody being paid millions of dollars for a few minutes of belting the daylights out of his opponent in the boxing ring, or somebody who wins millions in a highly regressive game of chance; but criticises somebody paid one million dollars for a year of running a complex company providing services to hundreds of thousands of customers, or somebody else paid \$300,000 for running a large hospital with hundreds of staff and thousands of patients.)

What about the future?

Can we be optimistic about the future? There are clearly some factors adversely affecting our growth rate which we can never change. Most obviously, we will always be thousands of kilometres from our major markets, and it will take years before the high protection impeding our agricultural exports is eliminated. We can not avoid the fact that, as a country, we have squandered large amounts of capital on projects which have only a minimal benefit for future growth.

But perhaps the significance of our distance from major markets is diminishing as transport and communications systems become ever cheaper and more efficient (I suspect that there are both costs and benefits for New Zealand in that development), and barriers to our exports continue to reduce, though painfully slowly.

Moreover, within New Zealand we have eliminated the protection and the subsidies which caused so much misallocation of resources in the past. Inflation no longer interacts with the tax system to steer investment into real estate and out of investment in plant and equipment. And most of the other factors which have adversely affected our growth are ones which we ourselves can change, if only we have the will to do so.

In recent times, many political leaders have suggested that as a country we should be aiming to return New Zealand's income levels to the top half of the OECD. As far back as 1990, the Trade Development Board, now Trade New Zealand, proposed that that goal be achieved by 2010.

Would it now be *feasible* to raise New Zealand's per capita GDP to the median OECD level by 2010? What such a goal would imply in terms of growth rates over the next decade would clearly depend in part on how fast other OECD countries themselves grow over the decade, but plausible numbers – which assume that other OECD countries achieve the same per capita growth rates over the next 10 years as they did in the nineties – would require GDP per capita growth in New Zealand of about

⁶ It is not hard to see why a tax system that allows the deductibility of nominal interest payments in full – even when much of the interest paid in a high inflation environment is, in reality, a compensation to the lender for erosion in the capital value of the loan – but does not tax the increase in the nominal value of the asset strongly encourages people to borrow heavily to invest in real estate in an inflationary environment. It is also the case that, in allowing deductions for depreciation based on historical cost and taxing profits on inventory on the basis of the historical cost of acquisition, the tax system, in an inflationary environment, over-taxes, and thus discourages, investment in other kinds of businesses.

3.6 per cent per annum, somewhat more than double the growth in per capita GDP achieved by New Zealand in the nineties.⁷

Can a doubling of our per capita growth rate, as compared with the average of the nineties, be achieved? I am sometimes surprised to hear people argue that such a goal should be easy to accomplish. Why, it is occasionally argued, some companies have grown by 10 per cent annually for years! Even whole regions sometimes grow at rates which are well above the growth rates suggested as being necessary to raise per capita income levels to the median of the OECD. But what is often overlooked in making such comments is that a company may grow at a high rate for years because it can absorb resources of people and capital from outside itself; regions can similarly grow rapidly by absorbing people and capital from other areas. New Zealand as a whole may increase its gross output more rapidly by bringing in lots of additional people and lots of additional capital, but that increase in gross output *may* produce only a modest increase in the *per capita* incomes of New Zealanders.

No, doubling the growth in per capita incomes would be extremely difficult. But perhaps it would not be impossible. Some other small countries – Finland, Ireland, and Singapore are the most frequently cited examples – have achieved similar or even greater increases in per capita income, but it has been a very rare achievement, sometimes made possible in part by starting from a situation of economic collapse (Finland), and sometimes made possible in part by being able to bring very large numbers of unemployed people into the workforce (Finland and Ireland). Finland and Ireland also derived substantial benefits by being inside the European Union. We do not start from a position of economic collapse, and our unemployment rate is already low compared with that in many other OECD countries. We do not have large numbers of unemployed people with appropriate skills and attitudes waiting to leap into the workforce. We are not part of a very large market of 300 million people. To have any chance of doubling our per capita growth rate we will need to see quite radical changes in people's attitude and behaviour, and quite radical changes in public policy to encourage those changes in attitude and behaviour. Minor changes at the margin simply won't do the trick.

Even major changes might not do the trick, since we seem to have some deeply-engrained cultural characteristics which are not conducive to rapid growth – surprisingly widespread disdain for commercial success, no strong passion for education, and a tendency to look for immediate gratification (as reflected in our very low savings rate and strong interest in leisure) – and it usually takes years, and perhaps generations, to change such cultural characteristics.

Indeed, this attitudinal change is probably the most important single need if we are to radically increase our per capita growth rate. We need to want faster growth or, in personal terms, higher income. This may sound like a rather odd comment, but many of us know people who, having started a successful business, were happy to sell out of it for a few million dollars because that was more than sufficient to buy a nice house, a bach by the sea, a boat, and a decent car. And let's not criticise those who make that choice – after all, economic growth is a means to an end, and not an end in itself – but recall that retiring to enjoy the good life is not usually the attitude of entrepreneurs in the United States or other more successful economies.

But let's assume that most New Zealanders do in fact want to see faster economic growth, so that our more able children will not feel obliged to leave as soon as they can afford a one-way air-ticket to Sydney or London, so that we can keep and attract able people without creating Latin-American-style income disparities, and so that we can afford the health-care and quality of life which our Australian cousins will increasingly enjoy.

What might be required?

Increasing per capita GDP is about increasing the proportion of the population who are contributing to the production of goods and services in the market economy, and about increasing the productivity of those people.

What scope is there for increasing the proportion of the population who are contributing to the production of goods and services in the market economy? Not very large. Certainly, not nearly as large as was the case in Ireland and Finland when they began their period of rapid growth, with very high levels of unemployment. Participation in the workforce by those between 15 and 64 is currently around 66 per cent in New Zealand, not far below participation rates in Singapore and Ireland (68 to

⁷ Scobie and Mawson, *op. cit.*

70 per cent) currently, and unemployment, while higher than anybody feels comfortable with, is already approaching levels which are relatively low by OECD standards.

Getting still more people into employment in the market economy may involve making some difficult social and political trade-offs. For example, does the present welfare system – with largely unrestricted access to benefits of indefinite duration, and with a very high effective marginal tax rate for those moving from dependence on such benefits into paid employment – provide appropriate incentives to acquire education and skills and to find employment?

Nobody that I have ever met in New Zealand wants to deny those who are temporarily down on their luck sufficient income support to enable them to get back on their feet. In that respect, we are not willing to pay the price which Singapore paid to achieve very high growth, a society almost devoid of taxpayer-funded income support. But increasingly it is recognised that we will not achieve a radical improvement in our economic growth rate while we have to provide income support to more than 350,000 people of working age – 60,000 *more* than when unemployment reached its post-World-War-II peak in the early nineties – to say nothing of the 450,000 people who derive most of their income from New Zealand Superannuation.

This is partly because of the huge fiscal costs of these transfer payments – amounting to an estimated \$13 billion this financial year, or some 11 per cent of estimated GDP (both figures include the fiscal cost of New Zealand Superannuation). This cost substantially constrains the government from devoting more resources to education, law and order, research and development, and tax reduction. Indeed, it is probably fair to say that there is no other part of the government budget which can provide resources for these things. Certainly, it is hard to see scope for big reductions in the health or education budgets, the only other really major categories of government spending.

But I mention these transfer payments and the very high effective tax rates faced by those trying to get off them at this point not simply to draw attention to the fiscal costs but mainly because these payments have an influence on the numbers of those contributing to the production of goods and services in the market economy.

Are there ways in which we can change the incentives facing people now receiving such transfer payments? There are clearly a number of alternatives to the present way in which we provide income support short of adopting a cold-turkey Singaporean approach, and there is no single "right" way of doing it. Could we, for example, drop all benefits to the able-bodied and scrap the statutory minimum wage, so that pay rates could fall to the point where the labour market fully clears, but simultaneously introduce a form of negative income tax to sustain total incomes at a socially-acceptable level? Could we introduce some kind of life-time limit on the period during which an able-bodied individual could claim benefits from the state? Could we, perhaps, gradually raise the age at which people become eligible for New Zealand Superannuation, reflecting the gradual increase in life expectancy and improved health among the elderly? One of my colleagues has suggested the idea of abolishing the unemployment benefit but introducing some kind of "employer of last resort" system, perhaps run by local authorities with support from central government, under which every local authority would be required to offer daily employment to anybody and everybody who asked for it. Clearly, there would be huge benefits not just to economic growth but also to social cohesion if we were able to achieve a radical reduction in the number of those dependent on income transfers from the state.

Increasing productivity

But even more important than increasing the proportion of the population who produce goods and services in the market economy is increasing productivity. Ultimately, it is productivity – output per person – which mainly determines the standard of living, and it is clear that increasing GDP per capita by 3.6 per cent per annum means at least trebling the rate of productivity improvement which New Zealand has achieved in recent years (not much above 1 per cent).

How might we move in this direction? Before attempting to answer that question, let me stress that, while the Reserve Bank makes a useful contribution to the economy's performance, it can never make the difference between 1.7 per cent per capita growth and 3.6 per cent per capita growth. The Reserve Bank can and does operate monetary policy to maintain stability in the general level of prices, and that is a necessary condition if New Zealand is to maximise its growth, but it won't produce a doubling of our growth rate. The Reserve Bank can and does promote the stability of the financial sector, and that too is a vital contribution to maximising New Zealand's growth, but it won't produce a doubling of our growth rate.

No, most of what now needs to change if we want to double our growth rate involves policies and behaviour which fall well outside the Reserve Bank's areas of responsibility, as I have already noted.

The second point I want to make is that it is important as we talk about all the opportunities afforded by the "knowledge economy" not to forget that for many years to come most New Zealanders will not be employed in software companies or biotechnology research firms. They will be employed in "the old economy". But that does not mean that they will be employed in industries which lack scope for improving productivity. On the contrary: it is useful to recall that over the last 15 years, with average productivity improving by little more than 1 per cent per annum, productivity in agriculture improved by almost 4 per cent per annum – a rate of productivity growth which, if achieved across the economy as a whole and sustained for a decade, would easily see our per capita incomes reach the OECD median within a decade.

Improving productivity involves a whole host of things which can be loosely grouped under three headings – improving human capital, improving physical capital, and improving technology.

Improving human capital

To improve our human capital, we urgently (I almost said "desperately") need to improve the quality of our education system. And I say "improve the quality of our education system" rather than increase the resources devoted to our education system. We might need to increase the resources devoted to education, but we already spend a higher fraction of our national income on government support for education than the great majority of other developed countries. Despite this, international surveys of educational achievement suggest that we are not getting educational outcomes consistent with this high level of expenditure.

It must be a source of grave concern that so many of the people coming out of our high schools have only the most rudimentary idea of how to write grammatical English; and that while Singapore, South Korea, Taiwan, and Hong Kong occupied the top four places for mathematics in the Third International Maths and Science Study, New Zealand ranked only 21st (out of the 38 countries in the study).⁸ It can not be good for our economic growth, or for the employment prospects of many of our young people, that, according to an OECD report released in April 1998, nearly half of the workforce in New Zealand can not read well enough to work effectively in the modern economy.⁹ It must be a matter for particular concern that 70 per cent of Maori New Zealanders, and about three-quarters of Pacific Island New Zealanders, are functioning "below the level of competence in literacy required to effectively meet the demands of everyday life".¹⁰

The University of Auckland is one of the two main hosts of this conference, so you would be surprised and disappointed if I did not stress the importance of doing more to improve the quality of tertiary education in New Zealand. And clearly, I believe that that is vitally important, though whether that means even more public sector resources going into the tertiary sector or other kinds of reform I am not in a good position to judge.

But I strongly suspect that improvements in pre-school, primary, and secondary education are even more important for our long term growth, and for the long-term social cohesion of our society, than are improvements in tertiary education. Indeed, it may well be that improvements in these pre-tertiary areas are the fundamental prerequisites for improving the quality of tertiary education in New Zealand.

But although there can be little doubt that improving our human capital by securing improved educational outcomes would contribute to New Zealand's long-term growth, the higher-growth dividend from improved educational outcomes would almost certainly accrue well into the future, not within the next few years, or possibly even within the next decade. Indeed, it is sobering to reflect that some of the countries which have had particularly good economic growth in recent years, such as Australia and the United States, have literacy levels not significantly higher than New Zealand's. It may well be that better educational outcomes would be more important in ensuring that more of our people have access to higher paid jobs, and thus in assisting social harmony, than in assisting economic growth directly.

⁸ *IEA Third International Mathematics and Science Study, 1998-1999.*

⁹ *Human Capital Investment: an International Comparison, OECD, 1998.*

¹⁰ *Adult Literacy in New Zealand, Ministry of Education, 1998.*

Improving physical capital

One obvious way of increasing the output per person employed is to give people more physical capital to work with. (And by "physical capital" I mean not just plant and machinery but also roads and other infrastructure.) Of course, more physical capital is of no use whatsoever if it is the wrong sort of physical capital, and that points towards the huge importance of "getting the signals right" – by which I mean ensuring that investment takes place in areas which maximise the goods and services produced by that capital. As the Japanese have discovered in recent years, all the investment in the world will not encourage growth if the extra capital produces few of the goods and services which people actually want. Happily, as I have mentioned, we now have most of the signals right – businesses are no longer encouraged by high levels of protection to invest in industries where New Zealand will never be internationally competitive; the financial sector is free of the regulation (and the irrational exuberance which immediately followed the removal of that regulation) which used to distort the allocation of resources; and the misallocation caused by the interaction of inflation and the tax system is also now a thing of the past.

Under these circumstances, what might we do to encourage investment in *more* physical capital?

At very least, we need to seek and destroy those obstacles to investment which are within our own control. There is little doubt, for example, that businesses, especially small and medium-sized businesses, find the compliance costs of many public sector rules and regulations a significant obstacle to more investment. The recent report of the Ministerial Panel on Business Compliance Costs highlighted these issues, and noted that complying with a multiplicity of rules and regulations stifled the ability of businesses "to expand, innovate and compete". Businesses saw the biggest single problem as the way in which the Resource Management Act was being implemented, and described dealing with that legislation as being "cumbersome, costly and complex". It should not require two years to get all the approvals needed to set up an early child-care facility catering for only 30 children, or ministerial intervention to cut through the red-tape involved in setting up a boat-building yard. Most of us know similar horror stories.

We may also need to look at whether there are deficiencies in our national infrastructure which are acting as a deterrent to investment. Do we, for example, need to improve the transport infrastructure in some parts of the country – perhaps in some of the areas where forests are reaching maturity by upgrading roading systems, perhaps in Auckland by completing the originally-planned motorway system and by introducing more appropriate congestion charges?

Could we do more to encourage investment by expanding the size of the market? If the small size and isolation of the New Zealand market discourage investment in New Zealand, should we be doing more to encourage those with the skills and attitudes which can assist our growth to immigrate to New Zealand? Should we more vigorously seek economic integration into a much larger market? We have made a great deal of progress through our free trade arrangement with Australia, and the bilateral free trade arrangements with Singapore, and potentially Hong Kong and other countries in the region, are greatly to be welcomed. But if we really want to encourage investment in New Zealand for a much larger market, perhaps we should be devoting every effort to negotiating a free trade arrangement and greater economic integration with the United States also. There can be little doubt that one of the major reasons for the recent economic success of both Ireland and Finland is their membership of the European Union, as I have mentioned. A closer economic integration with the United States would not make New Zealand any closer physically to California, but it would carry potentially enormous economic benefits.

It is in this context that the time may have arrived when we need to give serious consideration to the pros and cons of alternative currency arrangements. Far be it from me to advocate the abolition of the Reserve Bank of New Zealand and, as I have said on a previous occasion, any decision to abandon the New Zealand dollar in favour of some other currency is finally a political decision, not a decision for central bankers. And frankly, I do not know whether there would be net economic benefit in adopting some other currency arrangement, but if we are to have a no-holds-barred discussion on how to improve New Zealand's economic performance, one of the issues which should be looked at is this.

Another matter relevant to how we might encourage more investment in physical capital is the tax regime. Do we need a substantial change in the tax structure to encourage investment in New Zealand by New Zealanders, by immigrants, and by foreign companies? And if so, what might that change look like? This isn't the place to go into detail, but it would probably involve a significant reduction in the corporate tax rate (it is disturbing that New Zealand's corporate tax rate is now the highest in the Asian region). The rate of company tax is rarely the only factor determining the location

of a new investment, and indeed it is not often even the dominant factor. But it is a relevant factor, and is one of the issues to look at if we are serious about encouraging more investment in New Zealand.

Improving technology

And finally, how might we increase the growth rate of productivity, or of GDP per capita, by further increasing the rate at which we adopt new technology from abroad, and develop new technology of our own? Roger Ferguson, Vice Chairman of the Federal Reserve Board, cites research done by Fed economists which suggests that "the consolidated influences of information technology investments account for about two-thirds of the acceleration in (US) productivity since 1995".¹¹ And there can be little doubt that a radical improvement in New Zealand's productivity growth rate will require a more rapid adoption of new technology than has been the case in recent years.

To some extent, we would see more rapid adoption of new technology if we saw more investment in human and physical capital. The three things often go together. But there are some things we probably need to do to encourage this.

To begin with, we should at least try to ensure that there are no obstacles to the development and adoption of new technology. In particular, we need to ensure that our regulatory framework does not close off developments in biotechnology, an area where we must surely have the potential to be world leaders. This does not, of course, mean that there should be no restrictions whatsoever on experiments in this area, but it does mean that we should remember that every restriction has a cost as well as a potential benefit, and sometimes the cost can be very substantial.

Do we need to go further, by providing positive incentives to undertake research and development in New Zealand? Our unhappy experience with governments providing incentives to particular private activities inevitably and rightly makes us nervous about such a suggestion, but might the "externalities" associated with research and development – the economic benefits which the individual firm can not itself capture and retain – justify an exception in this case? Recent OECD data suggest that Australian businesses spend about double what New Zealand businesses spend, relative to GDP, on research and development, while those in Ireland spend about three times as much, those in Finland spend about six times as much, and those in Sweden spend about nine times as much. Even allowing for some over-statement arising from businesses having an incentive to re-classify expenditure as R & D where there are tax benefits from doing so, New Zealand businesses seem to be spending substantially less on R & D than do businesses in other successful economies.¹²

Do we need to take steps to encourage the adoption of new technology by encouraging a more entrepreneurial, a more risk-taking, culture? At a minimum we may need to try to make entrepreneurs feel more loved – if not our *only* national heroes at least *among* our national heroes! We also need to foster an understanding of financial matters, and an interest in business activities, in our schools, through programmes such as those run by the Enterprise New Zealand Trust.

We need to consider whether the personal income tax structure provides appropriate encouragement to entrepreneurial New Zealanders to stay in New Zealand, and encouragement to entrepreneurial potential New Zealanders to come here. Our top rate of personal income tax is not particularly high by the standards of other developed countries, but it cuts in at a level of income below that in many countries and our tax system allows relatively few deductions. Compared with the rapidly growing economies of Hong Kong and Singapore, our top rate of personal income tax is very high.

Perhaps we also need to think of some more innovative moves in the tax area. The United Kingdom attracts many entrepreneurial people from all over the world to live and work in that country by exempting from UK tax all income generated outside the UK for people not born in the UK. I understand that Switzerland effectively "negotiates" the tax to be paid by wealthy foreigners who want to live in Switzerland. It may be no accident that many entrepreneurial New Zealanders have moved to these countries in recent years.

Another idea was suggested in the discussion paper issued by the McLeod Committee recently, namely establishing a maximum amount of income tax to be paid by any individual during the course

¹¹ "The productivity experience of the United States: past, present, and future", a speech at the US Embassy in The Hague, 14 June 2001.

¹² *A new economy? The changing role of innovation and information technology in growth*, OECD, 2000, page 29.

of a year. The McLeod Committee suggested that that might be \$1 million.¹³ Even a maximum of \$500,000 per annum would be more than enough to cover 10 times over the cost of public services likely to be used by a person paying that much tax, but would be a level of tax which would seem very attractive to many expatriate New Zealanders and other entrepreneurial people in the US, Europe and Asia, from whom we are currently collecting no tax revenue at all. I strongly suspect that establishing such a maximum would actually generate significantly more tax revenue for the New Zealand government than the present tax structure does.

Yes, it would offend our traditional New Zealand values to waive income tax once \$500,000 had been paid, but what if very few current New Zealand residents pay more than \$500,000 in tax each year? And if such a regime encouraged 1,000 entrepreneurs to come to New Zealand and the government were to gain, say, an extra \$500 million a year in tax revenue to finance more early-childhood education and tax incentives for research and development, who amongst us would be worse off? Indeed, the likelihood is that such an injection of entrepreneurial drive might well play a major role in changing the rate at which New Zealand business adopted new technology, and so in improving the growth in New Zealand productivity.

More savings?

Before concluding, let me talk briefly about the role which increased national savings might play in helping us to increase New Zealand's economic growth rate. "Briefly" because I am not at all sure what role national savings play in economic growth in a world where capital is free to move from country to country. We know that Japan has one of the highest savings rates in the world, but has had one of the worst growth records in the developed world for more than a decade. We know that the United States and Australia have had rather low national savings rates in recent years, but both countries have grown strongly. We certainly know that savings which are channelled into investments which yield little or no growth are of no benefit.

On the face of it, our own national savings performance has been poor over several decades, and that has been reflected in persistent balance of payments deficits over more than a quarter of a century – and very high private sector levels of indebtedness to foreign savers as a result. We know that, because of our heavy dependence on the savings of others, a significant fraction of the total output produced within New Zealand now accrues to those foreign savers. We know too that we probably all pay somewhat higher interest rates than would otherwise be the case because of the risk premium which foreign lenders charge as a result of our heavy dependence on the savings of others.

But even if we were sure that improving our savings performance was a vitally important ingredient in improving our growth performance, or our standards of living more generally, nobody knows for sure how best to do that.

In recent years, successive governments have sought to contribute to an improved national savings performance by running fiscal surpluses, though there is no certainty that that increases national savings in total – the possibility is that increased public sector savings may be offset by reduced private sector savings, perhaps because of enhanced public confidence that taxpayer-funded retirement income is assured.

What about special tax incentives for retirement saving? Alas, there is little evidence that such incentives have any significant effect on national savings – to the (limited) extent that they increase private sector savings, they may well simply produce an offsetting reduction in public sector savings (because of the reduction in tax revenue required to provide the incentives). They also tend to be quite regressive, in that most of the benefit of the incentives goes to those on the highest incomes, who might well be savers even without the incentives.

It is possible that some form of mandatory savings scheme might produce an increase in national savings. It is hard to avoid the conclusion that Singapore's breath-taking savings performance over several decades is related to the very high level of mandatory savings required by that country's Central Provident Fund. But on the other hand, it is not yet entirely clear that Australia's more modest mandatory savings scheme is having a marked effect on Australia's savings performance, although it is clearly having an effect on developing a pool of institutional savings.

¹³ *Tax Review: Issues Paper*, June 2001.

On balance, I would probably be a supporter of some kind of mandatory savings scheme as one contribution to improving our growth performance. But the case is not yet conclusively proven, and I would prefer to see more informed debate on the subject (as distinct from the substantially ill-informed debate of the kind we saw when this matter was last on the public agenda in 1997).

One thing is clear however: we can not afford to lament the extent of foreign investment in New Zealand, and more generally the extent of our dependence on the thrift of foreign savers, unless we are also willing to save more ourselves. Our high level of dependence on foreign capital, year after year, is simply the other side of our lousy savings performance.

Conclusion

Mr Chairman, let me conclude by reminding you that we have some huge advantages in terms of economic growth – macroeconomic stability, a substantial measure of consensus on economic policy across the political spectrum, a competent and corruption-free judiciary and bureaucracy, an English-speaking population. After some decades of growing substantially more slowly than other developed countries, we have recently picked up our growth performance and during the nineties achieved per capita growth at a rate closely similar to average growth in other OECD countries.

There are, therefore, plenty of reasons to be optimistic. Getting ourselves back to around the middle of the OECD pack in terms of GDP per capita within a decade – indeed, even within two decades – will still be a major challenge to all of us. Fortunately, our history suggests that we thrive on major challenges.