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JOINT STANDING COMMITTEE ON FOREIGN AFFAIRS,
DEFENCE AND TRADE

(TRADE SUBCOMMITTEE)

**Reference: Enterprising Australia - planning, preparing and profiting from trade
and investment**

MONDAY, 25 JUNE 2001

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JOINT COMMITTEE ON FOREIGN AFFAIRS, DEFENCE AND TRADE

Trade Subcommittee

Monday, 25 June 2001

Members: Senator Ferguson (*Chair*), Mr Hollis (*Deputy Chair*), Senators Bourne, Calvert, Chapman, Cook, Gibbs, Harradine, Hutchins, Sandy Macdonald, O'Brien, Payne and Schacht and Fran Bailey, Mr Baird, Mr Brereton, Mrs Crosio, Mr Laurie Ferguson, Mr Hawker, Mr Jull, Mrs De-Anne Kelly, Mr Lieberman, Dr Martin, Mrs Moylan, Mr O'Keefe, Mr Price, Mr Prosser, Mr Pyne, Mr Snowdon, Mr Somlyay, Dr Southcott and Mr Andrew Thomson

Subcommittee members: Mr Prosser (*Chair*), Mr O'Keefe (*Deputy Chair*), Senators Chapman, Cook, Ferguson, Hutchins and O'Brien and Fran Bailey, Mr Baird, Mr Hollis, Mrs De-Anne Kelly, Mrs Moylan, Mr Somlyay and Mr Andrew Thomson

Senators and members in attendance: Senator Ferguson and Mr Baird, Mrs Moylan, Mr O'Keefe and Mr Prosser

Terms of reference for the inquiry:

To inquire into and report on increasing Australia's trade and investment through initiatives for economic expansion, in particular:

- The role of development agencies in economic expansion such as the Industrial Development Agency in Ireland and the Economic Development Board in Singapore;
- Reasons for the success or otherwise of development agencies in establishing countries and regional areas as economic leaders;
- The comparative role of such development agencies to existing agencies in Australia;
- Incentives and impediments to foreign investment in Australia such as transport systems, taxation, telecommunications infrastructure, production costs, industrial relations structures, legal systems, federal systems of government and research and development initiatives;
- The adequacy of a skilled workforce in Australia particularly in new growth areas such as, though not limited to, financial services, information technology, E-business, education, pharmaceuticals and health care, and the competitiveness of that workforce; and
- Opportunities for encouraging inward investment and promoting export sales.

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Subcommittee met at 10.05 a.m.**COOK, Mr Grahame, Head of Division, Innovation and Science Division, Department of Industry, Science and Resources****GEORGOPOULOS, Ms Hellen, Head of Division, Business Competitiveness Division, Department of Industry, Science and Resources****HOLTHUYZEN, Mr Michael, Deputy Chief Executive Officer, Department of Industry, Science and Resources****JONES, Mr Barry, Executive General Manager, Invest Australia, Department of Industry, Science and Resources****PURCELL, Mr David, Principal Adviser, Strategic Investments and Policy, Department of Industry, Science and Resources**

CHAIR—I declare open the Trade Subcommittee of the Joint Standing Committee on Foreign Affairs, Defence and Trade's inquiry into Enterprising Australia—planning, preparing and profiting from trade and investment. This inquiry arose out of the continuing interest of the trade subcommittee in expanding Australia's trade and investment. The subcommittee looks forward to receiving important and significant evidence over the course of the inquiry to assist in our deliberations.

On behalf of the trade subcommittee, I welcome representatives from the Department of Industry, Science and Resources. The subcommittee prefers that all evidence be given in public, but should you at any stage wish to give evidence in private you may ask to do so and the subcommittee will give consideration to your request. Although the subcommittee does not require you to give evidence on oath, I should advise you that these hearings are legal proceedings of the parliament and therefore have the same standing as proceedings of the respective houses. The subcommittee has a submission from the Department of Industry, Science and Resources, submission 21. I invite you to make a short statement before we proceed to questions.

Mr Holthuyzen—Thank you very much, Mr Chairman, honourable members, for the opportunity to appear before the subcommittee. The Department of Industry, Science and Resources works towards improving the wellbeing of Australians through world-class business, science and sport. Our programs and services are aimed at fostering the development of competitive Australian industry and enhanced science and innovation. The key themes of this inquiry, investment and international competitiveness, are core to the department's activities.

Over the last few years the capability and capacity of Australian industries have grown. This growth is being built on the solid economic foundation of low inflation, low interest rates, low unemployment, reform to the tax system and labour markets, and our stable policy environment. These attributes have provided industry with confidence and certainty for investing in their future. ISR recognises investment is critical to the establishment of sustainable, competitive and globally focused Australian industry. Continued and sustainable investment in innovation, research and development and technology has a direct impact on Australia's ability to compete in global markets. While we have a business environment that is conducive to foreign

investment, ISR also recognises that there are impediments to attracting that investment, such as Australia's small market size, distance from other global markets and other factors which we would be most happy to go into during the period of our hearing today. These factors impact on Australia's industries' competitiveness, and by addressing these Australia's international profile continues to be raised.

While Invest Australia was established in 1997, the department has been facilitating and promoting investment since the 1980s and working during this time to both facilitate investment and support our investment attraction efforts with Austrade. Invest Australia was established by the Prime Minister to inject vigour and energy into Australia's investment efforts. Invest Australia subsumed the investment promotion and facilitation program and restructured the investment commissioner service provided through the investment promotion facilitation program in Austrade. Today the Invest Australia partnership and whole of government approach provides a more seamless and proactive approach to investment promotion, attraction and facilitation.

Major initiatives being implemented by Invest Australia, other than its direct attraction and promotion program involving the overseas investment network, include support for the Strategic Investment Coordinator, Mr Fergus Ryan, who advises the Prime Minister and cabinet on requests for investment incentives; support for activities of the gas to liquids task force which will evaluate opportunities for development of a new gas to liquids industry in Australia; and active promotion and support for investment into regional Australia through the provision of investment and promotion tools such as regional investment guides which will be available soon.

Since 1997, Invest Australia has attracted productive investment worth over \$18 billion. Specific projects include the most contemporary one, I guess, the Holden state-of-the-art manufacturing plant at Fisherman's Bend in Melbourne. This plant, estimated to cost some \$400 million, will generate 550 new jobs. There is the \$23 million IBM Asia-Pacific e-business innovation centre in Sydney, which will support IBM operations and see Australia become the heart of IBM's Asia-Pacific e-business development. Other projects include Syntroleum's speciality gas to liquids project and the Visy paper pulp mill in New South Wales.

Australia's efforts in investment promotion and attraction have fragmented considerably in the recent past with a number of Commonwealth agencies and states and territories establishing their own inward investment promotion and attraction functions. ISR views this interest in foreign direct investment by other Commonwealth agencies as a potentially positive development and has established relationships which engender cooperation with Invest Australia overseas. There are clear downsides, however, if promotion and attraction is not coordinated and implemented on a whole of government basis. In this regard, ISR has been a leading participant in the meeting with Commonwealth and state and territory agencies involved in investment attraction facilitation to Australia since its establishment. In recognition of the roles these agencies play in attracting national investment to Australia a set of Commonwealth, state and territory investment lead protocols governing the process of generating, distributing and responding to investment leads has been developed at the behest of and with the support of the Minister for Industry, Science and Resources, Senator Minchin. The protocols build on the operational guidelines for national investment attraction that were developed in 1997. The meeting of Commonwealth, state and territory industry ministers also agreed to a national

strategic approach to investment attraction on ICT, biotechnology and research and development. There is a lot more I could say but perhaps, given the time, it may be appropriate for you to ask questions and for us to answer them for you.

CHAIR—Thank you very much for that. I note that you mentioned the \$18 billion under Invest Australia, and it is in your submission, too. I am a little bit curious as to how you can claim the \$500 million for that Basslink cable when it could not have gone offshore because, as far as I am aware, Tasmania is still at the bottom of Australia.

Mr Holthuyzen—Yes, that is true. I guess it is a question not so much of whether the Basslink would take place but of whether there would be an alternative project in other parts of the world that would substitute for it. It is not a question of whether we would have it somewhere in Australia but a question of whether it would happen globally elsewhere. There have been some developments on that project over the last few months and, while we are still facilitating it, of course, there is still a lot of work to be done. That project was listed in the submission some three months ago when we prepared it, but some dynamics have changed since then. We can give you some more details of that either now or in writing, but we are still facilitating government approvals with that project. It has not gone to finalisation yet.

CHAIR—I am just saying that any normal Australian would count the gas to liquids project, and Holden's at Fisherman's Bend and those sorts of things as things they would think of. On another matter, I notice in your submission you talk about trying to get Australian industry to gain confidence. It goes on to say in your submission:

Industry needs the confidence to grasp opportunities and to invest for the future.

How do you do that?

Mr Holthuyzen—That is a pretty broad question. You do that in a number of ways.

CHAIR—A bit patronising too, I might think. But how are we different from the others? Are they more aggressive than we are?

Mr Holthuyzen—It is a very necessary comment to make, I think. Australia is, as I said in the opening statement, a very small economy. It has a very small market, it is a long way away from other markets where there is a bigger population and a bigger capacity for investment to take place. In addition to that, we are not operating on an even playing field; there are other economies that are both bigger and smaller than Australia where governments provide as a matter of course significant incentives for the location of investments in their economies, both within Asia and elsewhere in the world.

As a result of that, for Australia to attract investment we have to work very hard. We do that in a number of ways, and when I say 'we' I mean from a whole of government perspective the Commonwealth and the states but, predominantly from where we are speaking, the Commonwealth. We do that first of all by making quite sure that the macroeconomic and the microeconomic settings for the economy are as efficient as they possibly can be, and since the government has been in office it has been working very strongly to ensure that that happens. Second, we make sure we have low interest rates and the fiscal regime in place to make it

attractive for investors to feel comfortable investing in Australia. We have microeconomic reform being pursued—

CHAIR—If you cannot make money out of a project interest rates count for nothing.

Mr Holthuyzen—That is right and—

CHAIR—By the way, one of the hire car companies, Avis, as I recall it, used to have the slogan, ‘We’re second, we try hardest.’ What is our catchcry? Do not tell me about smaller markets and a whole range of other things; if we do have constraints, what are we doing to beat the other guys?

Mr Holthuyzen—As I said, the reason I emphasised the macro and the micro is that you have to get those right first, and that is often missing in the debate. You can do all sorts of other things but if you do not get them right you are wasting your time, so that is very important. No matter what efforts you make in terms of attraction and promotion, industry will not come to Australia if you do not get them right. What we have in terms of initiatives to attract investment to Australia is an attraction and promotion program. What we do there is we actually articulate the good reasons for coming to Australia and identify the comparative advantages we have. I can list those if you wish but Invest Australia promotes about 10 or 12 good reasons why you might want to invest in Australia, and obviously that depends on the particular companies and the particular industry that you are talking about. Those reasons include, predominantly, the comparative advantage we have, the location issues in terms of proximity to Asia and those sorts of things.

CHAIR—But in one of the other points of your submission you mention that we missed out on that Smith Kline Beecham because they are in a better spot.

Mr Holthuyzen—We missed out on that because the government concerned paid a lot of money.

CHAIR—Hang on. I thought I read in your submission that one of the reasons was that they were actually closer to the action? So one of the shortfalls is that geographically while we might be here we are not right in the spot that they were looking for.

Mr Holthuyzen—That is right.

Mrs MOYLAN—There were also the issues of tax incentives and training programs which we do not have.

Mr Purcell—Perhaps if I could add a couple of supplementary comments to what Mike has said. You ask: what are we doing to attract investments? There are a number of levels at which you need to look at it. Generically—and it is identified in our submission—we need to get on the radar screen and make a short list for companies. Even some of the major multinationals sometimes do not look to Australia as being in the first rank of the places they look at as part of a global development strategy or their next investment, whatever its typology. One level down, I think, is to take a broad strategic approach, whether that is geographic, sectoral or however you want to describe it. You have to do your underpinning analysis to actually determine who the

key decision makers are and have a targeted and fairly efficient approach to identifying what are the companies that are going to be most likely to invest in Australia, which are those we want to get here for one reason or another and what are the quantitative and the qualitative aspects of the investment. Then, when you get down to the specifics of it, what are you actually doing on a company by company basis when you have identified your targets and you are very much looking to win the investment for Australia?

That last comment is very much a clear indication that there is a tough market for attracting high quality investment that is nationally significant, so the broader community would be able to say, as you said, on a reasonable person test, government intervention of one form or another to seek to attract that investment is required. That is the job that has to be done if taxpayers' money is going to be spent via an incentive or any other kind of facilitation program. Before whatever we might do is actually embarked upon we had better be very sure we are able to defend that as being in the national interest, or the regional interest specifically.

There are some things I wanted to mention to round out Mike's comments. In terms of some of the incentive cases and some of the other major project facilitation cases that are mentioned, there has been international competition for them. The assessment that is always done in our case is very much based on whether you need to expend the energy or expend the taxpayers' money to actually secure those and whether you have done a significant amount of homework to determine whether in fact it is worth it in the first place. The negotiations always tend to focus on whether we are cost competitive, and that is your point, Mr Chairman. In a lot of cases Australia is a very competitive location. It is based on our sound broad fundamentals, our stable fiscal, prudential and regulatory regimes and other such things. We tend to say in many cases that it is always necessary but in a lot of cases not sufficient, so you do have to supplement that with some other actions. We have actually been doing that in a very strategic way.

I suppose the only other thing I would add is that in each case that we, on behalf of the government, seek to take some action on, whether it is advising the strategic investment coordinator or advising the government more generally, it is always on the basis of the leverage, the long-term benefits that can actually flow beyond the specifics of the project in question. How do you exact the leverage through intellectual property, technology or those kinds of things? I thought I would just respond to your question by trying to open it up. I thought what you were asking was what we are really trying to do at all the various levels of attraction, promotion and facilitation that are involved in the game of trying to build a strong enterprise base in Australia, with foreign direct investment attraction being a key component of that.

CHAIR—Thanks for that.

Mrs MOYLAN—One of the things this committee was looking to do was to examine what we are doing against other countries—we do a lot of things well, but can we actually do more and can we become more focused in what we are doing to attract industry? I guess my question is around the training needs, partly because people in my electorate often come to me and say they cannot get people to work in their industries and that some of our industry is going overseas—in one case off to Korea—because we cannot deal with it. We do not have sufficient trained people, for example, in pattern making to look after our own industries. I have a bit of a focus on the training.

Other economies, particularly Ireland and Singapore, are very different from Australia, and I will go through two of the common elements. The first is an intent to look at their whole response and have a detailed plan as to how to tackle improving their business climate—and they did that a long time before the results we are seeing now in both cases. Secondly, they made a concerted effort to actually look at the skilling needs of the nation, in terms of pure and applied science and also in the other complementary areas. My first question, and there are a series of them, is: how important is a ready labour market in attracting investment, from your point of view, and what emphasis are you placing on it?

Mr Holthuyzen—I will get my colleagues to make some comments about the skills and training issue. The first point to make is, yes, we can confirm that the skills, the training and the ability to have a ready labour market are extremely important in attracting investment to Australia. There are clearly stresses and shortages in key areas, which the government is trying to address, most lately through the Backing Australia's Ability program which Senator Minchin has recently announced, and I can give you some details on that. But before I get to some more details about what Australia is doing, I do think it is important to clarify that in the case of some other countries, particularly the ones that you mentioned, Ireland and Singapore, one must not assume that by taking the approach they take we are dealing with apples and apples. We are not doing that. In the Irish case, the reason they pursued a very vigorous—

CHAIR—But are their apples more inviting than our apples?

Mr Holthuyzen—It depends whether you are prepared to pay the price for the apple. In the case of Ireland, of course, they ended up getting a significant amount of money from Brussels to pursue significant training and skills upgrading, which is not available here. But, importantly, their objectives were not the same. Their objectives for skills and training in Ireland had nothing to do with investment and had everything to do with a need to ensure that a very strong overhang of graduates and students coming out of their schools had skills ready and available for them, including in the common market and not just in Ireland. In the case of Singapore, they have significant problems even now. They have done a lot of central planning, a lot of forward work, to try to get skills loaded up there in Singapore, particularly in IT and the knowledge economy, but they are still found wanting. So one must not assume that just because they have done certain things in other countries we need to transpose what they do in those other countries to Australia, and that what they do meets Australia's needs.

Mrs MOYLAN—I do not think that anyone on the committee feels that way. I think what we are doing is exploring what has been happening and looking at it in the context of some common themes, rather than looking to transpose what is being done somewhere else. Obviously that is not going to work: we have our own particular idiosyncrasies, I suppose, and our own particular agendas, and they are very different. That has been acknowledged, but I suppose what we are looking at is whether there is some common thread here that we can actually learn from, not by transposing what they are doing but by adapting and adopting some of their themes to our own development. I do not think we need to go through the minister's announcement on training packages, because most of us know what they are, and we welcome those. The other question I had is: what is your role? For example, how do you ensure—because obviously it is critical, by your own admission, to the future of our economy's development—that the Australian work force is developed in a competency based training system and not the way the Australian Manufacturing Workers Union criticises? It says:

The notion of research is much too narrow and ignores the realities of multidisciplinary teams—research scientists, engineers, technicians, as well as trades and other shopfloor workers—the key role of TAFE and the need for a competency-based training system.

I raise that because I know that in my electorate there are some people who have worked very hard with the university, a local TAFE and a high school to ensure that young people are streamed through the system at the level they are competent at. For example, some of them will go on to the science areas but others will actually complement the work of the scientists in being able to manufacture or design a whole range of other skill areas which are more TAFE based and with competency based skills.

Certainly, from talking to industry, there seems to be some problem here in marrying up these skills and, in fact, in giving people who are not academically inclined but who are very skilled in other areas a real role, valuing that role and encouraging young people to develop those other talents that complement our research side. What is your role in looking at these deficiencies within the marketplace and trying to ensure they are attended to?

Mr Holthuyzen—We have two roles in regard to that. Firstly, we are in a unique position to identify the types of projects that are coming to Australia and that want to invest into Australia. In talking to the CEOs and other people involved with those companies, we are able to identify the sorts of skills and training needs that are both wanted and needed by those companies and identify what is available in Australia. We have, over a period of two or three years now, been getting very close to the Department of Education, Training and Youth Affairs in Canberra and also facilitating with the states, which often implement a lot of these programs at the state level through the schools, the TAFEs and the like, both to identify and to pass on in very detailed form the sorts of skills deficiencies that are here and the skills needs that are coming across the horizon and to try to influence government policies, both at the Commonwealth and at the state level, to ensure that we meet those potential needs of the future.

Mrs MOYLAN—Do you also work with the Australian National Training Authority?

Mr Holthuyzen—Not directly. We do talk to them, but we mostly talk to them through the department. My colleague Hellen Georgopoulos just reminded me that I do also want to refer to the issue of action agendas, which are central to the minister's strategy. The first point is that we do identify and we do endeavour to pass those on. We are not a department, of course, that deals in a specialist way with educational skills needs—that is not our role.

Mrs MOYLAN—Yes. I think you have answered that in that you are at the cutting edge. You see what sorts of industries are attracted to investing here and you are seeing what kinds of skills are required. Is there anything that can be done to strengthen your role in relation to training outcomes and education outcomes?

Mr Holthuyzen—Yes, I think so. One of the areas which we have identified as being a problem for potential investors coming to Australia is that they actually do not understand or know what is available here. An example of that is—and the company will remain unnamed—an electronics and computer company that knocked on our door, seeking to invest in Australia. They simply followed the pattern that they do: they scour the globe for investment incentives. They thought they would knock on our door to see what money the Commonwealth government and the state governments concerned would give. A central action that we performed was that

we were able to identify quickly the sorts of existing Commonwealth programs in the apprenticeship area, which was able to provide funding assistance to this company so that they could employ people and train them at the same time in key colleges and key training areas, and that satisfied them. The crucial point to make here is that we in government are very close to these programs and policies and assume everybody else in the world knows about them. But they do not.

The important point to make, and it is a central argument about skills, training and all those sorts of things, is that it is often not the case that we do not have the capability; it is just that a lot of the companies do not know where it is and they do not know what the Commonwealth does to involve itself to help meet their needs. That is the very sophisticated end of investment attraction and promotion to which we, as Invest Australia, add value to try to bring together, in a one-stop shop seamless operation type way, all the various information and the various knowledge of company assistance programs and the like. Attraction and promotion is very much involved now with skills and skills needs. So that is the flip side. I might say to you that the important point to make here is that programs invariably can be massaged to meet company needs, but people outside of Australia do not know that. You need an Invest Australia to try to bring all of that together, and that is what we do. That gets reflected in the types of changes that have occurred over time in the programs that have been announced by the minister through Backing Australia's Ability. The education programs themselves have changed over time and reflect the fact that we understand and we have transmitted that information to government agencies, which have then changed the way they have pursued their work.

Mrs MOYLAN—There is one other issue. In reading about what Ireland has done one of the weaknesses I see, and you mention it in your report, is that things got a bit out of balance there—quite badly, in fact—and I know there was some political outfall for them. Singapore was a bit more balanced in its approach, and I just think our approach ought to be not only attracting foreign investment into this country but also looking at an import replacement program and strengthening our export responses and helping our companies to export. I suppose the pig meat industry was one of the key success stories in the last three years. I wondered what your department does in relation to all three. Are you looking at the three elements here? How are your programs actually helping an import replacement program and our companies to access export markets?

Mr Purcell—I have one supplementary comment to Mike's comments which goes to that question as well. We talked a bit about the project level but you were also very interested at the program level, and I would agree with you about the Irish example, through the Irish Development Authority. You are right there. Their approach was very much born out of a fiscal crisis. They had a deep economic crisis and that led them to very much embrace a whole range of policy changes, some of which were in the investment attraction area. It was a very large component of their development strategy over the last decade.

At the project level in Australia, if I can draw the parallel, every one of the projects that Mike has alluded to and that are in our submission—if I can just touch on that level—has a direct training element in there. We found it to be one of the things that, when a company is seeking to negotiate with a government, you do not have to negotiate very hard on. They are always very willing to embrace some partnership arrangement or some kind of reciprocal arrangement. Inevitably they draw in a variety of training and educational institutions. I will not mention any

of the ones here, but there was an announcement over the weekend of another investment project—the Asia Pacific Space Centre—and clearly one element of that, again, is that there is collaboration to go into a partnership with one or a number of universities in Australia and overseas. That is a key element at the level. It also has a major signalling effect to others to say, ‘We know what you are on about. That is very good.’ It has a promotional aspect. The level up, programmatically, is something that I cannot speak on because I am projects focused, but I thought it was worth putting in that bit of context and leaving it for others to talk about the broader question, which is really about training programs per se and how you link that back to technological development and so on.

Mr Holthuyzen—You mentioned import replacement and export enhancement; I make the point that our central policy focus on investment is that it is our belief and the minister’s belief that export enhancement and, if you will, import replacement—although that is not a conscious policy; we leave that to the market—follow investment. There is little point, from an Australian perspective, in generating investments for the local market only. They would be too small and, in the globalisation that occurs today, you would not get too many companies that would come to Australia with the sorts of investment that would attract the type of employment opportunities that would soak up the Australian employment market, nor would they generate the sort of wealth that we want.

Mrs MOYLAN—When I was talking about import replacement I was talking about working at a local level. One of the problems that Ireland had was that, in putting all its focus on attracting investment from overseas, the local communities got very irritable because nothing was being done to support local companies in import replacement and in getting their products to the export market. It seems to me that there were some political problems because they did not balance those elements. I am not talking about attracting overseas investment to do import replacement, I am talking about strengthening local domestic corporations to do more import replacement commerce.

Mr Holthuyzen—We do have that program. I will ask Ms Georgopoulos to talk about that.

Ms Georgopoulos—From that perspective, we certainly do work very much with the local communities. Our Industrial Supplies Office Network—which is, at the federal level, a network that is supported by the department—aims to bring together all Australian capability right across the nation to actually support projects, whether they be domestic or, indeed, international projects. Particular support to the local level is provided through a program called the Supplier Access to Major Projects Program, where we endeavour to ensure that Australian suppliers not only get a fair opportunity to bid but also utilise that program to increase their capability and their ability to find strategic networks domestically and internationally. To date, that was a program that was also recently announced in the budget this year in terms of getting funding for further years. So there has been very focused support given to suppliers to ensure that they can supply projects.

Mr O’KEEFE—Michael, firstly, can I commend the department on the quality of the submission in the sense that, more than anyone else who has presented to us, your department has focused on the terms of reference and you have given us a lot of views and information that are the first to arrive to us in some time, and particularly your appendix A, which summarises a few of the other agencies that are similarly doing this work. After several months at this, it is

the first time that some of this information has turned up on the table. Thank you for that. I can see where you are coming from, philosophically or intellectually, in the pitch that the department has. I differ from it, I think, in a sense: for instance, on page 40, where you draw your conclusion about the Irish experience and you say that someone has made a judgment that:

A closer examination of the success of the Irish economy during the 1990s reveals that a number of 'convergence' factors played a more significant role than the IDA.

And then you have a list of all those things. We could have a discussion about that for ages. I have a basic premise that money is a bit like water: it will follow the path of least resistance. If you want it to go somewhere you dig it a channel and it will go there. I also happen to believe that business decision makers are very Pavlovian. Give them a tax deduction and they will follow it anywhere. That seems to be the key to the Irish success, and it seems to be the key to a number of these other countries that have got aggressive about attracting foreign investment. They have put a very juicy tax deduction out there, they have attracted interest in the investment, in the terms you are talking about, and then they have set about making sure the other things are in place to back it up. It seems to me that we tend to resist, above all, giving that tax deduction, which is the juicy carrot. We have always resisted it, and we give them everything else. You have a whole suite of programs, everything you have outlined to us—all these sophisticated things we are doing—but we do not have the juicy carrot there in the first place. That is just a view I have.

To develop from that, this issue of states bidding against each other—for instance, you mention the Holden engine plant as one of the great successes of our strategy— is everywhere. Not only is there the effort the federal government is making but you also have these premiers lining up discounting against each other with very tangible handouts to attract that business there. We all know of examples where the investment was going to take place in Australia anyway. It has been a public sector handout to get it in their particular state. Is there anything that we are doing federally where we can play a role to try to moderate this issue of public dollars being traded off against each other to attract an investment so that the money can be used to dig that channel in some other way? Is there anything, apart from talking to the premiers and telling them that we wish they did not do it? Is there anything actually going on in that field to tackle that problem?

Mr Holthuyzen—There are a couple of angles to that. There are two types of investment that one needs to distinguish between. There is the direct investment that comes from overseas to Australia—new investment, greenfields investment or additional investment—for which a location is to be found. While the Commonwealth is obviously very keen to be party with the states, which often have their own initiatives to try to attract investment, we do not get involved in location issues. The Commonwealth government has made a conscious decision that it will not be involved in or influence where a particular project will be located. A location decision needs to be determined first before the Commonwealth facilitates other than existing programs. Where there is general access to programs or to a suite of arrangements which are publicly known—research and development grants, tax concessions like Start and all those sorts of things which are available to any company, no matter where they locate—when it comes to incentives the Commonwealth will not get involved until location has been determined.

The latest tension point between the states—and it is not an Australian phenomenon, it is a phenomenon worldwide because of rationalisation of plant; frankly, it is a globalisation issue, it

is very predominant in America, it is a big problem there—is where two old plants close down or are downsized and a third plant gets put together to take up the rest of the operation and that could be located somewhere else. Arnotts in Victoria is a good example. The Commonwealth does not see itself playing a direct role in that, because it is a location issue. It is an issue that gets debated from time to time. It got debated a few months ago at a Commonwealth-state industry ministers meeting that was held in Adelaide. But it was predominantly a debate between the states. Obviously we are happy to in any way facilitate the states getting together to sort that out. But to be perfectly honest my own personal view is we have a federal system and it would be a very brave public servant who felt that they could find a solution to a situation where the states compete against each other for a particular project, because you can cooperate—

CHAIR—Isn't the term 'courageous decision'?

Mr Holthuyzen—Correct, Mr Chair.

Mr O'KEEFE—Let me give you a parallel. We do not seem to have had any problem in putting together and building a competition policy that involved penalising the states in federal payments for not breaking down their state monopolies and introducing competition. Just as a side issue, all the papers today are full of the announcement that electricity prices are going to go up because of competition—fabulous. That is a side issue. The point is that we did not have any problem at all developing a policy to financially penalise states that resisted breaking down state monopolies. Is any thought being given to financially penalising them for engaging in these sorts of activities?

Mr Holthuyzen—I can assure you not.

Mr O'KEEFE—That is all I need to know. I have a second question. I saw a writer in the *Australian* the other day describe as 'corporate Hansonism' the fact that lobby groups—it just happens to be in the aviation industry but it will turn up everywhere else shortly too—are banging on the doors here complaining about Singapore's strategic investment in Australia. Heaven knows where Singapore is getting all this wealth, because a lot of those factors that you described—remoteness, small markets; all the problems that we have as to why we cannot do things—apply to them. But somehow they have got all this wealth and they are starting to invest strategically in Australia. My view is: more power to them. But we are now seeing industry responding to that by saying, 'Hey, this is not good for Australia.' The aviation industry is the first one but the banks and everyone else here will be saying the same thing. How is your department gearing up to respond to this sort of lobbying position that is now landing in Canberra?

Mr Jones—We and other departments in this town have, from time to time, simply pointed out the benefits of foreign investment to the Australian community. Australia would be nowhere without foreign investment. It has been important throughout our history. We think the best response to the kind of noise that is made occasionally about investments along the particular lines you are talking about is to simply put more information into the public domain about the benefits of foreign investment: what it has meant for Australia, what it has meant for our living standards and what it would mean if we started to take measures against foreign investment

along the lines that some people advocate. We think that information is a vital part of countering the kind of misunderstanding that sometimes goes on.

Mr O'KEEFE—To take that example a little further, let us say that cabinet has to consider the issue of whether Singapore Airlines taking a bigger stake in Air New Zealand is against Australia's interest. The department of transport makes a submission to cabinet putting a view that it should be somehow held away in Qantas's interests or whatever and your department has a view that is an 'anti-invest in Australia' signal. Would your department, through the minister, take a submission to cabinet arguing the counter view; the view that we think you hold from what Invest Australia advocates?

Mr Jones—It would depend on the circumstances of the individual case, obviously. Through the Foreign Investment Review Board we do get the opportunity to have a look at all the major proposals coming across the table, and if we think it is appropriate we would, through the minister, make a stand. But, as I said, it depends on the circumstances in the individual case.

CHAIR—This airline is very different. It is really about holding onto or expanding our market share as opposed to foreign investment, because the airline is already here. It is a very different question from investing in a major resource project or a whole range of other things. I think this is one that Australia wants to look at so that we at least have a flag carrier that is dominant enough in world standings. What do you think?

Mr Jones—As we said, circumstances will differ in every case, and the national interest can be defined differently depending on those circumstances.

Mr O'KEEFE—It is interesting that that view is coming from a free marketeer and the opposite view is coming from—

CHAIR—I just posed the question.

Mr O'KEEFE—It is interesting watching politicians tie themselves up.

CHAIR—Some say monopolies are great, so long as you have got one!

Mr O'KEEFE—That is what Qantas is trying to tell us, my friend. I make another point. In relation to this issue of import replacement-export development which you talked about, I have a view that it is not quite how you described it and that we still miss an opportunity. I want to put a couple of scenarios to you and ask if the department is thinking this way. I have had experience over the years in wandering around watching older industries reinvest, often with government support, to stay alive. The mining industry is one, the dairy industry is another and the textile industry is another. In every industry you go into you see brand-new imported equipment—hundreds of millions of dollars worth. Each one of the industries says, 'I wish I could've bought this in Australia but we do not make this stuff so it is all imported,' and each of them has made the decision in complete isolation to anything else. I worked out at one point that in the next three-year cycle there will be a billion dollars worth of those big tip trucks the mining industry buys every five years.

CHAIR—Alpax.

Mr O'KEEFE—There will be a billion dollars worth when you look at how many there are. My point is this: when we go in with an industry assistance program of some kind or other where we know it will lead to that kind of reinvestment of technology and opening up of export opportunities and all the rest of it, does anybody sit down and actually identify that this is going to lead to collectively one billion plus of investment in particular equipment? Is there any attempt made to bring the likely suppliers of that into Australia to get some participation in that process? Does that happen?

Mr Holthuyzen—It does. I will ask Hellen Georgopoulos to get to the specific point, but there are a couple of clarifying points I would like to make first; that is, in the broad issue of investment attraction, promotion and the role we play, there is not that coordinated planning role. That is because, fundamentally, it is government policy that at the end of the day resource allocation and economic growth are for the marketplace to fundamentally determine. So we are not going to sit there and pick a sector—be it haulage trucks or whatever—as an area where we would want to leave some slack in the economy for some reason or another. That is not the role of government. That does not mean though that, to the extent that there is a market out in Australia for the production of certain goods and services and there are lead times before a particular project comes on stream, yet we know that it is going to happen, we do not have a generic program in place that helps facilitate the supplier matching the project. We do do that, and Hellen can tell you what that is.

We work very strongly—in a facilitatory role, though—with industry to ensure that, if there is an opportunity for Australian produced goods and services to be provided to a particular project or to a particular sector of the economy, there is that enabling capacity. We help to ensure that that happens. It is more a transparency role, though. It is a market failure concept. It is our belief that at the end of the day it is the job of the entrepreneur and it is the job of the industry out there to match supply and demand. But if there is a lack of information, a lack of knowledge or a lack of understanding about the requirements of major projects or companies, we are more than happy to facilitate the two groups getting together.

Mr O'KEEFE—But the answer to my question is no, in the sense that there is not a requirement in return for whatever assistance we might be giving. If you look at page 41 here, you mention as an example Motorola and Corel Corporation being required to repay grants in Ireland because they did not deliver the goods.

Mr Holthuyzen—I will be interested to see whether that ever happens.

Mr O'KEEFE—Sure. Tell me, Hellen: can you see where I am trying to go?

Ms Georgopoulos—Clearly in terms of requirements there are WTO implications there. But in terms of facilitation, the Industrial Supplies Office Network is meant to be Australia's capability and authority on Australian capability. It is a national network made up of state and territory industrial supplies officers whose job it is to identify Australian suppliers of goods and services that can cater to the needs of major projects. The way that the Industrial Supplies Office Network works is that, particularly when there is a new investment, Invest Australia will look to facilitate all the approvals and bring up-front the kind of information that is necessary.

Mr O'KEEFE—Please stop there, Hellen, because I know all that. What I am saying is that here we are investing in a support package; let us call it a package for the dairy industry. Let us say that the consumer will be paying something like \$1.8 billion over the next eight years. It is a straight industry support package facilitated by government. It is going to lead to another round of technology investment in that industry. None of that technology is being manufactured in Australia. Are we saying to any decision makers in the dairy industry, 'You can have this package providing you find some ways to get some of this manufacturing or some of these partnerships into Australia'? Is anybody saying that at all?

Mr Holthuyzen—We are saying it with specific projects, particularly investments. It is not a mandatory legal condition, invariably. But what ends up happening—and David and I and others get involved in negotiating with potential investors to Australia—is that as part of the deal there are certain activities that these projects must pursue that are of that kind. There are two types. There is the more generic one; Syntroleum in Western Australia is a very good example of that. It is a gas-to-liquids set-up. They did not recognise the need for, nor were they interested in, undertaking a significant amount of value added research and development here in Australia. But, as part of that package, the government said, 'If you want to get the investment here and if you want us to help you, you have to do some of that sort of thing.' We worked out with them in a detailed way the sorts of things they needed to do—they got links with CSIRO, for example, and other centres of excellence—to pursue research and development. In addition to that, Invest Australia links in strongly, as Hellen has just said, with potential local content suppliers.

Mr O'KEEFE—I understand all that. I am talking about whether we are playing any proactive role to use the leverage. You give an example where we do this. Hellen, I did not mean to be rude and cut you off.

Ms Georgopoulos—No, not at all.

Mr O'KEEFE—I can understand what you are saying, but we know all that. We were out the front here. What I am asking about is: do we use our leverage to drag more out of it, rather than facilitate what is already here?

Ms Georgopoulos—Yes, that is right.

Mr O'KEEFE—That to me is the difference.

Mr Holthuyzen—I think the powerful point to make is that, at the end of day—and I suspect it is the same in Ireland, Singapore and anywhere else—you can mandate those sorts of conditions, but once a project is up and running and they do not meet them, what can you do? You are not going to turn around and say, 'Well, we will have our money back now,' which means that the project will probably close. In some sense, leverage only works a certain way and to a certain degree and, when you have a basic philosophy that it is the marketplace that must ultimately sort this out, you only go to that facilitatory step, I think.

Mr O'KEEFE—I can understand that.

Senator FERGUSON—I just have one question. I am sorry; I missed part of your presentation, so you may have already answered this. With Invest Australia, firstly, do you identify and then target potential inward investment into Australia, and, if you do, how do you do it?

Mr Holthuyzen—The short answer is that we do that in two ways. I will get David and Barry to make some comments. We do it generically through an attraction promotion program where we target particular sectors, and we have strategies which we work with other departments and other agencies and the states. The key ones currently that we have identified there are biotechnology, ICT and also research and development. So we specifically mandate our investment commissioners, we mandate our embassies overseas, and we mandate our Austrade colleagues in the trade commissioner service to help us with that. Predominantly it is the investment commissioners, and from the Australian end, who identify key companies and potential investors in those sectors, as well as other sectors. There is the leads concept, which is where we more generically are also on the lookout for potential investors in Australia in a whole range of different industries. Those are the three which we are focusing on at the present time. Then, of course, we pursue it through seminars, conferences and exhibitions and the like in more generic invest in Australia campaigns.

Mr BAIRD—I agree with my colleague Mr O’Keefe: you did present this in a way that addressed the issues, which was not the case in some of the presentations we have had. I think several of us on this committee have been somewhat inspired by what happens in other countries. There is the Irish Development Board, the Singapore model and, in my case, the models that they have in quite a few of the sunbelt states in the US. I notice, for example, the \$150 million that the Singapore Economic Development Board is given. I think Invest Australia gets about \$11 million, or of that order. I hear all the things that you are doing, but I wonder whether it is time that we had brand Australia out there to push the envelope in terms of marketing for attracting new investment promotion, et cetera. Without wishing to be political, because I obviously support the government’s efforts across the board in these areas, particularly in relation to Austrade which I think has been singularly successful, and the Australian Tourist Commission, Invest Australia has been a little bit like the poor relation. I wonder whether you have any general comments, just briefly, because I know we are out of time.

Mr Holthuyzen—There are two quick comments I can make on that. Clearly, funding is an issue. Matching \$11 million with the hundreds of million dollars in other places is—

Mr BAIRD—Do you know, by the way, what it is in Ireland?

Mr Purcell—Yes, we do.

Mr BAIRD—Would you like to share that with us?

Mr Purcell—Yes. Barry will correct me if I get it wrong. We do have the figures. They have more administrative money than we do, significantly more in equivalent dollar terms depending on what exchange rate you use on any given day, and also they have a significant program budget for a variety of things.

Mr Holthuyzen—We can give you those figures.

Mr Purcell—We have the Irish Development Authority's annual report excerpts and I thought we might have had an actual summary, but we have comparative information on most of the overseas agencies.

Mr O'KEEFE—What do you think it is?

Mr Purcell—From recollection, it goes something like this, and this is just off the top of my head: I think it is something like six times the budget when you average it out, leaving aside the different size of the economy; the Irish economy is about a quarter the size of Australia's, from recollection.

Mr Holthuyzen—But irrespective of the amount of money—and obviously I think funding is an issue; I am sure government accepts that; there are funding constraints but I am sure that when they can do so they will—you have to do it smart. The real problem there is, I do believe, while it is very welcome that we have other agencies of the Commonwealth and the states as well who are involved in direct investments, that that muddies the waters. You need a one-stop shop. You need the one branding, just as you indicated. Like Austrade on the export side, you need it on the investment side, and you need it in a very sophisticated, integrated coordinated way for proponents to make sense of what goes on in Australia.

I think we can do that better than what we have done, and if we do that better then, of course, that eases the pressure on the funding side, in my view. Obviously we would match and better some of the other agencies if our funding were better, but I think we would match and better those other agencies if we branded better. We accept that. Clearly, it is very important that we have the expertise and we have the input from these other agencies. We are not suggesting for a minute they should not be there, but at the end of the day, when it comes to overseas promotion of Australia, having that one brand and that single entry point, which is what we have been striving to do, is extremely important, so we agree with you on that.

Mrs MOYLAN—Before we finish, is it possible to get a list of overseas companies that have established in Australia in the last five years, a list of companies that have considered Australia and not established here and a list of companies that have actually been established here and have moved their operation offshore?

Mr Holthuyzen—We can certainly endeavour to provide that in the best way we can. Obviously, we can only capture in detail most of those companies whom we are aware of in investor trading. Many companies come here and do not necessarily come to the Commonwealth—

Mrs MOYLAN—I appreciate that.

Mr Holthuyzen—We do have a major project facilitation program that the minister operates which identifies projects that want to come to Australia, so we can provide that.

Mrs MOYLAN—That would be great. Do you normally do an analysis of—for example, the one that is mentioned in your submission—why they have not established here?

Mr Holthuyzen—Yes, we do.

Mrs MOYLAN—It would be instructive for the committee to actually look at those points and examine the different categories that I have just outlined.

Mr Holthuyzen—We are happy to do that, with one small qualification if I could in that one thing that we have noted, as people involved in this, is that many of the decisions—both to come and not to—are very project specific, and invariably some of the key publicly related stated reasons for not coming or coming here do not bear a great deal of relevance to the real reasons sometimes.

Mr BAIRD—We are not trying to be critical—I think your presentation has been excellent—but it is more in terms of where we collectively should be pushing the window.

Mr Holthuyzen—That is understood.

Mrs MOYLAN—It is just instructive for us in the direction of our final deliberations.

Mr Purcell—We will try to get you some case studies which illustrate the range as much as possible.

Mrs MOYLAN—Thank you, that would be really worth while.

Mr O'KEEFE—I have also been following with some passion the development of the superannuation fund capital base in the Australian economy. I am wondering, given a lot of your activities are involved in attracting not only enterprise to Australia but also capital, if are you seeing any response from that domestic capital base to understanding what you are about and looking for what I would call 'import substitution of capital'—using some of your own money to do these things.

Mr Holthuyzen—I think that is right. Grahame would probably have a quick comment to make about venture capital and the way the government's program Backing Australia's Ability in particular has generated much more venture capital coming into Australia.

Mr Cook—Yes—

CHAIR—But I think Neil's question was a bit different.

Mr O'KEEFE—Let us see where you go—venture capital, infrastructure capital, partnering up, big investments or whatever.

Mr Cook—The department helped fund an ABS survey, which was published very recently, which shows a substantial increase in the venture capital industry, to \$4.9 billion. About 35 per cent of that came from Australian superannuation funds, which is a higher proportion than we have seen in the past, and that shows that they are becoming more interested in this sector. Also, there were some changes made to try to attract offshore US pension fund investments into Australia. About \$10 million-odd came from that source. Both the ABS venture capital survey

and the industry survey—the industry does annual surveys—are showing that the venture capital industry is growing, broadening and deepening and moving along the risk profile to higher risk capital investments. But there is no doubt that, the more money we can attract in—whether it is domestic or offshore from superannuation funds—the better off we are going to be.

Mr O'KEEFE—Can you provide us with some of that information, such as that ABS survey?

Mr Cook—Yes.

Mr O'KEEFE—Thank you.

CHAIR—I thank the witnesses. I would like to add my comments to those of my colleagues. I found that your submission was very well put together, with a lot of basis and thought. Please forward your additional material to the secretary. You will be sent a copy of the transcript of your evidence, to which you may make corrections of grammar and fact. Thank you all very much for your attendance here today.

[11.13 a.m.]

MIRPURI, Mr Ashok, High Commissioner, Singapore High Commission

CHAIR—On behalf of the trade subcommittee, I welcome His Excellency the High Commissioner to the Republic of Singapore. The subcommittee prefers that all evidence be given in public but should you at any stage wish to give any evidence in private, you may ask to do so and the subcommittee will give consideration to your request.

Mr Mirpuri—Thank you for the opportunity to appear before you. When you wrote to me several months ago, Mr Chairman, about the role of the Singapore Economic Development Board, I wondered how I would be best able to assist the committee. I decided to make a short presentation, then we can go into questions. We can always do some follow-up with some specific questions that I may not have the full answers to today, because it is a very broad subject in terms of Singapore's development. I have to make two preliminary comments in that regard initially. The first is that the Singapore model is unique. Given the nature of Singapore's geography, the nature of its history, the nature of its people and its complete lack of resources, we have had to pursue a very dramatically different model from that of other countries.

Over the course of the years, because of a certain development success, many questions and many requests have been put to us asking whether we can, in some ways, replicate this model in other countries. We have been very reluctant to try that, because of the unique nature of it. It is like the efforts many of us make—these pilgrimages we make to Silicon Valley—to try to replicate Silicon Valley in our own countries. I joined one of those pilgrimages a few months ago. It is really a unique system over there which, at best, you can put together in very small ways. But that model is so dramatically different from what the rest of us have.

The other preliminary comment I would like to make is that Australia has got its own system and, as the High Commissioner, it would not be appropriate for me to comment on the Australian system. I know that, in the terms of reference of your committee, you had certain questions about the foreign investment systems in Australia and the work force. I do not think that it would be proper for me to comment on those matters. I am quite happy to share with you information about Singapore and the Singapore experience in that regard.

You had specifically asked some questions about the Economic Development Board. The Economic Development Board is a statutory board in Singapore. It comes under the Ministry of Trade and Industry. If you are not certain about the model, I can send you information on how this government structure works, or we can take it up in some of the questions. Singapore's system of government is very similar to the Australian system. We have a parliamentary system with a cabinet and ministers responsible for ministries. In the 1960s, we started to create statutory boards like the Economic Development Board, which was created in 1961, even before we gained independence. They report to the Minister for Trade and Industry. For reasons of their own efficiency, they work quite independently. Their staff are not treated as civil servants; they are treated as commercial employees. That gives them a certain flexibility to pay them very differently from civil service salaries and to reward them with bonus structures that civil servants will not be able to get. We found it a far more efficient way of running these

statutory bodies. There is a Trade Development Board and various other statutory bodies in Singapore that run independent of government but come back to government for policy issues. They may have a CEO or a chairman who is a civil servant, but most of their staff are not civil servants.

In Singapore's case, the development patterns have changed since the 1960s, although the overall theme stays very similar. Today, the current focus is on developing what we call a KBE—a knowledge based economy. It is very much focused on developing Singapore's capabilities in the KBE. We have created an Industry 21 initiative; the vision is for Singapore to be a vibrant and robust global hub of knowledge driven industries by 2010. I know that we are going to be competing with Australia on some of these knowledge driven industries, but there are also areas of great synergy. Knowledge driven industries are those with a strong emphasis on technology, innovation and capabilities. We are pushing for the economy to be much more robust in terms of being very well diversified for activities and markets.

Being a very small country with a population of four million people, we are very much swayed by global economic developments. It is very important for us to have this very robust economy, or else the risk is that, every time there is a fall in one of the key markets of the US, Japan or Europe, Singapore gets hurt by it. We are trying to diversify in terms of activities and markets. We want to see the twin engines of growth of the economy in manufacturing and services. Manufacturing will encompass the entire value chain, in terms of research and development, product development and marketing. The economy is kept vibrant through the introduction of new products and services. We also want Singapore to be a global hub that has a strong technological investment in market links, not only to the region but also to developed countries. For example, three-quarters of our electronics and pharmaceutical exports go to the developed markets of the US and Europe.

We expect these knowledge driven industries to contribute 40 per cent of Singapore's GDP in the next 10 years and to create 20,000 to 25,000 new jobs every year. Two out of three jobs in manufacturing and three out of four jobs in services will be for knowledge and skilled workers. It is very important to speak a little bit about workers in Singapore because those of you who have been to Singapore realise it is very small and we actually have no resources. The only resources we have are our people, which is why there is a great deal of emphasis on the knowledge industries. We do not have the oil in the ground, the gold, or any other mineral resources to use. Even our water is imported from our neighbours.

In terms of EDB, they see themselves as playing two basic roles for this economic development strategy as defined by the government. The first is to enhance capabilities and the second is to maintain competitiveness. In terms of enhancing capabilities, the idea is to provide capabilities relevant to the companies that are investing in Singapore at competitive costs. Costs are very important in terms of any investors' decisions. EDB works towards facilitating the companies grading up in the value chain, and because they promote a range of clusters they can provide an environment where clusters can have some synergy and create new products and processes—for example, biochips, intelligent transport systems—and the idea is to look for where these value added clusters are. Having looked at the models of Silicon Valley and Boston's Route 128, EDB is also bringing in world-class universities with a focus on teaching, research and industry linkages, and the intention is to create value from technology licensing and spin-off companies.

To attract these multinationals to Singapore, talent must be the key. Given our limited land, given the high wage cost, the only way we can compete is by having the talent available for them. The work force is being pushed to upgrade their skills and to embrace lifelong learning constantly. EDB is helping to provide people with skills and knowledge relevant for the industries of the present and for the future, and, as a society, we welcome foreign talent to contribute to the economy. A world-class work force is a strong pull factor for knowledge driven industries, in our experience.

Aside from enhancing the capabilities, a second main prong is to maintain competitiveness, and the idea is to view cost competitiveness holistically. The aim is to offer multinationals not so much cost savings on individual cost items but as a whole to make operating in Singapore as viable and as highly competitive an option as possible. Although the government keeps a very close watch on cost competitiveness and is ready to take tough measures as necessary, the package that is offered extends beyond that. The package that is offered to multinationals includes excellent infrastructure and communications, a corruption free and stable political and business environment, a skilled work force and good interagency coordination. We summarise this, and many in the Australian media have also summarised this as a Singapore incorporated approach—the Singaporean approach. Operating in this Singapore system will enable companies to push out their products so quickly and efficiently as to be able to command premium pricing, which in turn will allow companies to more than cover the relatively higher costs of operating in Singapore. We do not hide from companies that there is a higher cost of operating in Singapore because of limited land and labour.

A key element of the pro-business environment is a tripartite system of cooperation between workers, employers and the government. This ensures that the economy functions smoothly for the benefit of both businesses and workers, and when it comes to hard times the government has been able to implement cuts in wages while leaving social cohesion intact. In addition, the transparent system of governance has contributed significantly to the robustness of the financial system during the recent Asian economic crisis.

I mentioned briefly the cluster development approach. Let me say a few more words about this. There is the presence of a network of related industries and companies which is used to enhance the information flow, share resources, support services and provide access to suppliers. For example, there is a chemical cluster being built up on Jurong Island. Jurong Island was a group of islands that were reclaimed to put up a chemical cluster. The idea is to use that chemical cluster for companies who have the synergies of working in close contact with each other. The government put in place the infrastructure in order to organise that. We have been relatively successful in attracting investments to Singapore. The average over the past few years has been about \$S7 billion to \$S8 billion. The Singapore dollar is about on par with the Australian dollar. In terms of jobs, we have created 15,000 to 16,000 jobs almost every year in the manufacturing sector, and 5,000 to 6,000 jobs in the services sector.

The main priority now is that Singapore remains a highly attractive location for business. EDB's job is to continue to attract both foreign and local investments as well as to nurture local enterprises. Investments will flow in, in EDB's view, if we have strong capacities and a first rate infrastructure and if we remain cost competitive. The regional crisis has not diverted EDB and the government from building up the modern infrastructure for growth industries. They are

investing a great deal in IT, broadband infrastructure, a broadband network for the whole island, and the other main thrust of that is education.

I mentioned something called Industry 21 and I just want to read off to you some of the main elements of the Industry 21 program. The first target is education. The idea is to attract 10 world-class institutes to set up centres of excellence in education and research in Singapore by 2010. Recently they announced that they have managed to have eight world-class institutions already set up; in terms of chemicals, by 2010 the idea is to triple output to \$75 billion; in terms of communications and media, it is to become Asia's leading communications and media hub by attracting leading foreign companies and developing local capabilities in electronic commerce, Internet services, broadcast TV and film production; in terms of headquarters, to attract multinationals to set up headquarters in Singapore. For local enterprises the idea is to develop at least 50 local knowledge based companies into world-class competitors; for engineering, to nurture five new industries and to attract 20 global engineering centres and 50 manufacturing headquarters; for health care, to attract five world-class centres of research, education and medical services; for electronics, to grow by eight per cent a year and secure 150 new projects and produce \$150 billion of output; for logistics, to be Asia's leading logistics hub, to support manufacturing and services; and for life sciences, to double the output of life sciences manufacturing companies in Singapore within five years. These are very extravagant targets but EDB believe that, unless they put the stretch into their targets, they will not be able to achieve many of them.

CHAIR—Thank you for that, Excellency. You mentioned the chemical clusters being developed on Jurong Island: can you give me an indication of what sorts of incentives, both tax and monetary, the government would be offering to get companies to locate there instead of some other country?

Mr Mirpuri—In terms of tax and other incentives, these really depend on the companies as they go. It is very difficult to generalise and say, 'These are available to everybody.' It is important to recognise that many of the companies setting up in the chemical cluster have had a long history with Singapore—for example, Shell, which is a major investor in the chemical cluster, has been in Singapore since the late 1950s or early 1960s—so we view these things as long-term relationships rather than short-term attractions. Mobil and Exxon—all of them are there. So, in terms of incentives, Shell would probably have a slightly different incentive structure, for example, than the next player. Aside from the tax incentives, EDB offers to coinvest in some of the projects as well, if only to encourage people to come in. The idea is not so much for EDB to make money but, rather, to give that catalytic effect to the investments and then, after a few years, to divest themselves of it and then carry on. They would help companies to set up structures. Many of these projects are multibillion dollar projects and no one company may want to take the risk. EDB will help them to set up the structures by bringing other partners into the game as well. As I mentioned, the idea is to create infrastructure for these companies in order to have the synergies. Jurong Island itself is eight islands that have been reclaimed and put together; and that is at no cost to the companies. Having had the island, there is a land bridge linked to the rest of Singapore so there is easy transportation and, again, that was put in by the government. The government has secured long-term supplies of gas from Indonesia and Malaysia for Jurong Island. These are some of the incentives that come into the entire package, rather than just the tax incentives.

Mr BAIRD—I am interested in the role that your organisation, the Singapore Economic Development Board, takes. It seems to have three roles—the attraction, the research and the investment per se. Can I ask a few things in terms of, firstly, the attraction. Does this involve multimillion dollar promotional exercises around the world, or is it targeted to specific companies, talking to them about investing in Singapore?

Mr Mirpuri—EDB has set up offices in the US, Japan, Europe and Indonesia. We do not have any in Australia because it is close enough for an EDB officer to fly here and talk to businesses. They have a plan in terms of bringing investors into Singapore. The idea is for officers to constantly go out and sell EDB and Singapore to them. Again, just like with the chemical industry, because these officers have been around for quite some time they would be staying a great deal in touch with companies to put to them what are the latest developments taking place in Singapore. There is no major multimillion dollar sort of activity to go out to promote Singapore by running advertising campaigns. We find that the best way is actually getting an EDB officer to stay in very close touch with the market, with the investor. In the US we have offices in New York, San Francisco and Houston, among other places, and the idea is for them to stay in close touch with investors in order to get feedback from them, and then to take them to Singapore to provide them with a first-hand look at what is happening in Singapore. Rather than an advertising campaign, they may organise a biennial conference in Singapore, or tie up with a company like Fortune or Forbes. Forbes is organising a conference in Singapore later this year. The idea is to bring the investors to Singapore to let them see many of these things at first-hand. As they then take up that immediate perspective of it, they can follow up. They have very close follow up with EDB officers. If you look at the average day's diary of an EDB officer, he would be having two or three contacts in the course of a day, aside from attending functions, and a great deal of follow up goes into that in the course of a year. They are very dogged in the way that they pursue many of these things, I must say. I have worked with many of them, and they are extremely dogged in the way that they pursue it.

Mr Lee Kwan Yew wrote in his memoirs, which were published last year, the story of how EDB got Hewlett Packard to invest in Singapore. There was a great deal of reluctance by Hewlett Packard to come in—this was in the 1970s at the start of the electronics boom—and they finally convinced Mr Hewlett himself to come to Singapore to have a look. You start at a very low level and work your way up to the top. Unfortunately, the factory was not ready in time for getting Mr Hewlett up there, and he wrote about how EDB officers worked so hard to get power into that building, and the Hewlett Packard people did not believe it would be ready. When Mr Hewlett arrived in the morning, they had the cable and power to take him up to the floor. Hewlett Packard then realised that this is a serious country, that they can actually invest in this country because people will go out of their way to do some of the things that are needed.

We find that the most important thing is actually having that first-hand contact with people and presenting it to people. The multinational has a range of choices where they want to invest. They take a global strategy. We obviously want them to come to Singapore. We see Singapore, as I mentioned, as a regional hub, and again that adds to the incentive value for many of these companies. You may have heard about Singapore negotiating free trade agreements across the world. We are doing one with Australia; we are currently negotiating one with the US; we have signed off with the New Zealanders; we are negotiating with Japan, Canada and Mexico. Again, that is part of that overall package of trying to get investors to come to Singapore and to see it

as much bigger in that wider sort of picture, but again it requires people to go out and sell it in that fashion.

Mr BAIRD—The people that are seeing it are very much the targeted industries that you have outlined, so it is focused on those aligned?

Mr Mirpuri—Yes. If a car manufacturer came to Singapore and said that they wanted to manufacture cars in Singapore, we would probably tell them no. I think we would definitely tell them no, because we do not have the labour force or the space required for that. Again this is something that Lee Kwan Yew related. We used to have Mercedes Benz being manufactured in Singapore. An EDB officer asked the Germans at Mercedes Benz, ‘When do you think that we can remove the tariff preferences,’ because in the early stages of import substitution in the 1960s everyone had tariffs. In the 1970s we asked Mercedes Benz when we could remove these tariff preferences, and the Germans felt that the Singapore labour force was just not up to the mark where tariffs could actually be removed, that it would always require tariffs.

Within a few years we asked Mercedes Benz to terminate the investment over there. We just did not want to live behind a protectionist wall. To do that for one industry would then hurt every other industry we have. So we practically have no tariffs in Singapore. Each industry must be efficient, must be able to prove its capacity before it can compete. If there are industries that cannot compete—extremely labour intensive ones—they have to relocate. It just becomes too expensive to do that. Looking at the development of industries in Singapore, we have shifted very much up in the value added chain—from the very low value added, labour intensive industries, such as textile manufacturing and car manufacturing—in order to get the premium pricing. Otherwise these companies cannot survive. We just do not offer anybody protectionist barriers.

Mr BAIRD—I note that it is suggested by our people that the Economic Development Board also take equity and investments as well; is that right?

Mr Mirpuri—Yes. We have done that for some of the companies in the chemical cluster. The idea is not so much to invest for profit but really to give a catalyst to the process, and they really like to divest these shares in quite a short time. As soon as the project is up and running and looks very viable, you can sell it off to somebody. Because they do not see themselves as an investor, per se. They are not in the business to make money out of these investments. They are in the business of bringing these investments to Singapore. If, in a \$2 billion investment, there is a \$100 million shortfall here or there, EDB comes in to take it. It is a little bit like companies giving CEOs stock options. They then have a greater interest in making sure that the investment works. Having got the investment to work, EDB can then divest and move on and focus on something else. We do not give them a large amount of money to be able to do that.

Mr BAIRD—My final question relates to those two organisations under focus at the moment, Singapore Airlines and SingTel. Do they have government equity in them, per se?

Mr Mirpuri—They are both what we call government linked companies. They are majority owned by the Singapore government. This is because of the unique style of Singapore’s development. While they have majority government ownership, they are run as commercial entities and their interests in Australia, for example, are driven by commercial considerations.

Because of Singapore's development, we only became independent in 1965. We had no large Singapore companies. We had multinationals, we had the British companies, we encouraged Americans and Japanese to come in and invest, but there were no Singapore companies. The government had to take the lead to really create many of these companies.

There used to be a Malaysia-Singapore Airways—MSA. When Singapore and Malaysia split, the airline was split as well. Malaysian Airways was formed, taking some of the domestic routes over there. Singapore had to go and create international routes. The government obviously had to play a role in that. Telecommunications in Singapore, like in many countries, was largely a government monopoly. As in Australia and anywhere else, for a long time, most telecommunications were government monopolies. Shares have been sold in these companies. Similarly, the Development Bank of Singapore, which is now a private bank, was spun off from the Economic Development Board.

In the 1960s and 1970s, it was an important part of Singapore's development to have these companies and push them ahead. Coming up to the 1990s, the government started to privatise these companies. Singapore Airlines' shares are listed in the stock exchange of Singapore and traded internationally, as are SingTel shares, as are shares of the Development Bank of Singapore—DBS—and a large number of others. The government still holds majority shares in many of them. They have committed to sell off these shares. Obviously, in dealing with shares there are transitional issues. You do not want to create large liquidity in terms of releasing such an amount of government shares into the market immediately. But in terms of the way in which these companies operate, they are purely commercial. We have no domestic market in Singapore. Singapore Airlines has to compete on an international field. They have to provide a service to a passenger that has no government subsidy coming into it. They have to convince international banks to lend them money in order to buy new aircraft. The government does not go in there and say, 'We will give you money for new aircraft'.

Similarly with SingTel, while SingTel is a government monopoly, we are selling off those shares, SingTel has to grow by going overseas and these investments overseas are not guaranteed by the government. They succeed or fail on the basis of the commercial reality.

Mr O'KEEFE—Excellency, thank you for all the information you have given us. I have two or three areas that I want to develop a little bit further. We do—certainly I do—have a fascination with the growth of your pension funds and the fact that you have now moved to, I think it is, 40 per cent—20 per cent by employer and 20 per cent by employee. In your economy and with your people you have obviously had them very comfortable with the notion, first of all, of a huge part of the national wage bill going into a common capital pool. To what extent is that pool directed by government in this development model of Singapore? Has it got to allocate certain amounts to certain kinds of investments? How is the capital put to work, or is it just left to the fund managers to do what they think is best for their investors?

Mr Mirpuri—The Central Provident Fund, we call it the CPF, is actually an individual's money. We do not have pension systems in our country; we have evolved out of the pension systems. Even most civil servants do not get pensions when they retire; therefore, this was created as a way for people to be able to look after themselves after they stop working. The biggest group of people who complain about it are, of course, the employers, because it actually adds to their wage bill. We used to be at 40 per cent but, when the economic crisis hit in 1997,

in 1998 we cut back, and it is now somewhere in the range of 35 to 36 per cent. We want to bring it back up to 40 per cent again. It was an important way of cutting back because it did not immediately hit the pay packet of anybody when it was a cut back in the Central Provident Fund contributions. That was an easy way in terms of keeping the cost competitiveness for the employers, who were saying the wages had become too high in Singapore. Yet you had to maintain social cohesion by ensuring that wages did not get cut. You may have big problems—anyone going around cutting 10 or 15 per cent of wages would have major problems. So this is a good buffer in terms of every time you have an economic crisis—and as a small country we seem to have more than our fair share of economic crises, despite our economic management, because of things happening around the rest of the world. It becomes a good buffer that can be adjusted: in good times the government tries to move the number up again and, in bad times, it has to go down.

These funds are put aside for an individual to be able to use in certain approved investments. The main thing it has been used for by most people is for housing. Rather than use their salaries for housing most Singaporeans use their Central Provident Fund contributions, including that of the employers, to pay off their mortgages. So if you look at the amount of money actually left in an individual account after paying off a monthly mortgage, it is not a very large amount. It is a way of making sure that, by the time they retire at 55 or 60, they would have paid off their home already. Again, it is a protected system of ensuring that people do not lose their homes. The nature of Singapore's development has meant that we have encouraged people to own their own homes at a very early stage. There is a large government housing building project that started in 1960s. We had a large number of squatters. People lived in very difficult situations where there were fire risks. The government went into a housing development program and, rather than renting these out to people, the idea was to create home ownership. We now have home ownership at almost 90 per cent of the population—largely funded individually. The government does not give these homes to people but actually encourages them to buy their own homes. That has created a greater amount of responsibility in looking after estates, so these public housing estates are very well looked after.

A certain amount of the money in that fund is put aside for medical purposes. About 10 per cent is put aside, up to a cap, for medical purposes. Anyone who requires hospitalisation can tap into that fund, and anyone whose parents require hospitalisation can use the fund. We are still a filial Asian society and we encourage people to use that money to help their parents and sometimes to help their siblings, as well. That fund can be used for approved medical purposes, and can also be used for education for the children. Again, the Singapore society is very focused on education, and parents want to send their children to have as much higher education as possible. Families can tap into that fund to use it to send their children to local universities. So, at the end of all of this, the amount of money actually left in individual accounts is not very large.

There used to be a small interest rate paid by the Central Provident Fund—tax free—but now we encourage everybody in fact to manage what is left in their own funds. They are allowed to invest in blue-chip stocks and shares and have the principal come back to the fund—they are allowed to keep the profit. Unfortunately, many people have not made a profit on it. They have suddenly realised that it is not that easy to manage their own money and that it is easier to leave it and get two or three per cent return. They are allowed to buy some gold.

The government is moving towards a state where people will actually use that money to buy more funds for their own retirement. Because we have an ageing society—the fertility rate is very low in Singapore, about 1.4, which it is nowhere near replacement level—we are going to be reaching an ageing crisis, so these funds will actually be used much more for the long-term future of Singapore. People will be able to manage their own futures as they reach retirement age, because they will not have children to look after them as family sizes fall. There may be a bit of a misconception that this is used as a fund by the government to go around and—it is not really. It does not really work in that fashion.

Mr O'KEEFE—Good—that is important. The other point that I picked up on in your presentation was the fact that, clearly, you have had to go very high up the value add tree because space is at a premium and therefore you have to maximise what you do with it. The cost of reclaiming the islands, for instance, is a huge investment. Is Singapore considering partnering up, perhaps, with surrounding countries who have space, for instance, available for joint projects because you have capital and skills and they have space? Is that sort of thinking on the radar screen? Does Australia come into it at all?

Mr Mirpuri—Again, the first thing is that these projects are driven by commercial considerations. We have a program for regionalisation, which was put in place in the early 1990s—and is now what we call globalisation—to tap Singapore into the rest of the world. The regionalisation phase actually involved setting up industrial parks in some of our neighbouring countries. Because of the high wage and land cost in Singapore, many investors were finding it too expensive to stay there. It made sense for them to relocate, for example, to Mexico, after NAFTA was signed, or to Eastern Europe, which put them much closer to the European market so that they could hopefully get access into the EU.

Singapore would have lost a certain value in contributing to that manufacturing process, so Singapore companies started to want to have manufacturing bases geographically close to Singapore. Initially, they were just in Malaysia, and the natural trend was for people to go into Malaysia, set up a factory over there and then bring the products into Singapore for some of the more high value activities and then to ship them out or to send them by air freight from Singapore. Singapore also could be the financial centre to raise funds for that. Subsequent to that, industrial parks have been set up in Indonesia—on the islands of Bintan and Batam, which are 20 to 45 minutes away from Singapore by boat—an industrial park has been set up in Vietnam and one has been set up in China. We have also set up an IT park in India. In all of these a group of investors come together with some assistance by the EDB and put their own money down. Again, they are driven by commercial considerations; there is no subsidy involved in that. The idea is to attract multinationals to relocate from Singapore into these places—for example, into the IT park in Bangalore—or even to bring them straight from the US to there, and yet to have a connection with Singapore for some of the higher value added activities, for some of the financial, research and development activities, and to have them taking place in Singapore. That is where the link is with Singapore in terms of some of these activities.

Not all of them have been successful, I have to admit, and some of them have not made money over the past few years, but again that is the nature of the business. You cannot predict how many of these things will function. In terms of Australia, the interest is much more into biotechnology and the agricultural sorts of sectors, doing some of the research. Singapore does

not grow its own food in agriculture, so some of these elements are where we could work with Australia, particularly with biotechnology in terms of looking at some of the research being done here and some of the other activities taking place with some of the industries in Singapore. It is something we constantly explore.

Mrs MOYLAN—Given that we live in a rapidly changing world, particularly in technology, what is the greatest challenge for Singapore in maintaining its commercial and technical edge, particularly in the face of investment competition from China and Malaysia?

Mr Mirpuri—I think if I were to put one challenge down—and there are, of course, a whole range of challenges—it is getting the right people in. That is the biggest challenge we have. The concern in Singapore is that the development model of the last 30 years that has been so successful will probably not be the development model of the next 30 years.

Mrs MOYLAN—That is what I am driving at. So how is your development corporation actually looking to produce its vision for the 21st century and beyond? I know you have established this Industry 21, the 2010 vision.

Mr Mirpuri—As in any investment, there is a lot of hit and miss. If we had all the answers we would be very comfortable with it. We are not comfortable with it because we do not have the answers. That is why we have all these people out there; that is why we have groups going out to Silicon Valley, to New York, to Boston. We had a group that went out to Japan and Korea, and we have one that goes to Europe. We have that constant information gathering to fit into and to discuss how we should deal with some of these future issues. As I mentioned, people are the most important, so the one thing that the government and EDB feel that can actually be controlled is education, to keep raising the level of education of people, and that is where getting the world-class universities in is important. As we are getting almost a third of our population into institutions of high education, it is very, very important. We have pushed these numbers up.

It also includes a process of lifelong learning. Older workers who did not have the educational opportunities 20 or 30 years ago are brought back by unions to be given basic skills in order to make them employable; otherwise there is a risk that they will remain structurally unemployable. It is a global battle for talent, and we are losing our people to other centres of excellence. People have moved to Australia and also to the US and Europe. Someone who wants to be a nuclear physicist and who can be a brilliant nuclear physicist will find no role in Singapore because we do not have a nuclear physics program. They just have to go somewhere else, so we lose these people. The challenge then is to nurture these people through education. But the next challenge is to be extremely flexible, not to be tied to any rigid model as such. As I mentioned, the difficulty with having 30 years of success is that when you start tinkering with something the question becomes, ‘But this has been successful; why change it?’ You are not sure that it is going to work for the next 30 years. So there is a great deal of information gathering. We have to go out and learn as much as possible and see where we can start changing the system. For example, the education system is being refocused. We are creating very bright students but we are really not creating very successful entrepreneurs in some cases.

The industrial system has been refocused. Just like Industry 21 is a program, we have a program called Public Service 21 to refocus the public service toward being very much more

innovative in terms of the things it does, rather than to be very bureaucratic in the way it does things. It is a mind shift that has to take place over time. We have had to encourage foreign talent to come in, which is a very difficult prospect for many Singaporeans. Our blue chip Singapore companies, such as the Development Bank of Singapore, brought in an American CEO three or four years ago, and now he has been replaced by a French CEO. It is very difficult for the Singapore work force sometimes to accept some of these things. Neptune Orient Lines, which is our main sailing line, is now run by a Norwegian. Singapore Airlines has on its board Australians and other foreigners.

The idea is to always get new ideas and new perspectives. We have created a number of international advisory panels—for example, an international advisory panel on higher education and an international advisory panel in biotechnology—to get information from people and to then look forward and see where we may have to change. It is, as I say, a hit-and-miss thing. You invest some time and effort in a particular thing but, really, you have to be flexible enough to be able to shift away when you realise that this is not going to work and to redouble efforts on other things. We have put a lot of money now, and a lot of effort, into biotechnology. The returns are going to be far more long term than any of us want, unless we start now. Every primary schoolchild is being taught biology. Every secondary schoolchild is being exposed to bioscience. If nothing else, at least they will learn how to look after their own medical needs in the future in a much more informed fashion. But, if they can then go on and really develop some biotechnological future for Singapore, it will be ideal.

CHAIR—Excellency, thank you for your attendance here today. If you have been asked to provide any additional material, would you please forward it to the secretary. You will be sent a copy of the transcript of your evidence, to which you can make corrections of grammar and fact. Once again, I thank you for your attendance.

[11.57 a.m.]

BECKWITH, Professor Athel, Treasurer, Australian Academy of Science

WHITE, Professor John, Secretary, Science Policy, Australian Academy of Science

CHAIR—On behalf of the trade subcommittee, welcome. The subcommittee prefers that all evidence be given in public but, should you wish at any stage to give your evidence in private, you may ask to do so and the subcommittee will give consideration to your request. Although the subcommittee does not require you to give evidence on oath, I should advise you that the hearings are legal proceedings of the parliament and therefore have the same standing as the proceedings of the respective houses. The subcommittee has a submission from the Australian Academy of Science, submission No. 6. I now invite you to make a short presentation before we proceed to questions.

Prof. White—Thank you very much. I advise the subcommittee that I am the former science policy secretary of the Australian Academy of Science, having relinquished that job in May this year. So the paper you have got is from me. I am also the President of the Royal Australian Chemical Institute at this moment. I will be speaking on behalf of the academy and, to some extent, on behalf of the Australian Chemical Institute. I am very glad to follow the ambassador. I have just spent three days in Singapore and I have been, for the last three years, a member of one of the international advisory committees that he was speaking about to you, in particular to advise the National University of Singapore on how it can become a world-class university before 2010. Indeed, the visit this last week was the second visit to see how they had got on after the advice we gave them three years ago. So I will touch on a few of the points and, indeed, I am rather fully aware of some of the developments that have been made in higher education in Singapore as a result of this contact.

I think the first thing I would like to say in very general terms relates to the summary point that was made in the academy's submission—that is, we think that, in relation to, for example, Singapore, the degree of integration of our innovation system from the universities through the CSIRO and into industry is something which still needs attention. In particular, I will make a point later on about the relative weakness, as I see it from my contacts with the universities in Singapore, that will appear in the Australian university system compared with the Singapore universities, within five years, in my view. I will come back to that later when I am discussing the points, because I will do them one by one and I will add to them some material which relates to more recent experience.

One of the points that we want to address is the role of the development agencies. In that respect, I would wish to say that we must always think about the great difference in governance between Singapore and Australia. Let me focus on that for a moment. I think some things are possible there that are not possible here, and I think we must always be very clear about that. I will have a few more things to say about that. But then if I take the determination of the Singapore government, and indeed other development agencies, I think that the dot points that you see we have made in the submission—the ability to negotiate and decide quickly on a national basis, the tax incentive schemes, the national consensus about priorities and the

coordinated and synergistic with industry policies for national higher education and infrastructure—will, from my recent experience, totally hold up. I would like to give you a couple of examples. I will take an example or two from my recent experience in Singapore.

The national consensus on priorities: we heard from the ambassador that the priority was pharmaceuticals. It had been chemicals, electronics and things of that kind. I understand that the current priority for Singapore is food. That seems to me to indicate a very important change—and, indeed, partly answers your question, Mrs Moylan. I saw an illustration of it this time; the Economic Development Board of Singapore has decided this, I understand. They are going to import low price foodstuffs and make them into something which sells for a rather high price. That is the very simple game that is in town. What has been the effect on the National University of Singapore? They have been told that they should have a very high-class food science unit in the National University of Singapore. We last week reviewed the beginnings of that unit. They have recruited people from England, Australia and New Zealand. They are expecting to go to eight. It looks like an extremely good potential unit. Of course, it is not meant to be a high-class research organisation; that is meant to provide the input to the future food industry of Singapore. I am trying to illustrate the point of an integrated and synergistic relationship in connection with a decision of a particular kind.

I would like to tell you as a committee that I believe that the entry standard for graduates to the National University of Singapore is higher than for most universities in this country in science. They still work with the Cambridge, England, entry requirements of the A levels, and their entry requirements for science are about two As and a B. I was for a very long time a member of the staff of Oxford University—although I am an Australian—and two As and a B used to get you into Oxford. So I have to tell you there is a very high standard of entry into that university and there is a very high standard of performance of the graduates, who are all employed the moment they graduate. In fact, it is a problem for the University of Singapore, because they cannot get Singaporeans to stay on and do research.

Mr O'KEEFE—Are they funded in any way during their course—scholarships or anything?

Prof. White—Yes. There are no fees—just remember that.

Mr O'KEEFE—No HECS?

Prof. White—No. The government is investing in education. If you want me to drive home that point, the Nantang University in Singapore—I speak just on supposition but I believe that it is a fair supposition—is being developed as a rival to the National University of Singapore; namely, how can you otherwise explain the fact that they have just agreed to spend 400 million Singapore dollars—and, by the way, it astonished me that I got 42 Singapore dollars for my \$A50 last week—on biotechnology in Nantang University. They have recruited the head of biology from the Rockefeller Institute in New York, a Singaporean, a fellow of the royal society, to direct the operation. He is currently recruiting the best people. I heard the ambassador talk about getting the best people into Singapore. It is an absolute priority. He is recruiting at the moment and Nantang will be a competitor. I can see it putting a bit of biff into what is occurring there.

If you want another illustration of what their game plan is—and this is through the National Science and Technology Board, and you probably know that that is an extremely important component of the Singapore game plan for high technology—the National Science and Technology Board is about to spend on biotechnology one billion Singapore dollars a year for five years. I do not know what our spending in Australia is, but I have a suspicion it is less than \$100 million over that period.

This has to be a warning to you. I think your committee is an exceptionally important one, and I have to say I am appalled to find that you have had only 16 submissions, at least on the web; this is such an important matter. I am absolutely struck from my experiences in the last week or so and over the last three years of just one case. I do not know much about Ireland, Germany or a few other places, but what you are doing in my view—and I think in the academy's view, because this paper has the full endorsement of the council—is of the greatest importance, so two illustrations.

If I wanted to give you yet a third illustration of the way in which this whole thing is being revved up, I would tell you about the institutes of advanced study that the National Science and Technology Board funds. We have one institute of advanced studies in Australia at the Australian National University. Its total budget is of the order of \$110 million per annum, and it is being sized down. In Singapore there are, I think, 13 institutes that have been established over the last five years, and the average budget of those is 500 million Singapore dollars a year.

I have to say that the academy regards this as an extremely serious matter, and when I say to you that in five years time we might be outstripped you can see what I am talking about. Their real problem will be to get in the good people that the ambassador was talking to you about. We actually have them at the moment in Australia. With my chemistry hat on: chemistry is strong in Australia, but we have not got a chemical industry. I would like to refer you to a paper that I wrote for the Royal Australian Chemical Institute in connection with the chemistry action agenda that is going on at the moment. The chemical industry in this country is just about at rock bottom; in Singapore it is rather high, but Singapore will eventually turn around, and what will we do? Will we stay at rock bottom or will we come up again? So that is a point I would like to make to you, and this what these development agencies are all to do with, to make long-term decisions of that kind and to hold policy for long periods.

I will try to finish rather more quickly because I have gone on a bit longer than I had expected. One of the things which we lost recently was the GlaxoSmithKline investment in Australia. I would like to turn to my colleague Professor Beckwith to speak on point No. 2 of the academy's submission to you. I will whip through the last few points after he has had a few words to say, because he can describe to you exactly what happened when SmithKline were negotiating with our people in Australia about whether or not they would come to Australia.

Prof. Beckwith—Thank you, John, and thank you, Mr Chairman. Last August there was a meeting held by FASTS on science, technology and the boardroom. After that meeting there was a small private meeting held by the Chief Scientist and a Dr Rebeck from SmithKlineBeecham—it is now GlaxoSmithKline—in which he told us why Smith Kline Beecham chose Singapore as the headquarters for their Asia-Pacific research operation. That is what he set out to tell us, but what he really told us is why he did not choose Australia, and I found this extraordinarily interesting.

This man himself was an Australian, he had a very distinguished overseas career—he had worked in Australia, Great Britain and Canada—and he had been sent out by GlaxoSmithKline to decide where their Asia-Pacific research headquarters should be. His natural choice, of course, was to be back in this country, and he saw all sorts of reasons why Australia would be very attractive. First of all, it is politically stable: we do not have a history of sudden changes of governments under unusual circumstances. It has great quality of life, and that is important in the research and development organisation: you are hoping to attract the best people in the world to come and work there; they like a nice place to live in.

He was looking also for academic excellence—and that, I think, is something that he thought Australia did have—because any company wishes to interact with an infrastructure of people who can provide input through consultancies, joint work and so on. He was looking for long-term national positive industry policies. He was looking for financial incentives, and he was interested in geography: where we were placed. Although our submission says that geography was a key feature, my recollection of that meeting was that that was not so, that in fact, if the other things had been right, geography was not so important, particularly for an R&D establishment. We are still in the Asia-Pacific region and we are only a day's flight from most of the places that one would want to interact with.

But what he asked us was why, then, having regard to all these things that are attractive about Australia, they did not come here. A major problem was a lack of long-term policy. As pointed out to us, GlaxoSmithKline has a time horizon of some 20 years. He said, 'You are having an election next year. How can I be certain what the policy towards industries such as ours will be at the end of 2001? Why is there not a bilateral approach to some of these areas?' To be frank with you, I think in a way he was being somewhat critical of our system. He felt that an adversarial system of politics was not helpful when it came to establishing and attracting new industries.

He also found that a parochial view in the bureaucracy was not helpful. As part of his work here he went to a number of departments. His impression was that many of the departments were more interested in what they saw as their own particular bailiwick—that is, their parochial interests—than they were in the overall benefit that would come. He compared the experience that he had here with the experience that he had in Singapore. It really is rather fortunate the way in which it has been arranged this morning. He went to various places. He went to the department of immigration, for example, because it is very important in setting up in a place like this that you get the best people and that you get them quickly. I think he said that the department of immigration told him they could fast-track things and that probably people could come in in a few months or so. He told us then about his experience in Singapore. When he went there he met a group of people that comprised the Prime Minister, the ministers, the heads of the chief departments and the vice-chancellors of the universities, and they said, 'Here is the deal.' Everything was ready. When he said, 'What about bringing in the best people?' they said, 'Tomorrow, if you like.'

I think what he was trying to tell us was that somehow the system that we use is not friendly towards the sort of thing that he wanted to do and that GlaxoSmithKline wanted to do. Of course, he is not suggesting that we change our system but I think he is suggesting—and I would certainly agree with him—that we look for ways in which we can make the system work better. He noticed, incidentally, that apart from the parochial view of some of the departments

and the competitive view, which he thought was not helpful, then there is the state system which is also involved with this. Clearly it is very difficult for a company that is intending to set up to be getting bids from every different state in Australia and counter-bidding. I think what he was saying to us was that it would be much more in Australia's interests if we could work out a system whereby we solved those problems before the customer arrived so that it was not necessary to go through such a convoluted arrangement.

I think the pleasing thing out of it, in some ways, was that he did see Australia as a place of scientific excellence. He did warn us that it was necessary to maintain this and he felt that certainly there should be more encouragement of interaction of people from the universities with industry. You will notice that in the arrangement that he came to with the Singapore government there was immediately, as part of the deal, an arrangement whereby postdoctoral students and PhD people could work in the universities at the same time as they were working with Smith Kline Beecham.

CHAIR—Thanks very much for that. In relation to the example you gave with SmithKline—talking about Australia and the perception that we are not a friendly country to do business with—in your submission, that is where you got that reference from, I take it?

Prof. Beckwith—Yes, that is right.

CHAIR—Are you saying that specifically or generally as well?

Prof. White—Perhaps I could comment a bit about that. I would like to first of all say that I think the government has made—and should be congratulated for making—some steps to improve the tax reform situation. But, to take this point of friendliness, the extent to which overseas earnings of people coming to Australia are taxed, the extent to which overseas property after five years is taxed, is not friendly compared with what other people do. So you tend to get people like Paul Anderson who will come for a period of time, say five years, and will go away again after that. There are things like that which in some sense are micro things but may not be. I think your committee is powerful enough in some sense to have something to say about that.

Mr O'KEEFE—They are not in one sense, Professor, if you subscribe to the view that the biggest single factor that seems to influence these decisions is the tax incentive. People seem to be prepared to get on a plane and chase a tax break anywhere around the world, and then see what else can be made fit the package. That seems to be the carrot that lures industry brains, and we consistently resist that. We do every other thing you could possibly do except give tax breaks in a special case or a special way. Your submission seems to reiterate the point that it is the tax break that first gets them to Singapore, and then they start finding everything else is good as well—or not?

Prof. White—I think that is, on the whole and in general, true. You could take, for example, Ireland. Someone told me once a figure for the creation of high-tech jobs in Ireland; I think it was \$300,000 per job. So you have to think of very large amounts of investment from the point of view of the tax break and over a period of time and so on before you can actually get that wheel moving.

Mr O'KEEFE—I sorry, I did not want to interrupt. I was just clarifying that point.

Prof. Beckwith—If I could speak further about that: of course the tax breaks are important. My feeling from his discussion was that it was not necessarily the most important thing. What he had difficulty in finding was what exactly the tax breaks were. Once again it was a problem with various states and various departments. Each state can make its own tax breaks. There are various ways in which tax breaks can be made. My impression was that he did not think Australia was unfriendly in the way in which we would normally talk about friendliness; he felt it was not an easy country to deal with in terms of coming to these agreements, because of the multitude of departments, states, governments and ministers that he had to deal with, as distinct from the single stop shop that Singapore provided, where he could see very clearly just what were the incentives and what were not.

Prof. White—I think one of the things we would like to leave you with is this idea of the one-stop shop. I have made that point in the paper and it is also made in the paper about the chemical action agenda.

Mr BAIRD—Mine is just a quick question because parliament is about to start. If you were Prime Minister, what would you do to attract investment to Australia?

Prof. White—It seems to me that this is an extraordinarily vain thing to say but excuse the implied vanity—

Mr BAIRD—It is a theoretical question.

Prof. White—I was rather struck by how many people are employed in Invest Australia—900-odd people. I do not know how many are employed in Singapore, Ireland and a few other places, and whether we are trying to do too much across a very wide spectrum of export and import and a few other things of that kind. So I would look at systematics first of all, the systematics of the way in which we are doing things. I would also be inclined to look at some of the points we have raised in our paper about structures such as tax, relationships with the states and things of that kind, which might expedite matters and make this one stop shop idea a more practical thing to put into place. Finally, I would absolutely insist on making sure that our ideas creation generation machine, the universities, was better than Singapore's in 10 years time. I am trying all I can in this committee, which is a very international committee of five people—British, Americans and one Australian—to make the National University of Singapore like Cambridge University by 10 years time. They are recruiting staff, they are paying enormous salaries, they are doing all sorts of things about reforming their promotion structures, and so on. We must do that.

Mr BAIRD—Professor Beckwith, do you have anything to add to that?

Prof. Beckwith—I think all the things that John said are absolutely right. I think we are somewhat different from Singapore now, as we are in the situation where we must do a bootstrap operation. In a sense, the first thing to do is to do what we can do now and do it well. I suppose that if I was Prime Minister then I would be getting all of my ministers in there and emphasising to them that this is an area where there has to be a conjoint approach, that we cannot have interdepartmental rivalries, that the eye has to be on the main game and the main

game is to get industries like this into Australia. There is no time for messing about with my own parish. It seems to me that this was an important disincentive, it was a difficulty. It comes back to the one-stop approach, but you only get a one-stop approach if you have some unanimity of vision. I would also be thinking about how we could build a long-term vision into what we do in Australia. Unfortunately, the political system tends to give us a three-year time horizon. All of these companies, not just this one but any big company—BHP, Rio Tinto, the lot of them—nowadays work on a 20-year plan. Somehow, we have to modify our system so that we have a similar long-term view.

Mrs MOYLAN—Thank you very much for a very interesting presentation. I notice that in the Department of Industry, Science and Resources' submission they say:

Australia is moving to establish an electronic one-stop shop for all business regulatory needs so that all appropriate services are deliverable over the Internet.

Is that going to do the job in terms of a one-stop shop?

Prof. White—Not in my view.

Mrs MOYLAN—Would you elaborate on that, please?

Prof. White—I think it is a necessary first step because it will mean that information about what could happen will be there, and the diaspora of small businesses and other interactions—which, clearly, Invest Australia is interested in and will continue to be interested in—will need that. Let us take an example that, I hope, is very important to your committee at the moment: what is going to happen to the Timor Gap oil? That is developed in this paper from the CHEMICA site—which I can leave with you if you would like to look at it. What are we going to do? We have to, somehow or other, make a decision between the Northern Territory and the Pilbara region of Western Australia. Infrastructure is extraordinarily important in making a successful go of it from the point of view of a major industrial development. Someone has to make a decision about who goes first, whether it is Darwin first or Pilbara first. Where is that decision going to be made? It will not be made on the Internet. There needs to be some place where the federal government takes an initiative with the governments of Western Australia and the Northern Territory, for example, and decides who goes first.

Mrs MOYLAN—There are, as the department has pointed out, a number of agencies who are trying to promote Australian business. Invest Australia is obviously the key body but there is also the Department of Industry, Science and Resources itself, Austrade, AusIndustry—I should say—the Department of Education, Training and Youth Affairs, and there are a number of state agencies. In your view, is there a lack of synergy here? One of the things we set out to look at is that Ireland and Singapore, although they are very different economies to Australia and probably have different directions in some respects, seem to have one thing common: one particular agency whose primary job is to make sure that their economies are growing and to look at the whole range of issues that actually make economies work in terms of attracting investment, import replacement schemes and also helping companies to export—although I have to say that Ireland was deficient in that, as they seemed to concentrate initially on attracting overseas investment. Do you see a problem with the lack of synergy between these agencies in particular or just between departments?

Prof. White—There might well be one, and it might well be reflected in what Professor Beckwith has said to you, namely about a perception from the outside that Australia is difficult. That would seem to me to indicate some structural problem, as I mentioned to you, and therefore it could be that somehow or other—I hate using the word *supremo*—there could be some scope for coordination for fast-tracking things and so on.

Mrs MOYLAN—Do you think that Australia's geography and diversity are added challenges in achieving that, compared to, say, some other economies?

Prof. White—I think they are challenges, but they are also our glory. I think there is a lot of strength in diversified activity that is not there in a highly piled up one.

Mrs MOYLAN—But logistically it presents some challenges—

Prof. White—I think so.

Mrs MOYLAN—in drawing the elements together.

Prof. White—That is why I gave you that example of the Timor oil. Focus on that and just see how that problem could be solved in the Australian context to the benefit of Australia.

Mr O'KEEFE—First of all, thank you both for the submission and the policy position you take. It demands intervention; it demands government prepared to actually provide real support, and it demands a long-term strategic approach. I agree absolutely with all those policy positions. I suppose we are picking up in this study—and I think we agree with your opening comment—that this is actually pretty important for Australia. One of the features that came through from the Irish ambassador's presentation to us was that it has been both sides of their political system that have locked into this long-term economic strategy. They have pumped the incentives in, but both parties have agreed that that is bipartisan. You have made the point that you think we need to do more of this and I think we are certainly going to pick up on that. I am just making sure I have summarised what you say correctly.

I think the issue of incentives is very real. You are reinforcing the fact that it is real. If you happen to have the chance to have a look at the transcript, you will be appalled by the positions that were put to us this morning by the industry department, because they are in fact still running a very strong philosophy that, basically, if the market wants to go there, it will go there, and it is not government's role to push it anywhere or drag it anywhere. Those of us who believe in this position have got to continue to mount the case. The one-stop shop thing—I think we have been talking about this in Australia for 25 years. I do not know whether we are getting anywhere with it. All I can say is, 'Continue to emphasise it.'

I think there is something to flag in this, though. If you accept the notion that he who pays the piper calls the tune, one of the flow-on effects of the change coming from the GST arrangements in Australia is that much larger buckets of untied funds are going to the states, and the federal government from here on is going to have less capacity to actually produce the dollars to drive the interventionist approach you are talking about. I think we are going to have to give some thought as to how we deal with this. It cannot be grabbed back. It may be that a

particular state becomes a focus or something. I am not questioning you here on that, I am signalling that the thinking needs to go out ahead of that.

Before I make my final comment, I really would like you to tell us a little bit more, Professor White, about this Singaporean international panel of experts that they are putting together, in which you are a participant. The high commissioner explained the model to us. Have we got anything like that that works in Australia? Do any of the state governments pull in a group of honchos to tell them how to take their government forward or anything? Are we doing anything like that?

Prof. White—The only thing that I am aware of is what used to happen frequently for the Institute of Advanced Studies in the Australian National University. There there were reviews by internationally acknowledged experts, with one or two Australians participating—a very small number of Australians. It was meant to be a cold shower to the university from the point of view of its performance and it was meant to be a little bit discreet in the sense that they really could tell people where the warts were. I think we need that. I was telling people last week where the warts were, and the report that we will write this week to finish it off will speak about the warts. In fact, the very opening recommendation—and I do not want this in *Hansard*—

CHAIR—Do you want to give this comment in camera?

Prof. White—Yes.

Evidence was then taken in camera, but later resumed in public—

Prof. Beckwith—One of the great things that Australia has done is produce superb expatriates. We have a large number of experts—the head of the World Bank, the Chief Scientist in Britain, and so on, who are very sympathetic to this country. I think there are people out there who wish us well and who would be very happy to serve on the sort of committees you have in mind.

CHAIR—We are out of time. On that basis I would like to thank you for your attendance here today. If you have been asked to provide any additional material would you please forward it to the secretary. You will be sent a copy of the transcript, on which you may make corrections to grammar and fact.

Resolved (on motion by **Mr Prosser**):

That the subcommittee authorises the publication of evidence, other than that taken in camera, given before it at the public hearing this day.

Subcommittee adjourned at 12.33 p.m.