

Porter Address

MICHAEL E. PORTER

Wellington Town Hall

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Address - Michael E. Porter

Simon, thank you so much for that kind introduction and for honoring me with all the time today.

I am delighted that so many of you were willing to come and participate in the beginning of a new discussion about the future of New Zealand and its economy, what the future aspirations of the nation should be and how you are going to achieve those aspirations. I was privileged to have led an earlier effort with a team of New Zealanders. It is time, however, to revisit where New Zealand stands in the global economy. It is time to craft a strategy for the next stage. And, as much as anything else, it is time to put some more wind behind the sails, to build a new wave of energy behind the country's progress.

New Zealanders have accomplished a lot. The country has gone through a remarkable amount of structural change: its economic foundations are vastly stronger than they were in 1991 when I was here before. As I go around the world and talk about where I think my work may have made a difference, New Zealand is one of the places that I mention. This progress is one of the reasons why the Asian crisis has left New Zealand with a cold rather than a life-threatening illness like so many other countries in the region.

That said, however, I believe that New Zealand has only partially achieved its potential. Nor will it achieve its potential by going on auto-pilot or simply allowing things to happen. New Zealand needs a new vision going forward. I have some thoughts about that which I want to share with you in a moment.

But first, I want to lay out the basic intellectual foundations that underlay our original project and its findings. Next, I will comment briefly on what has been accomplished. Finally, I will comment on what has not been done, and propose some priorities for going forward. As you will see, I believe that New Zealand now needs to fundamentally change the character of its national economic reform process. The country has been through the stage of figuring out what was going wrong, and stopping many of the negatives. What is needed now is to move to the affirmative stage-to charting a positive agenda. New Zealand needs a vision that will excite and motivate every citizen to reach new and heretofore unheard of heights. There is no reason, in my mind, that this country cannot be one of the most prosperous nations in the world and a model for others. But, and I hope you will forgive my directness-you are not there yet.

Let me be clear that I have no interest in pursuing or advancing any political agenda in this country. But it is time to move to the next level.

The Basis of Economic Prosperity

In order to do that, we have to remind ourselves what really makes a country prosperous. Our goal is to raise the living standard of New Zealanders, to improve the quality of life. We know, beyond a shadow of a doubt, that the only way to have a prosperous economy is to create a high and rising level of productivity throughout the economy. A productive economy can pay high wages; an unproductive economy can only support low wages. A productive economy can earn high returns on the capital it invests in its business activities; an unproductive economy can only scrape by earning low returns.

Productivity determines prosperity; there is no other way. Productivity is the definition of competitiveness; no other definition makes sense. I see a tendency in New Zealand to think that lowering wages will make the country more competitive. That is not victory, that is defeat. If wages are under pressure that means that firms are not competitive and cannot support a high standard of living. The same applies to exchange rates. I also hear people in many countries say that they will become more competitive if the nation's currency goes down in value. But if a nation's currency goes down in value, that is another sign that the nation is not competitive and that the quality of its goods and services cannot support current prices. The only definition of competitiveness, and the only way to build prosperity in an economy, is improving productivity.

Competitiveness in a Global Economy

- A nation, state, or city's standard of living (wealth) is determined by the **productivity** with which it uses its human, capital, and natural resources
 - Productivity depends both on the **value** of products and services (e.g. uniqueness, quality) as well as the **efficiency** with which they are produced
 - It is not **what** industries a nation, state, or city competes in that matters, but **how** firms compete in those industries
 - Productivity in a nation is a reflection of what both domestic and foreign firms **choose to do in that location**



- The public and private sectors must each play different but interrelated roles in creating a competitive economy

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Now, productivity is partly a function of efficiency, especially in commodity industries. In the modern global economy, however, productivity is more than efficiency in producing the same old goods. It also has to do with the value of the products that a nation produces. And as an economy becomes more advanced, it has to find ways to raise the value of its products, with value being measured by what buyers are willing to pay. Buyers are willing to pay more only if the product is better quality, it has better features, is offered together with better services, or carries a better brand name. Productivity growth is as much a function of raising product value as it is of improving the efficiency with which traditional products are produced.

Attaining higher value does not require a nation to produce semiconductors or computers. A nation can be prosperous and productive in virtually any field. What matters is how a nation competes, not what industries it competes in. You can be very prosperous in tourism if you can raise the average spending per tourist from \$100 a day to \$300 a day by providing a better experience-better hotels, better services, better attractions, and a better brand image. Let us take another example. Shoes seem like a mundane product, not at all the foundation for a prosperous society. But the Italians get rich making shoes because they make shoes in a very special way - with great style, great design, strong brands, great distribution. So Italian companies are able to sell those shoes for \$150 a pair and support high wages and high profits, whereas many other countries that make shoes by imitating and without much skill and sophistication can only support wage rates of 50 cents to one dollar an hour.

To build a prosperous economy, we must stop thinking that traditional industries are bad and that the nation must move into hi-tech. Instead, the focus must be on the ultimate basis of prosperity, which is the productive capacity of the economy. If the nation can boost productivity through improving skill and technology, prosperity will rise. On the other hand, if there are impediments which stand in the way of relentlessly improving productivity, the nation will stagnate.

Clearly, the Government has a fundamental role in building a productive economy-I will say a little more about that later. But the private sector has a fundamental role as well. Indeed, one of the things that has to happen in New Zealand is a re-balancing and re-thinking of the respective roles of the public and the private sectors. To a significant extent, New Zealand still is a Government-led society. Ultimately it must become a society where both the Government and the private sector lead together.

New Zealand today is in the ranks of the advanced nations, which raises the ante for what you must achieve to sustain your prosperity. Middle-income nations can imitate others products and use their relatively lower wages and other costs to be competitive. Advanced nations do more than imitate; more than cut costs; more than restructure. They have to develop innovative capacity. Developing nations have much lower wages, they are improving their infrastructures, and have the skills of citizens. The only way to justify today's high wages-and even higher wages tomorrow-is to produce products and services that the developing and middle-income nations simply cannot produce. Growing prosperity depends on the capacity to innovate, to produce higher and higher value products that others cannot produce or will produce only after a delay. To support an advanced-economy wage structure you have to be a moving target as a nation, applying better and better levels of technology to develop unique products and production processes.

The Challenge Facing Advanced Nations

- An advanced nation cannot support high wages and profits through producing **standard** products or services made with **standard** methods
 - Developing economies have far **lower wages** and **improving** skills and infrastructure
 - Developing nations **can access existing technology** via outsourcing and technology acquisition
 - A broader array of nations are **building innovative capability**
 - Multinational companies can choose to **locate activities anywhere**, including innovation-related activities
 - High wages can only be justified by **productivity differences**



- The prosperity of advanced nations depends on **innovation**:
 - Developing **high value** products and services
 - Creating **unique** products and features
 - Developing **uniquely** productive **processes** and **activity systems**
 - **Staying ahead** of technology diffusion
- Innovation also holds the key to solving many of a nation's most pressing **social** challenges (e.g., health care and the environment)

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These are the fundamentals of the modern global economy. There is not much slack. If a nation fails to develop this capacity to be more productive, it quickly succumbs to the pressure of these market forces.

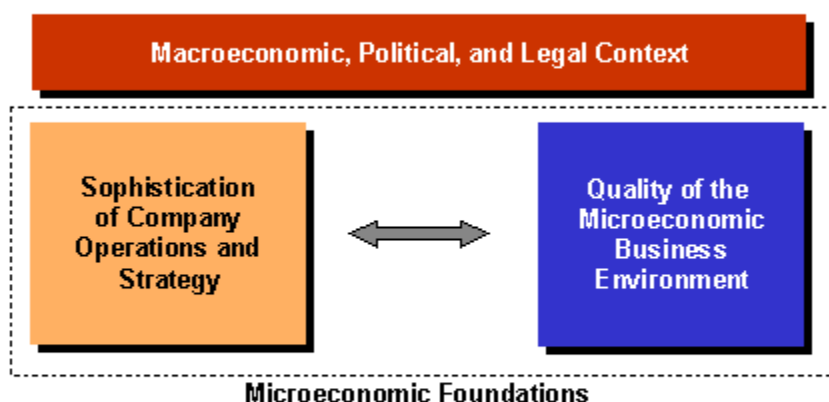
Building a Productive Economy

How does New Zealand build a productive economy? The first step is to create a sound and stable macroeconomic, political, and legal environment. New Zealand is well along in this process. New

Zealand has some of the soundest, most stable macroeconomic policies in the world in terms of inflation, interest rates, government finances, and the like. Indeed, New Zealand has been one of the great macroeconomic success stories of the last decade.

However, from studying economic development in nations around the world, we also know that just having good macroeconomic policies is not enough. Macroeconomic policies do not create wealth. They make it possible or easier for firms to create wealth, but prosperity will not rise unless what I call the microeconomic foundations of the economy are sound and improving.

Upgrading an Economy



- Sound macroeconomic policies and a stable political / legal context are **necessary but not sufficient** to ensure a prosperous economy
- Competitiveness ultimately depends on improving the **microeconomic foundations** of competition

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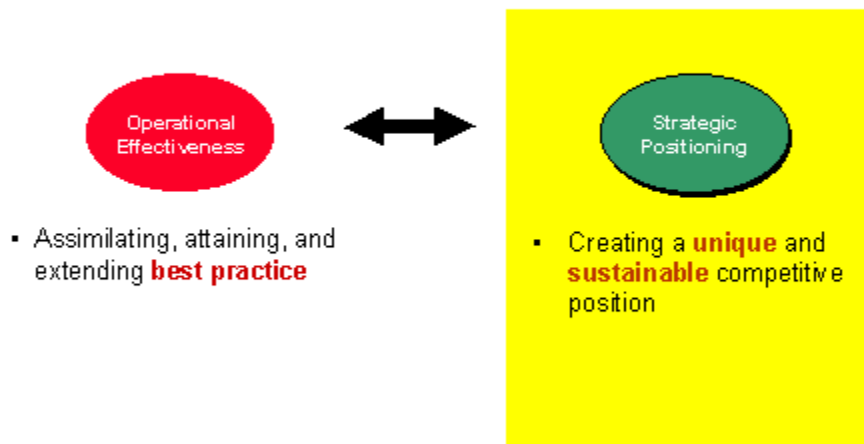
What are the microeconomic foundations? First and foremost, they are rooted in the capacity of New Zealand's companies. The New Zealand economy cannot be productive unless the companies and subsidiaries operating in New Zealand are productive. This applies not just to exporting companies but to every company. A country cannot afford to have inefficient companies in any part of the economy, because they will hurt other industries that depend on them for goods and services. At the core of any economy's prosperity, then, is the sophistication of company operations there. We will need to examine progress in the corporate sector in New Zealand, and I will come back to that in a minute.

A focus on companies alone is not enough, however, because their capacity to move to more productive strategies is also a function of the microeconomic business environment in which they compete. The macroeconomic environment-interest rates, inflation rates-is important in setting an overall content. But what I am talking about is the immediate environment on which companies draw as they go about competing every day: things like the infrastructure that they use to transact business and the types of people that they are able to recruit in the market. Even the best intentioned companies who seek to employ the most advanced and sophisticated managerial techniques to compete are constrained unless they have the right local environment to draw upon. So an important question is how New Zealand is doing in improving its microeconomic business environment.

Before answering, we should explore the microeconomic foundations of competitiveness in more detail. In terms of the company agenda, there are two fundamental challenges companies have to address. One is what I call operational effectiveness. There is a lot of knowledge, best practices and

technology, available in the world about how to compete. Basically, the first order of business for any company is to achieve operational effectiveness, to achieve best practice from a worldwide point of view. Doing so allows a company to be in the game. To take the next step toward higher productivity, however, requires doing more than assimilating best practices from elsewhere. Companies have to be able to create their own best practices and develop unique strategic positions. We must assess New Zealand's progress on both of these distinct and complementary agendas.

Determinants of Relative Performance

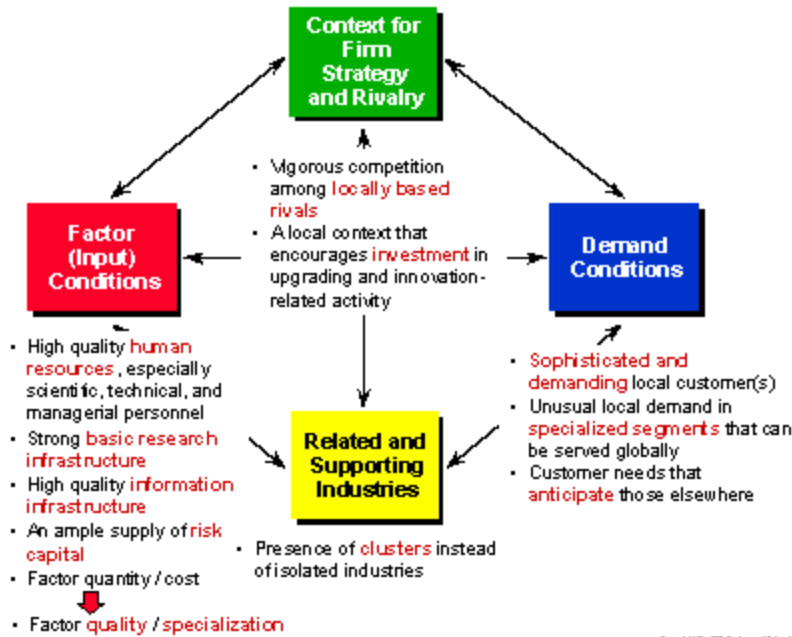


Source: "What Is Strategy?," Harvard Business Review, November/December 1996.

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In terms of the microeconomic business environment, there are four dimensions that theory suggests is important. One is the inputs that firms draw on, such as human resources, physical infrastructure, science and technology infrastructure, capital, commercial information, administrative rules and regulations. These are the crucial inputs that businesses have to deal with every day to create value. For an economy to become more productive, the quality, the sophistication, and, ultimately, the specialization of these inputs has to improve. The nation must drive up the average quality of its human resources, the quality of its scientific base, and so on.

The Microeconomic Business Environment



The second aspect of the microeconomic business environment is the context for competition. A productive economy needs a climate and set of incentives that stimulate aggressive investment. Initially that investment will be in "hard" assets; to reach an advanced-economy status, there must be a climate in which companies are willing to invest in "soft" assets like training, R&D technology, brands, and international marketing

Appropriate Roles of Government in Economic Development

1. Establish a **stable and predictable** macroeconomic and political environment
 2. Improve the availability, quality, and efficiency of **general purpose inputs and institutions**
 3. Establish overall **rules and incentives** governing competition that encourage productivity growth
 4. Facilitate **cluster development and upgrading**
- ↓
5. Develop and implement a positive, distinctive, and long-term **economic upgrading program** which mobilizes government, business, institutions, and citizens
 - horizontal **and** cluster specific

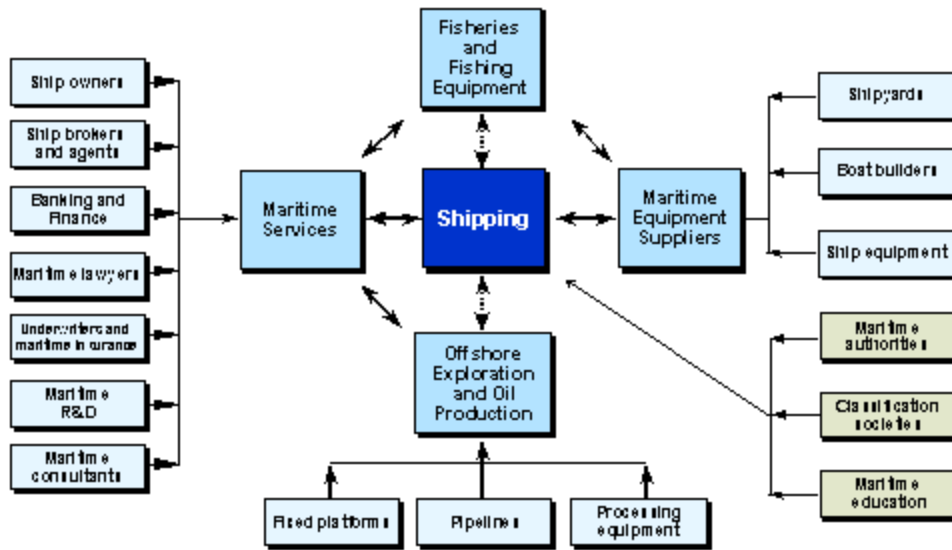
networks.

Closely related to this, a productive economy is one where there is internal competition. You cannot hope to compete abroad unless you have to compete at home. There are some fleeting exceptions to this in less advanced economies. When success depends on innovation, however, the pressure of local competition is fundamental to making sustained progress. It is no surprise, then, that when you look across nations, you find that success is greatest where the internal competition is the most vital, where multiple companies have a lot of pride at stake to see who is going to be the best.

Third, an advanced economy requires demanding customers. We have to create an environment in which both household customers and business customers expect the best, and their sophisticated needs give local companies insight into specialized market needs that will be the basis of international success. You might think that in a global economy the local market would not be very important because, of course, firms can sell everywhere. This is true to a degree in developing countries with \$2,000, or \$5,000, or \$10,000 per capita incomes. But to become an advanced nation requires innovation in the form of unique products, unique features, and unique services. It is very hard to be unique if doing so depends on understanding the needs of foreign customers better than foreign rivals. Innovation often stems most directly from local conditions, which local firms have a unique ability to understand. And if we think about some of New Zealand's most exciting growth industries, they illustrate this point clearly.

The final element of the business environment, where all the other elements also come together, is clusters. Clusters are the building blocks of a productive, innovative economy. A cluster is more than a single industry making a single product. Successful clusters involve a variety of related industries, suppliers and institutions all located in the same place. Consider Norway's shipping cluster. Norway is a tiny country, yet it accounts for 10% of all the world's seaborne transportation. It is able to compete despite its high wages. Why is Norway able to be so productive and innovative? Because it has more than just shipping companies. A variety of related industries and suppliers are also present, as are highly specialized institutions. If you are going to insure a vessel anywhere in the world, chances are the most highly knowledgeable insurance underwriters will be in Norway. New Zealand has plenty of lawyers; in Norway they have shipping lawyers, some of the best in the world and the most expert in structuring transactions. Norway's banking and financial institutions provide specialized financing not only to Norwegian ship owners but also to ship owners around the world. Norwegian universities have substantial maritime R&D capabilities. In sum, there is a critical mass of unique knowledge and capability in Norway in the maritime field that comes from the chain-reaction effect of combining a group of firms, industries, and institutions in the same field in the same place.

The Norwegian Maritime Cluster

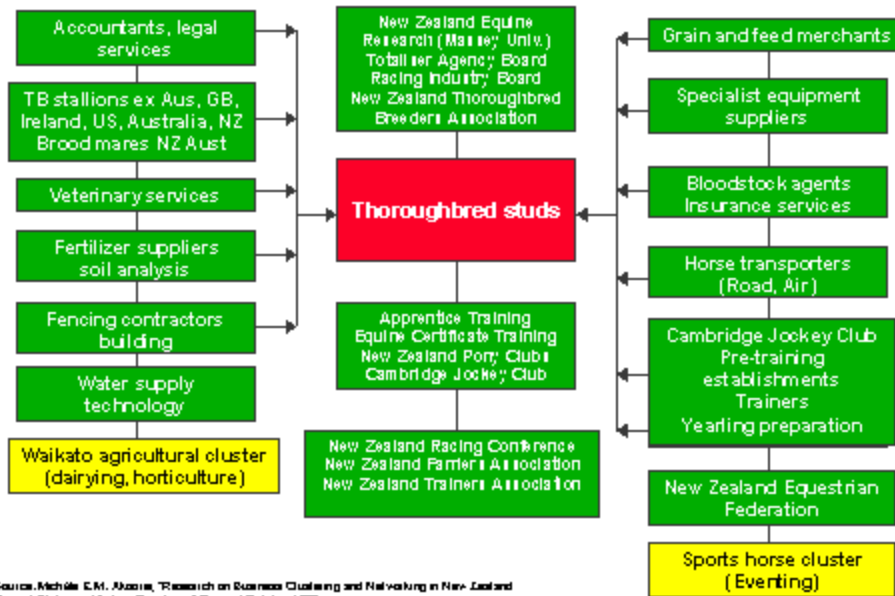


Source: Soren Utting, presented to M.I.T.

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California wine is another cluster. California has about 440 wineries and about 3,000 independent growers of grapes that supply those wineries. It also has a large array of institutions that support both the growers and the wineries. The University of California at Davis is one of the world's leading centers in wine making research and technology. Specialized trade associations collect data about the industry on a worldwide basis. Specialized trade journals, newsletters, and magazines published in California cover the industry and build its reputation and image around the world. Specialized public relations companies basically do nothing else but promote wines. That is a cluster.

The Cambridge Bloodstock Cluster



Source: Michelle C.M. Moore, "Research on Business Clustering and Networking in New Zealand Current Status and Future Directions," Revised October 1999.

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The Role of Government

What is the role of government in all of this? This has been a controversial issue in New Zealand, and clearly, the role of government has been transformed over the last ten to fifteen years. There are some who say that government has no role in the economy except to create stable, sound macroeconomic policies and then get out of the way. I believe this reflects too simple a view of competition in the modern economy. It is true that one of government's most basic role is to create a stable and predictable macroeconomic and political environment, and government must be vigilant in doing so every day. But, government also has some more positive, affirmative roles in the economy. One is to improve the quality of the inputs - the human resources, physical infrastructure, scientific infrastructure and so forth. That is an enduring role of government, no matter how prosperous the economy. Government also has to stay involved in making sure that the rules of competition in the society stimulate investment, upgrading, and innovation. That has to do with policies such as anti-monopoly rules, regulatory standards, and with the whole array of rules and incentives that get set in every economy that guide how firms compete.

Appropriate Roles of Government in Economic Development

1. Establish a **stable and predictable** macroeconomic and political environment
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Government has at least two other roles that are growing increasingly important to New Zealand's future. One is to facilitate cluster development. The more a country seeks to be a high-wage, advanced economy, the more government has to make sure that the steps are being taken to support the further improvement and specialization of inputs.

The final role of government is to facilitate change. The successful countries almost invariably have organized, formal mechanisms to drive the process of economic upgrading. The best processes cut across political lines and bridge business and government. I will come back to this a little bit later as I talk about where New Zealand needs to go next.

One final comment before I turn to my assessment of New Zealand. I increasingly believe that the distinction between economic policy and social policy is no longer valid. When economic policy is conceived of narrowly, in terms of minimizing government intrusion, then perhaps economic policy and social policy are different. But if one sees the goal of the nation as productivity and recognizes the fundamental role that human resources play in productivity, it is very quickly evident that advancing the social agenda and advancing the economic agenda have to be absolutely in sync. We can no longer think of the schools as part of the social agenda, but must also think about them as part of the economic agenda. The same applies to the natural environment. We must move beyond these obsolete distinctions that pit groups against one another and create false conflicts. To have a productive economy, a nation needs well educated people who have a sense of equal opportunity, who are healthy, and who feel safe. All those things are fundamental to productivity and to creating higher and higher value products and services.

A New Integration of Economic and Social Policy

There is no inherent conflict between capitalism and social needs



A productive and growing economy requires:

- Rising skill levels
- Safe working conditions
- Healthy workers who live in decent housing in safe neighborhoods
- A sense of opportunity
- Assimilation of underemployed citizens into the productive workforce
- Low levels of pollution (pollution is a sign of unproductive use of physical resources)

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New Zealand's Progress

Let me turn now to New Zealand in particular. On the company side, quite a bit has been done to go from being substantially behind to being in the race. New Zealand companies have narrowed product lines and abandoned activities they had no chance of competing in. Virtually every enterprise that I have had any contact with has dramatically improved its quality and efficiency. A lot of New Zealand companies are now exporting, and the progress here since our study six or seven years ago has been heartening. Organizations are functioning much more efficiently, and the working relationship between labor and management has improved substantially.

In terms of the business environment, there have also been great strides - primarily in reducing internal barriers and inefficiencies. Streamlining regulations and rules has done a good job of cutting out unnecessary cost. New Zealand has improved the physical infrastructure through privatization and investment. You have eliminated a lot of inefficiencies, intrusions, restrictions, and subsidies that hobbled markets and interfered with productive activity. You have started to reform some important microeconomic institutions such as the public R&D system to give it more accountability, and this effort is continuing.

The results, on one level, have been quite good. The improvement in New Zealand's growth performance is one piece of the evidence, although this is partly cyclical. A burst of growth is almost inevitable when a country goes through the liberalization process, because it triggers an upsurge of inward investment and a surge of corporate investment as companies upgrade themselves.

A more definitively positive sign that New Zealand is much more efficient and productive is that the country has weathered the Asian storm better than most others. The Asian countries that crashed all had serious microeconomic weaknesses: they lacked internal competition and effective corporate governance processes; they lacked sound banking systems, etc. These countries looked good on macroeconomies-they had high levels of investment and high levels of saving-but much of the investment was wasted on unnecessary capacity and real estate projects with no accountability or governance to

make sure that the money was well spent. New Zealand avoided most of those problems. Its internal institutions and microeconomic circumstances are much sounder than many of the other Asian countries.

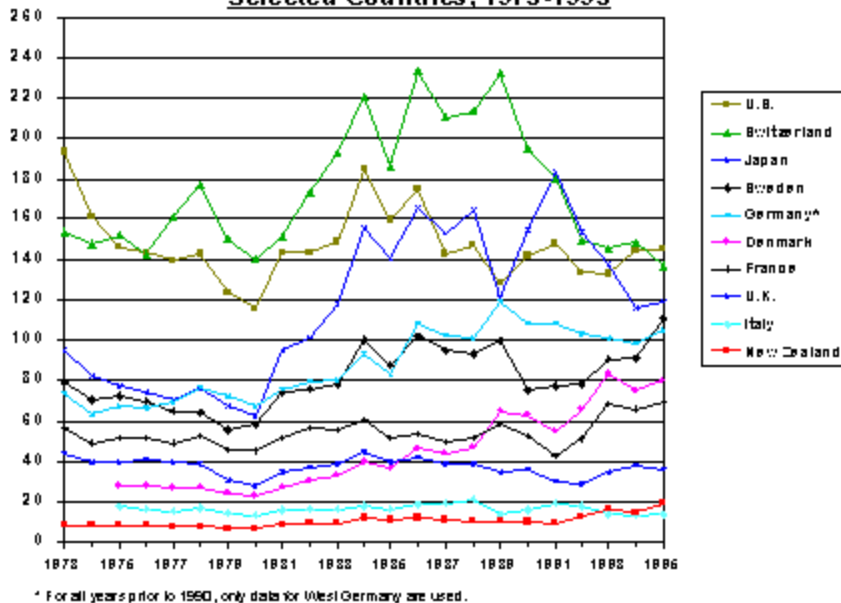
Yet, as one looks at New Zealand's results, there are some nagging signs that tell us that the agenda is as yet incomplete. What are the danger signals? First, some of the quantitative metrics of prosperity are not yet improving. The country's GDP per capita, the broadest measure of national prosperity, is growing very slowly, if at all. Overall productivity, despite all the improvements and efficiency gains, is growing slowly at best. In short, we are not yet seeing real change in the trajectory of some of the most fundamental underpinnings of prosperity.

Export growth is also troubling. New Zealand has been losing international market share, and export growth is simply too slow to provide the economic and job growth that will be necessary to support higher prosperity. The country is still vulnerable to exchange rates. Companies have not yet built robust enough competitive positions and enough uniqueness in a large enough number of industries to buffer the economy from the fluctuations in exchange rates which will probably continue for some time. Most of the multinationals coming to New Zealand are still coming here either to access natural resources or to serve the local market. So far, very few multinationals have seen New Zealand as a productive base of operations for the region or for the world. There are still aspects of New Zealand's business environment that are incomplete and have to be addressed.

The final sign of an unfinished agenda is New Zealand's record in innovation. There is very little evidence yet innovation has kicked into high gear. Recently I have been collecting and analyzing data on innovative performance across OECD countries. The metric we have used to measure innovative output is international patenting, or patents filed both in the home country and the U.S. Patent Office. The comparable measure for the United States is U.S. patents that are also filed in another country's patent office. The rationale behind this metric is that an international patent is a sign of commercial potential. If someone goes to the trouble of filing a patent in the U.S. patent system, it is a sign that the patent might be valuable. Moreover, if a patent is allowed by the U.S. patent system, it is a sign that the level of technology is high because the United States is quite sophisticated from a technical point of view. International patenting is far from a perfect measure, but it correlates well with productivity and exports. To link patenting most directly to what creates wealth, we compare it on a per capita basis. For example, the fact that a big country such as the United States has a lot of patents is not particularly relevant; the question is whether it generates enough patents to support high wages for its many citizens.

Taking New Zealand, we see that performance against this metric is low, particularly for a nation with your aspirations, wage rates, and current standard of living. For the sake of comparison, consider some of the new emerging economies. The patenting output of countries like Taiwan, South Korea, Israel and even Hong Kong is improving rapidly; on a per capita basis, all four of these countries have surpassed New Zealand.

Historical Innovation Index Selected Countries, 1973-1995



New Zealand's patenting performance again tells us that we have an unfinished agenda. We cannot just stand back and let natural forces operate. Unfortunately, this is what tends to happen in many nations. Many nations go through a reform process, extract the government from inappropriate roles in the economy, and then declare the job ended. The assumption seems to be that the private sector and entrepreneurs will do the rest. Yet the result, over and over again, is that prosperity does not come.

From a company point of view, New Zealand has done a good job on improving operational effectiveness, but has not yet built the capacity for truly unique strategies. Export growth is still tentative, and New Zealand has not yet created enough true multinationals with robust international market positions. This is predictable-companies start operationally and then move to the next stage. But we cannot assume that it will happen automatically.

On the government side, New Zealand has eliminated many of the disadvantages, reduced many of the inefficiencies, and stopped many of the bad things. But you lack a positive, affirmative agenda. New Zealand has decided what it does not want to do: the government does not want to protect, subsidize, or distort. But New Zealand has not articulated a positive vision to drive the economy to the next stage.

Towards an Economic Strategy for the Next Decade

What does New Zealand need to do next? On the company side, make the transition to innovation. Very few New Zealand companies are conducting R&D, and few have become innovators. New Zealand needs to make the transition from operational effectiveness to strategy, which will require greater capacity to make soft investments in R&D and training.

New Zealand needs to get over the small-country syndrome. How many times have I heard since I have been here that New Zealand is too small, New Zealand companies are too small, and New Zealand is too far away. The core of the German economy consists of \$25 million to \$100 million companies that are privately owned. The core of the Italian economy is \$10 million to \$50 million companies. New Zealand is not too small, it simply needs to make the next transition in terms of strategic orientation. New Zealand companies are going to compete as specialists, in niches much like the Swiss and the Finns. New

Zealand companies are unlikely to be mass market players. There are any number of New Zealand companies that have succeeded as focusers, and the nation has more than adequate size and adequate skill and capability to do so. We simply need to develop this understanding more widely in the corporate sector.

In terms of the business environment side, New Zealand needs to start investing more heavily in assets that will give New Zealand companies the potential to move to the next level. Number one on my list of priorities is human resources. Basically the country has not made enough headway in creating a structure and a system that can substantially improve the quality and sophistication of its human resources. This is troubling, because building a truly generative human resource system takes a decade. The public schools must be improved to a very high level of performance. Training must be realigned so that there are more agricultural technologists and fewer lawyers-with all due respect to you lawyers who are here. New Zealand must develop the skill pools that will take New Zealand companies to more sophisticated ways of competing. How is the average New Zealand worker going to move up? How are we going to equip that worker for the knowledge and service economy? What is our strategy? I do not think you have a clear enough one yet. The university system is not yet world class. New Zealanders have the smarts to be world class, and the capacity to be world class, but many things need to be done to put the right structure in place.

New Zealand has not been focusing on making investments in capacity, assets, and institutions that will be needed to upgrade the economy. The focus has been on pulling down the constraints and the impediments. But now you must move to the investment phase.

Science and technology is also a fundamental priority, given the importance of innovation. So far, New Zealand has been betting on the public science and technology system, the Crown Institutes. Great progress has been made in restructuring these institutions to make them more vital, more efficient, and more productive. But that said, the money that is being invested in R&D is not connecting very well with the private sector. How are you going to make the connection? For one thing, New Zealand needs to make a far greater investment in university research. We know from looking at other countries that universities are a powerful mechanism for diffusing technology. They are open institutions, their students take ideas out into the economy, and they catalyze the formation of new companies. Universities should not only be technology generators, but also generators of new companies. This is happening in countries around the world. New Zealanders have the capacity, but the national needs to create an institutional structure and invest the resources behind your strengths-fields where New Zealand already has some unique knowledge.

Equity capital is a major problem. New Zealand has done a pretty good job in the area of capital. The banking system is efficient and well-regulated (although there is still room for banks to specialize and develop expertise around particular areas of local strength. However, the lack of private equity and venture capital, the high cost of listing a company, and the high cost of raising capital in the markets will make it hard to grow enough new companies and fund enough innovative activity.

New Zealand needs to re-think the whole issue of investment. I am concerned that you are being hamstrung by the concept of "neutrality." I believe that you should give serious consideration to tackling-perhaps with some incentives-the task of increasing corporate investments that have social benefit. The two that come most directly to mind are R&D and training. I am not advocating that the government give grants or pay for corporate research projects. This is the wrong way to go about it, which should focus on providing incentives for all firms not favoring a few. If a company in New Zealand wants to double its R&D budget, however, a tax credit for part of the increase is a powerful incentive. If a company wants to expand its training, the government ought to be willing to chip in something because this creates an asset for the nation that will allow it to move to much higher levels of productivity. Because of externalities (to use an economics term) private firms will not make socially appropriate choices about how much to invest in these kinds of assets. Rather than get hung up with neutrality, we ought to decide what kind of asset base society needs, and make sure that the rules and incentives are set accordingly.

New Zealand also needs more internal rivalry and competition. I still have arrows in my back from my visit to New Zealand to talk about the earlier project, when I talked about the Producer Boards. But I still believe very strongly that competition must be introduced into these fields. I do not know the best way to go about this, but I do know that New Zealand must unleash more pressures and incentives to innovate, to build brands, to try new things, to create choice for farmers.

There is also need to pay attention to demand conditions. New Zealand customers are still not demanding customers. There are a variety of reasons for this, but a plan is needed to improve the quality of demand. New Zealand needs more consumer information, and greater consumer rights. Customers should be able to return bad products and get their money back. New Zealand needs demanding standards for quality, energy efficiency, and environmental impact. If New Zealanders can make themselves tough customers for one another, selling to the rest of the world will be easy. But if you accept less than the best, how do you expect foreign customers to like New Zealand goods?

New Zealand needs to be attentive to new products, new services, and new technologies and make it easy for them to take off here first. Do you know why Nokia is a world leader in mobile communications? Very early, the Scandinavian government decided to start experimenting with mobile telephony. Regulators opened the market, making it available to the private sector. That early market gave Nokia in Finland and Ericsson in Sweden the motivation and the capacity to be early and successful competitors. In contrast, the United States was slower in opening up mobile systems, and our companies are suffering.

Government procurement in New Zealand should stimulate innovation. Government ought to be a demanding buyer and set high standards. My understanding is that now the opposite holds true; government shops on price, not quality.

Finally, New Zealand needs to push the cluster agenda forward. So far, the tendency has been to equate clusters with networks. There have been some efforts to build networks among companies. But clusters are much more than networks. Clusters are specialized asset bases that get built over years and even decades. Clusters contain a wide range of institutions and capabilities that require investment. Some require public investment: the University of California at Davis did not become a leading wine research center by accident; there was a willingness to invest in building technological capacity, and the industry supported it. Competitive assets need to be built by the private sector through trade associations and other forms of collective investments.

New Zealand, so far, is not yet fully harnessing the cluster approach to drive industries to the next level. In many industries there are many small industry associations that are looking out for their one piece of the puzzle. They do not talk to each other, they do not want to work together, they do not want to come under the same umbrella to think about a concerted strategy for building assets, capabilities and skills. This is the next agenda.

As I have worked with other countries, I have found that the centers of excellence already apparent in an economy provide the framework for moving to this next level. If you can understand New Zealand's strengths, and where you have already demonstrated the capacity for excellence, this will help identify what kind of university capabilities needed, the science and technology policies needed, and so on. This process of cluster development provides a framework to go beyond making general improvements in the cost of doing business to creating the assets necessary to become truly innovative.

My hope is that over the next few years New Zealand can mount a sophisticated, aggressive cluster policy. Doing so will not require a lot of government investment, but it will require government to play a convening role, a participating role, and a listening role. If industry is to move to the next level, government must participate in the processes to learn what the constraints are and what the needs are.

The Need for a Motivating Vision

The agenda I have articulated is substantial. And there are still other policies that could be improved. They were discussed this morning in our working group, and I am sure that discussion will continue.

In the limited time remaining, though, I would like to take the discussion to another level. Surely, New Zealand needs to identify policy areas that must be addressed. But ultimately, I believe the nation must frame its agenda differently than it has in the past. As New Zealand pursued its economic agenda over the last decade, the process was wrenching and controversial. Companies responded because they were scared and threatened.

Today a new stage is necessary. New Zealand needs to sketch a future that is not about fear and pressure, but about excitement and confidence. New Zealand needs an agenda that truly inspires its citizens, its businesses, its universities, its school teachers, and its union members. New Zealand needs to create the sense that there will be a positive, bright, successful future if the country takes the right steps.

New Zealand needs a shared vision, a shared agenda for the country which all can understand. It needs to go way beyond - we are going to liberalize and be a market economy.? That was primarily about what the country was going to stop doing. The future vision must be about what will make New Zealanders proud. It must be a vision that will pull all those Kiwis-so many of whom are doing well in other parts of the world-back home because there is so much opportunity. You need a vision that is bipartisan, that goes beyond an individual government.

New Zealand's future vision has to be long term. It must look beyond the Asian crisis. Asia will come back; its fundamentals are strong. New Zealand is located in the right place. America is graying, Europe is graying, Africa is sputtering. Asia is going to be the growing market for years to come. Savings rates are high, and people are hardworking. The current slowdown is a relatively short blip in my opinion and those of many other experts.

New Zealand already has many of the attributes of the post industrial society. You have a lot of educated people, with much human potential. You possess attitudes and values that the world is moving towards- your concern for the environment, your concern for how to relate to one another, and many others about which I am only just learning. You are well placed to think boldly.

What is that vision going to be? The elements will derive from the fundamentals I talked about earlier, the factors that create prosperity. Crucial to the vision will be some goals that New Zealanders jointly seek to accomplish. Let me give you some examples. None of them may be appropriate, but they are the kind of goals that will be necessary for the next phase of New Zealand's transformation.

New Zealand needs a goal that has to do with increasing the human potential of its people. Whether it is expressed in terms of years of schooling or level of training is not what is important. What matters is that there is a goal of substantially improving the average educational attainment of citizens over the next ten or fifteen or twenty years.

Number two, New Zealand needs a goal about science and technology. Why doesn't New Zealand set out to double the R&D budget in the next five to ten years? Why not transform New Zealand from a country at the bottom of my OECD innovation ranking to a country that is moving up. New Zealand needs to set a goal to be the world center of knowledge in certain fields where you already have expertise. New Zealand's unique vision must capture the areas where the country has extraordinary capacity that can be developed. Biology. The environment. The marine area. This rugged, spread-out topography has given birth to a lot of expertise and knowledge.

New Zealand needs a goal to dramatically increase the place and prestige of entrepreneurship in the country. You need a goal that focuses on the information society-computers per capita perhaps, or internet usage per capita. New Zealand could set a goal to double or quadruple its services trade. New Zealand ought to be the dominant service economy in the region. You have sophisticated people, fine engineers, and creative, artistic citizens. There is no other place that New Zealand cannot compete with, Australia included.

I do not know exactly what the vision should be. I do know, however, that if New Zealand fails to inspire its citizens with ambitious goals and a sense of purpose, then you will be losing an opportunity. After twenty years of experience doing work all around the world, I have no doubt whatsoever that New Zealand can be an extraordinarily successful economy. The question is not whether you can do it. The question is the process: How are you going to mount a sustained effort along these lines? How are you going to put a process in place to create positive change that New Zealanders can get excited about, not negative change that many are afraid of?

The ideas that I have shared with you today can be built upon. With some time, I think we can agree on what needs to be done. What really separates nations is their capacity to do things. And change is not so easy because much of it must take place outside of government. When we were talking about macroeconomic reform, the Government could do it. Now you all must do it, and that will require a different kind of process, a different kind of organization structure, and a different kind of national dialogue. It requires a process that starts at the national level, but then cascades down to every city, to every town, and to every cluster.

Who is going to be the catalyst for this process? How are you going to find the political will to make the choices necessary to make all this happen? How are you going to avoid being so distracted by coming elections that nothing really happens for the next two years because of all the darts flying the press.

In summary, you should be extraordinarily proud of what has been accomplished. New Zealand has made major strides. You have attended to macro policy, and you have reduced government's role in the economy where it was inappropriate. On the corporate side, you have restructured, you have downsized, and you have gotten the house in order. Now the challenge is the affirmative one-of building and of investing. It is going to require a combination of public and private effort. It is going to require investment of soft assets not just hard assets. It is going to require not only a technocrat's list of economic policies, but also a vision and a sense of purpose that can be disseminated widely in the society - a vision kids in school can hear about, a vision everybody knows, a vision which allows New Zealanders to come together to upgrade and improve the quality of life.

I would be pleased to do anything I can to help. As you probably know, I came here in 1991 as a volunteer because I thought that something important was happening. I am here today again as a volunteer. I sense among many New Zealanders an appetite, a hunger, to take the next steps. You can count on my help as long as all are acting constructively and there is a genuine willingness to change. Recently I have had an opportunity to meet with dozens of leaders from all walks of life in New Zealand's society. There had been remarkably little disagreement about any of the substantive issues. Your greatest challenge now is to come together around a process that will unite everyone. If the year 2005 is my next date with New Zealand, I am confident that I can declare you by then truly one of the world's great advanced economies.

Thank you very much.