The knowledge wave...

creating Kiwi prosperity

Ka pu te ruha
Ka hao te rangatahi

It is time to cast aside the old net
The new net goes fishing

catchingtheknowledgewave
creating kiwi prosperity

www.knowledgewave.org.nz

An introduction

By Dr John Hood
Vice-Chancellor
The University of Auckland

The University of Auckland, in partnership with the New Zealand government and supported by the business community, initiated the "Catching the Knowledge Wave" project in October 2000. The project arose from the broadly held recognition that New Zealand's economic performance was inadequate to sustain the quality of life, the quality of public services and the social cohesion valued by New Zealanders.

Its aims were:

- To raise New Zealanders' sights and to encourage them to explore new ways to create future economic prosperity and social well-being.
- To spark a broad-based national discussion on how New Zealand can benefit from the pursuit and application of knowledge-based creativity and innovation.
- To develop initiatives for change.
- To build national support among political, business, academic, community groups and media for that change.

A pivotal point of the project was the Catching the Knowledge Wave Conference from August 1-3, 2001. With 420 participants and 37 national and international speakers, the conference was charged with identifying through its workshop sessions elements of the national strategy needed to enable New Zealand's transition to a competitive knowledge society.

As one of the co-chairs of the conference (the other was Prime Minister Helen Clark), I am very pleased that excerpts from four of the speeches to the conference are included in this issue of *University of Auckland Business Review*. The full text of these and many of the other contributions can be found on the Knowledge Wave website at www.knowledgewave.org.nz

Given the limited time available during the conference itself, it is a tribute to all who participated that it was able to voice aspirations for New Zealand's future. The general consensus was that, measured by GDP per capita, the top half of the OECD is where this country must be within 10 years. Without the effective doubling of GDP per capita growth this requires, we cannot improve resourcing in social, educational, welfare and other arenas.

Many practical and tangible recommendations for action were put forward at the conference (see sidebar below). I hope *University of Auckland Business Review* readers, as members of organisations and networks, will use them, develop them and implement them. How these initiatives are carried forward will determine the ultimate success of the conference.

POINTS TO PONDER

Some recommendations of note from the Catching the Knowledge Wave Conference:

- Create "compliance-light" zones with minimal regulations for new businesses.
- Create SWAT teams to mentor innovative new small businesses, e.g. help them with marketing, intellectual property, finance.
- Create a proactive investment promotion agency of scale.
- Create a social venture capital fund (this recommendation is already well under way).
- Leverage the Kiwi diaspora through the creation of Kiwi networks (discussions at the conference between The Warehouse founder Stephen Tindall and Professor David Teece have already resulted in the formation of a professional society for New Zealanders working in knowledge industries in Northern California).

The full set of recommendations can be found at www.knowledgewave.org.nz

Upgrading New Zealand's competitiveness

By PROFESSOR MICHAEL PORTER
Bishop William Lawrence University Professor at Harvard Business School. In 1989-1991, he led a team in a study of the competitiveness of this country, the results of which were published in the book *Upgrading New Zealand's Competitive Advantage.*

Below is an excerpt from a transcript of his speech

I remember vividly being here in 1990 and 1991 and arguing with person after person about whether competition was good. And now New Zealand actually ranks 10th among all the nations that we survey – almost 60 – in the effectiveness of anti-trust policy. And there are new amendments and new improvements in that policy that will make it even more effective.

New Zealand has made a commitment to competition. Yes, size is important. But the way to get size is not to dominate your local market. The way to get size is to be international and to grow globally. The way to build a big business is not to merge with your largest domestic competitor. If you want to merge, merge with foreign companies and put together a global company.

But the point is that New Zealand is not gaining position in the competitiveness rankings. It's not losing, it's improving in absolute terms, but other nations are improving faster. What that tells us is we have to step up the pace. We have to be more aggressive, more focused, we have to translate a lot of good thinking into action.

We have a lot of cluster initiatives in New Zealand, a lot of discussion of clusters, a new burst of energy, but many of the initiatives have had limited results so far. There's not a deep commitment and understanding to actual cluster development processes. We're facing stiff competition from other parts of Asia. There are government policies in New Zealand that are still working at cross-purposes.

Our wealth is going to be dependent on how productive a society we are, on how productive an economy we are. We know, from studying many nations, that it doesn't matter what, particularly, we choose to produce, as long as we can be really productive at it.

The old distinctions between hi-tech and low-tech manufacturing and services have fallen away. Today one can employ advance technology to compete in virtually every industry. The challenge we have in New Zealand is not that we have to get into totally new fields – that's not the challenge at all – [it] is how to make our areas where we have a position, extraordinarily productive. And in the process of doing that we will naturally grow and broaden our position.

Too many nations go on futile exercises trying to get into aerospace or hi-tech. The lesson from the decade of work that I've done since this initial book that we published is simply that you only succeed by building on your strengths. You don't create entirely new industries. You build new industries out of existing industries.

We know that to have a prosperous economy today you almost always have to have a mix of local and foreign firms. It's just too complicated for local firms to master all the skills and all the knowledge and all the technologies. We need to bring local firms and foreign firms together, ideally around areas of specialisation where they co-exist. The best economies look like this.

In the modern global economy, if you're an advanced nation like New Zealand, with relatively high wages, you cannot prosper by

And if we're going to have competitiveness in New Zealand, if we're going to have high levels of productivity, we need to build clusters

making standard products using standard methods. You need to innovate, you need to be continually pushing the frontier. Now when we use the word innovation we use it broadly. We're not just talking about scientific breakthroughs, we're talking about new approaches to marketing, product positioning, distribution channels, service delivery.

I think one of the things we've learned quite clearly in New Zealand over the past decade is that macro-economic policy is not enough. Competitiveness resides in the micro-economic structure of the economy, the capability of the firms and the quality of the business environment in which those firms are based. Increasingly, the challenge for New Zealand is a micro challenge not a macro challenge.

We need to improve the quality of inputs to business. We can't become more productive unless our labour gets more skilled, unless our scientific base gets better, unless our physical infrastructure gets more efficient, unless our capital markets get more efficient. We have to be continually ramping up the quality and the efficiency of our inputs to business.

And if we're going to have competitiveness in New Zealand, if we're going to have high levels of productivity, we need to build clusters. A cluster is more than just a group of firms in a single industry. A cluster involves an array of firms in a variety of related industries. Both suppliers and firms in closely related technologies.

Why does a cluster matter? Well, a cluster matters because it's more efficient if you can access suppliers and sophisticated services locally than if you have to out-source them. You'd always rather source from a capable supplier nearby, because if you have a nearby supplier it's much easier to have a dialogue, it's much easier to share knowledge, it's much easier to rapidly improve, to customise.

Clusters not only involve firms, they also involve related institutions … research programmes in universities that are specialised in the field.

We have to figure out where we have a realistic opportunity to be world class and we have to make sure that our universities and our research institutions focus accordingly. Right now we have a situation where our universities are duplicating each other. We can't afford that. We want them to compete on differentiation.

We need to promote much more co-operation between universities and the private sector. The way to do that is by using clusters. Find your areas of technological emphasis, wrap yourself in the cluster, become part of the cluster. Like the University of California at Davis is in the wine industry. Like the University of Rochester is in the Rochester optics industry.

We have to find ways to bring these two parties together. We need to get more money being spent by the private sector. Whether that be foundations or universities through their own fund-raising or international money coming from other organisations or businesses themselves. In order to do that we're going to have to do the next thing, which is probably increase the incentives for private-sector R&D fairly substantially.

I think the science parks and the innovation centres that are being created now are great, but we've got to be focused. We can't just have a science park that says anybody who wants to come and do innovative things can come. We need to figure out where to put our focus and we can have a lot of them in a lot of different fields.

There's a whole variety of areas where there's promising world-class stuff happening in New Zealand. We have to have a concerted, bold effort to raise that up and turbo-charge it. In order to do these things, we could add a turbo-charger to our economic strategy if New Zealand was able to attract more foreign investment. It's not a quick fix, because it takes a long time to attract foreign investment. And it takes a concerted strategy to attract foreign investment. But if we can get foreign companies here in the fields where we have some unique strengths and assets, this creates a kind of win-win situation, both for the foreign companies and for the domestic companies. It puts us on the global map in these fields and it naturally builds connections to the rest of the world.

How do we attract foreign direct investment? We focus. We do it in the clusters where we have some strength. And we want to reinforce that strength. I think in order to do that we're going to have to create some incentives, we're going to have to put in place some very attractive package that's compelling. I don't think we have to give huge windfall cheques to foreign companies to get them to come here. I do think we have to give them some tax incentives and I do think that we should make some commitments in terms of training and support and infrastructure development to meet their needs.

Finally on this agenda, we need to continue the process of transforming company strategies. If you go back to 1990 and 1991, New Zealand companies were very different. We have to acknowledge the extraordinary changes that occurred in the corporate sector. Companies went through major restructuring, they tightened up, they improved their operational efficiency, they improved their use of information technology. A lot of things have happened. Now it's time for the next step. More R&D, more unique products, more aggressiveness on brand development, more internationalisation. First regionally, then globally. The challenge for New Zealand companies is to go to the next level. Unfortunately as the New Zealand dollar has been depreciating, it provides a safety valve that gives you an excuse not to do that.

A country can only be as productive as its companies. The productivity of the nation is the sum of the productivity of all the firms in the nation and so we have to ask New Zealand enterprise to step up the pace. Having said that, companies can't move up unless the environment improves, unless the incentives get better, unless the skills they can hire are better. So it's all inter-related. And, hopefully, if we take a series of these steps together, we can make rapid progress.

New Zealand is facing an issue that is very complicated and affecting many nations ... how to balance economic policy and social policy. We have to develop an acute understanding of how economic and social policy actually can be integrated and made to reinforce each other. The risk is that if we see economics and social policy as separate and pin it against each other, we will pretty much eliminate any opportunity that we have to move ahead as an economy.

The big problem [we face] in the United States is too many people are not succeeding and not enjoying the prosperity other people are enjoying. We have the same issues in New Zealand, around the indigenous populations, but it's beyond that. How do you address this issue? Well, what we found is that if we see it as simply a social issue, if we see it through the social lens, we try to solve the issue with social solutions like childcare or drug treatment, or things like that. Those all contribute to the solution. But they don't provide the solution.

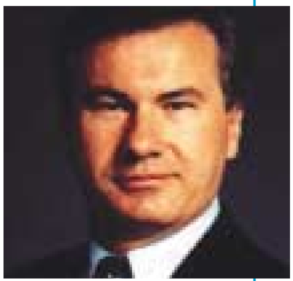
The only way to address these issues of inequality is to equip the people who are not prospering with the tools and the opportunity to prosper. It's fundamentally an economic problem. If people can't get access to good enough jobs, if people can't earn a decent enough income, if they can't have access to building businesses, then we can keep pumping money into housing subsidies and all kinds of support, but it'll go on forever.

In the United States, we're just making this transition. We're just starting to see that it's about economics, not just about meeting social needs. In New Zealand, I think we're kind of stuck on the fence. We have a lot of concern about these issues and about the indigenous citizens who are not doing as well. We have a whole array of programmes to try to address that, but we're just beginning to understand the key importance of business development, of supporting and promoting entrepreneurship and I would simply say that that's the only real solution.

Five steps to a better future

By PROFESSOR DAVID TEECE

A New Zealander, Professor Teece is Mitsubishi Bank Professor of International Business and Finance and Director of the Institute of Management, Innovation and Organisation, Haas School of Business, University of California, Berkeley. He also chairs Canterbury New Zealand and global consulting firm LECG, which he founded in 1988.



Below is an excerpt from his full speech available at www.knowledgewave.org.nz

New Zealand could be on the cusp of significant forward momentum. The reforms of the 1980s and early 1990s, while not complete, provide the country the chance to participate in the new economy. However, the institutional and managerial environment is not yet fully tuned to provide the resources and attract the capital needed to support new business formation or the expansion of established firms.

The situation will be somewhat frustrating for government, as there are no easy solutions. The problems I have identified cannot be relieved simply by having government throw money at them. A forward-looking and expansive vision, certain institutional and managerial changes, and a refocusing of efforts by government are basically what I am advocating.

1 Harnessing the expatriates

The knowledge economy feeds on and in turn rewards individuals with high-level skills. New Zealand is not producing enough of them. Moreover, much Kiwi talent migrates abroad because of superior opportunities.

There are at least two identifiable cohorts of expatriate New Zealanders: (a) skilled New Zealanders who have migrated abroad; (b) New Zealanders who like myself, have been educated abroad and simply chosen to build careers and families overseas. Both cohorts have certain attributes in common: (a) they are not at all alienated from their home country and (b) for many of them it is not at all out of the question that they would return home for a good opportunity, even if this required some level of pay cut. However, there is no sense of deep obligation felt to king and country, so they need to be cultivated and recruited.

One salient property of this expatriate community is that the whereabouts of these individuals is generally unknown to New Zealand, in the sense that at least to my knowledge, no comprehensive database of names, addresses and qualifications is available to either the public or private sector. Nor am I aware that there are systematic efforts to track these individuals and to leverage their networks to the benefit of local enterprises.

I do not mean to suggest and imply that some New Zealand firms are ignorant of the potential opportunities associated with reversing the brain drain. New Zealand-based headhunters do shop abroad. Whatever efforts

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University education and research need to be aligned with industry. This does not involve a sacrifice in research excellence

exist are not widely publicised, however, and I am quite confident that there are greater opportunities here than have hither before been achieved.

2 Restructuring education

University education and research need to be aligned with industry. This does not involve a sacrifice in research excellence. The great American research universities have achieved academic excellence while also meeting the needs of agriculture and industry. This has been aided by the formation of interdisciplinary and applied departments with outreach programmes designed to assist farmers and industrialists.

Clearly, scale prevents New Zealand's universities from being excellent across the board. The current emphasis on centres of excellence appears to recognise this. The bottom line is that links between the university and the business world need to be strengthened. But scale and resources are not the only ingredients to success.

3 Strengthening management

Because there is so little data to help me assess the condition of New Zealand management, my comments are necessarily impressionistic. Given the importance of management to enterprise performance, however, and given that some businesses (i.e. multinational firms) transcend the boundaries of nation states, there is not necessarily a correspondence between the performance of firms and the performance of the domestic economy.

In Japan, for instance, Toyota is doing well despite the performance of the Japanese economy. Accordingly, if the domestic economy and its management were to blame for everything, I might expect New Zealand-based firms to do poorly at home, but they need not do poorly abroad. However, I'm not aware of many cases of this kind in New Zealand. Moreover, if New Zealand management were excellent, I would expect to see New Zealand managers being vigorously recruited overseas by foreign companies. I am not aware of any significant activity of this kind.

Perhaps this suggests that management of the New Zealand private sector is not yet superlative. I have not encountered overseas firms remarking upon the exceptional calibre of New Zealand management.

How then, does one upgrade New Zealand

management skills quickly? One channel is the expatriate labour force. Expatriate managers do exist and they should be recruited home. They will bring with them skills and insights into management learned abroad.

This is what we have done at Canterbury with our new Managing Director, Peter Garbett. Peter clearly brings skills and fresh insights hitherto poorly represented in the company. While the talent pool for managing directors/CEOs may be thin, I do believe there are some very qualified technical and divisional managers buried in the expatriate labour force in Europe and the US.

Business schools in New Zealand can probably also improve their game. Should New Zealand universities decide to make it a priority, I believe there are expatriate faculty who could be recruited. Compensation is clearly a problem, but if the university-business links can be deepened, supplementary stipends could be arranged to surmount these barriers. It's at least worth a try.

4 Consolidating and/or expanding small business

New Zealand has many extremely small firms. According to one source, 84 per cent of small to medium enterprises employ five or fewer full-time equivalent staff[1]. Such firms are generally not particularly skill-intensive and certainly do not have much in the way of new product development or R&D capability.

This suggests the need to grow firms in New Zealand so they can support regular governance, a planning function and a new-product development. In some cases, consolidations may be necessary to achieve this. In others, sights simply need to be lifted.

One-man shops ought not to be thought of as entrepreneurial shows. Entrepreneurs build businesses. Accolades should be reserved for those who can build a team and achieve sustained revenue and profitability growth.

5 Expanding R&D expenditures

New Zealand has under-invested in R&D. However, turning on the R&D tap by itself will probably accomplish little. But as governance and "state of mind" issues are addressed, additional R&D spending may well pay off.

In New Zealand's current predicament, the main benefit of R&D is likely to be that it can help those performing it better understand and access technology developed abroad. One has to be in the game to recognise such technological opportunities. This is an important benefit which should not be overlooked.

[1] A. Pirich, S. Knuckey, & J. Campbell. "An Interface Between Entrepreneurship and Innovation: New Zealand SME Perspective", June 2001, page 3.

Why New Zealand has languished

By SALLY SHELTON-COLBY
Deputy Secretary General of the OECD

Below is an excerpt from her full speech available at www.knowledgewave.org.nz

On the issue of New Zealand's desire to improve economic growth, I recognise why this question grips your politicians and policy-makers: from one of the richest countries in the world in the 1950s, New Zealand was languishing in the bottom third of OECD countries in terms of GDP by the end of the 1990s. Moreover, while improving in the 1990s, growth has not been sufficient to close the substantial income gap with the OECD average, due to poor productivity performance. New Zealand stands out in the OECD as a country that has made enormous efforts over the past two decades to strengthen its fundamentals, e.g. in reforming its product and labour markets.

However, despite an extensive programme of reform, economic performance has remained disappointing and hasn't matched initial expectations of policy-makers. In particular, trend growth per capita, which is what really matters for incomes and living standards of New Zealanders, has languished, especially in comparison with other OECD countries. There appears to be an increasing awareness in New Zealand's government that on its own, getting fundamentals right may not be enough to strengthen performance.

The reform agenda in New Zealand stalled somewhat in the mid-1990s and, in some respects, even took a few backward steps. During this period, much of the rest of the world caught up. We note that Australia generally scores better in terms of many OECD measures. For instance, our analytical work has shown that Australia scores better than New Zealand in the areas of:

- Procedural inconveniences and delay of dismissal of employment contracts.
- Regulatory clarity.

- Explicit and implicit barriers to trade and investment, including tariffs.
- Public ownership of major assets.

In our 2000 Economic Survey, the OECD concluded that previous structural reform had produced moderately positive results, but that more needed to be done to refine and reinvigorate existing structural policies and to consider areas for further reform. Although we have concluded that there is no need for major tax reform, there are a number of taxation issues that could be usefully addressed, including a change in the tax mix toward more consumption tax and less income tax. Additionally, we consider that the recent increase in the top marginal rate of tax will reduce incentives for highly skilled workers to remain in or migrate to New Zealand and may exacerbate the "brain drain".

Administrative barriers to enterprise are among the lowest in the OECD and product market regulation is among the most favourable. The country also has a high rate of investment in and adoption of new technologies, e.g. in information technology and biotechnology. Concerns remain in other areas, however, including low levels of venture capital, indifferent skills development and the low level of R&D investments. On R&D, the OECD Growth Project concluded that this is an important driver of multi-factor productivity growth, but New Zealand scores very poorly compared with most other OECD countries and has the lowest tax incentive for private-sector R&D investment.

The OECD considers that New Zealand's performance in terms of developing human capital needs to be improved. In particular, we have noted that according to OECD Indicators (in our publication *Education At A Glance*), New Zealand remains significantly below the OECD average in math and science achievement in the eighth grade, while those of Australia are considerably better. Overall, the OECD considers that there is considerable scope for improvement in the education field: recent changes of policy have reduced choice; New Zealand has eight universities, yet the best is ranked only 33rd in Asia possibly due to the "thin spreading" of resources. In our 2000 Review, the OECD concluded that establishing clearer goals for schools and students, disseminating best-practice approaches and bolstering the incentives to develop skills were essential to improve standards.

All of this leads me to one overriding conclusion: New Zealand's relative resource endowments and remoteness mean that it has to perform even better than other neighbouring economies. Only then will it attract domestic and foreign labour and mitigate the migration of skilled workers seen in recent years, attract investment and achieve similar levels of economic growth.

The need for better productivity

By DR DON BRASH
Governor of the Reserve Bank of New Zealand

Below is an excerpt from his full speech available at www.knowledgewave.org.nz

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.

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 3.6 per cent per annum, somewhat more than double the growth in per capita GDP achieved by New Zealand in the nineties[1].

Ultimately, it is productivity – output per person – which mainly determines the standard of living. 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 one per cent).

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 they will be employed in industries which lack scope for improving productivity. On the contrary: it is useful to recall that over the past 15 years, with average productivity improving by little more than one per cent per annum, productivity in agriculture improved by almost four 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.

To improve our human capital, we urgently need to improve the quality of our education system. 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, 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.

One obvious way of increasing the output per person employed is to give people more physical capital to work with. 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.

[1]Scobie and Mawson, op.cit.

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. 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.

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? It would probably involve a significant reduction in the corporate tax rate (it is disturbing that New Zealand's corporate tax rate is 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.

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? 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.

Do we need to go further, by providing positive incentives to undertake research and development in New Zealand? 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.

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.

An 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 of a year. The committee suggested that that might be $1 million[2]. 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. 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 adopt new technology and so improve the growth in New Zealand productivity.

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[2]Tax Review: Issues Paper, June 2001

One obvious way of increasing the output per person employed is to give people more physical capital to work with

In conclusion

PRIME MINISTER HELEN CLARK

Below is an excerpt from her full speech available at www.knowledgewave.org.nz

I [endorse] what has happened at this conference. The process has been very refreshing and very stimulating. The ideas have come thick and fast. In the broad themes and the proposals emerging from them, there is beyond doubt the basis for a shared vision and there is certainly a willingness to go beyond talking, to implementation and action.

The ideas for action, as I had hoped, were not just ideas for government, but also ideas for education, for business, for individual citizens and for communities. The broad thrust of what has come through is entirely consistent with the government's thinking. We have heard new ideas, we've heard new ways of looking at things. We've already begun a lot of change and strategising. The outcome here encourages us to carry on.

What has come through particularly strongly is that New Zealand needs focus, attitude and confidence. Indeed if each of us displayed the attitude, confidence and optimism of the high school students who spoke [at the conference], New Zealand would go a long way forward.

I also think there has been very useful recognition by the conference that economic transformation has to be underpinned by social inclusion and participation. We cannot afford, as a country, to leave a significant minority of our people behind. The government will respond very constructively to the outcomes of this conference as I know all those who have been involved will.

DR JOHN HOOD

Below is an excerpt from his full speech available at www.knowledgewave.org.nz

Our hope was that out of the dialogue, debate and discussion there might emerge broad consensus around new ideas, new thoughts, new approaches that could be picked up by [conference participants] as individuals, as members of organisations by those organisations, among our institutions and in our public policy. This is because we desperately and constantly need to be challenging in different, highly constructive ways (this conference is one of them) the status quo.

It is too easy to allow ourselves to become embedded, complacent and resigned. We need to raise the platform of our public dialogue, to change the language, to stop talking past each other, and to move on from the cant, the dogma, the trivial and the petty that unfortunately and too often plague that forum. We need all New Zealanders to understand that they will only be better off on all dimensions, that we will only "create Kiwi prosperity", the byline of the conference, if we do achieve a step-change in our economic growth performance.

There is much the different cultures of this small country can learn from each other. The notion of a hui, where wisdom about challenges can be respectfully shared in the quest for better outcomes, informed the design of this meeting. It is, therefore, appropriate that I should conclude with a Maori proverb:

Ka pu te ruha
Ka hao te rangatahi

It is time to cast aside the old net
The new net goes fishing