**La Trobe University Ideas and Society**

**The Future of Australian Manufacturing**

**3 September 2014**

**Jane Long**

Hello everyone and welcome to this Ideas and Society session. My name’s Jane Long and it’s a pleasure to welcome you here today and also to welcome our guests.

But before we begin I would like to acknowledge the Wurundjeri people as the traditional custodians of the land on which we are gathered this afternoon and to pay my respects to their elders, past and present, and on behalf of La Trobe University and the Ideas and Society Program series, I would like to welcome you to the first event for this semester.

And we’re very pleased indeed to, as well, welcome so many members of the Melbourne North local government and industry sectors including Councillor Greco, the mayor of Darebin, representatives from other councils, and NORTH Link board members.

Today’s topic is Does Manufacturing in Australia Have a Future? And Emeritus Professor Robert Manne has assembled an outstanding panel for this event. The speakers are Professor Ross Garnaut, Professorial Research Fellow in Economics at the University of Melbourne, whose career is built around the analysis and practice of policy connected to development, economic policy and international relations in the Asia Pacific. He has authored or editored forty-seven books and numerous articles on international economics, public finance and economic development.

Professor Roy Green is the Dean of the Business School at UTS Sydney, part of the Prime Minister’s manufacturing task force, Smarter Manufacturing for a Smarter Australia, and was recently appointed to the new manufacturing leaders’ group. He has also led Australian participation in a global study, Manufacturing Matters for Australia, Just How Productive Are We?

And Dave Oliver, the current Secretary of the ACTU, a position he’s held since 2012. After ten years as a union Site Delegate and activist, with a passion for safety and asbestos issues, Dave became an organiser with the AMWU in 1988. Dave led campaigns to protect workers’ entitlements as a New South Wales branch official, before becoming Assistant National Secretary and then Victorian Branch Secretary in 2002.

So, welcome to all of our speakers, welcome to all of you, and I’ll now hand over to Robert Manne, to get the program underway.

**Robert Manne**

I didn’t anticipate that.

The only thing for me to do now is to ask the order of speakers is first Ross, and then Dave and then Roy, and I think … if I can say, we’re going to have three talks and then a short panel discussion and then I know there’ll be people who want to ask questions and I want to leave plenty of time for that.

**Ross Garnaut**

I think that manufacturing in Australia is in a dreadful position, but I think it’s in the same dreadful position as a lot of the Australian economy and I think that we will address the fundamental issues facing manufacturing if we address the fundamental issues facing the economy as a whole.

So, to get the panel discussion going, I’m going to talk a little bit about the general economic situation facing Australia. And I’m going to draw on the themes that are articulated in my book, *Dog Days: Australia After the Boom*, that was published last November. In *Dog Days*, I tell the story of how Australia went through a remarkable reform era from ’83 till the end of the century, in which productivity raising reform was a major theme of government policy, in which our society responded positively and productively to that, and it showed in our economic performance.

For most of our history, average productivity growth in Australia was just about the bottom of all of the countries that are now developed. When I say our history, our history as Australia, as a federation, from the turn of the century. We began life as a nation, as a very rich country, the richest in the world in average living standards, and we gradually fell down the global league table until we were well out of the eight, probably out of the eighteen, by the early 1980s. We embarked on far-reaching reforms and through the ‘90s, we had a remarkable period of strong productivity growth, for half a dozen years, the highest of all the rich countries. So a complete turnaround of our position.

And that reform era lasted until the end of the century.

We then entered what I call the Great Australian Complacency of the early 21st century. A number of things changed. There was a change in basic political attitudes. There was a change in our political economy, it became much harder to promote the idea of policy change in the public interest. Sectional interests, notably business sectional interests, became much more overtly and crudely engaged in the political process, in pursuit of narrow sectoral interests. It ceased to be necessary to argue the case for policy change in terms of the public interest and naked pursuit of private industry became more important. But we’ve always been some of that in our democracy, always been a fair bit of it in our democracy, but in the reform era, ’83 to the end of the century, that became less important. It became dominant again in the 21st century. A very interesting and big story about why that was the case, but I think it was very much the reality.

And one of the reflections of that was a decline in productivity growth again, and from being at the top of the OECD countries in the ‘90s, from early this century we slid, productivity growth falling to very low levels in the early years of this century and kept on falling, so that average productivity levels across the economy today is lower than a decade ago. That’s remarkable.

There’s particular as well as general stories behind that and I tell that story in *Dog Days*.

Well, you wouldn’t know all of that from looking at what’s happened to the performance of the economy as a whole. We are still in the longest period of economic expansion and unbroken by recession, that Australia's ever had. In the 23rd year of expansion, economic growth, unbroken by recession, we’ve never had anything like that before. It’s already twice as long a period of expansion as we’ve ever had before. It’s very unusual internationally as well. There’s only one developed country that’s ever matched and that was the experiences of the Netherlands through the long North Sea oil boom. The end of that was very sad for the Netherlands and the economics profession now talks about the Dutch disease, an economy that became completely uncompetitive through the expansion of a resource sector which made everything else uncompetitive, and when the resource sector stopped contributing to strong growth, other parts of the economy fell into difficulty. Certainly, apart from the Netherlands, no other developed country has had anything like the long period of unbroken expansion that we’ve had.

These have been very good years in terms of short term standards of living. Average incomes rose steadily right through the 23 years. Employment growth was very strong, up till 2011. It’s been a good deal weaker than population growth since then. Average incomes in real terms rose pretty steadily until 2011. There was a period of strong budgets and the 21st century was characterised by successive cuts in every form of tax you can think of, roughly from the turn of the century until the global financial crisis, big income tax cuts every year, but huge concessions to comfortably off old people in superannuation taxation, the capital gains tax cut in half, and many other taxes gutted during this period. At the same time as we expanded social security provision in some ways, and generally increased government expenditure.

Well, how did we keep doing that for 23 years, despite the fact that productivity growth was only there in the early period, the first half of it? Well, the first few years of this century, we kept incomes growth and employment going through an extraordinary housing and consumption boom which our banks funded by borrowing in wholesale markets internationally, a very risky form of lending. It was actually the pattern of growth, only in extreme form that other English-speaking countries and Spain got into in this period, and the other English-speaking countries and Spain had the global financial crisis in consequence. The United States, the United Kingdom, Ireland, and Spain, all grew as we did, in the early years of this century. We didn’t quite have the egregious excess of financial deregulation that the other English-speaking countries had and that’s one reason we didn’t have quite the crash. A bigger reason, much bigger reason, was that from 2003, we were the world’s main beneficiaries of the China resources boom and this century, up till 2011, saw the world’s most populous country, nearly twice as many people as the developed world put together, growing faster over a sustained period, than any economy ever had, faster than Japan in the ‘60s, and growing in a particular way. It was particularly metals and energy intensive growth, for various reasons I’ve discussed elsewhere. And that hugely increased demand for steel and for coal, iron ore, still making raw materials, and we were the world’s largest supplier to international markets of these commodities.

So our export prices … the unexpected growth, and it wasn’t expected to go quite as it did, it certainly took mining businesses by surprise, the unexpected growth led to shortages of all these materials, prices rose 600% but for iron ore, 500% and for coal, very large amounts for most metals and sources of energy. That immediately flowed through to corporate profits in the resource sector, into government revenue, commonwealth and state, and our governments with a little bit of a lag, because revenue was growing so strongly it took a little while to get the money back out the door, once it came in, but with a little bit of a lag, we spent it in tax cuts, public expenditure increased as it came in.

Spending the money as it came in lifted our whole cost structure, lifted our exchange rate. The real effect of exchange rate, the average of our exchange rate against other countries increased by 70% from the beginning of the boom, 2003, until 2011, the peak of the boom. No developed country has had that sort of currency appreciation before and it made everything that wasn't a big, well established mine with its debt paid off, uncompetitive, compared with other countries.

Now the reform era had seen a remarkable period of internationally oriented energy in our services and manufacturing sectors. The compound rate of growth and the volume of manufactured exports and services, from ’83 to 2003 was round about 15% and so the exports of manufacturing and services became a very big part of our economy. It became as big as agricultural or resource exports. And in services and manufacturing it was diverse. If you had to make a general point about manufacturing you’d say it was niche products that used particularly intensively high skills, special Australian skills. In addition, there was a big body of exports that depended on our abundant and relatively low cost energy, that was the processing of metals. But that was only part of the story and not an especially large part of the story. There was a lot of other parts.

Well, appreciation of the real exchange rate killed all that. The growth of manufacturing and service exports went into reverse and imports increased. I’ll show you a couple of charts to do with that in a moment. And the economy could keep going reasonably strongly despite that while resource exports were still rising and after a few years you started to get big investments in the resource sector that contributed to growth.

Now that all changed in 2011 because China’s model of economic growth changed. The rate of growth moderated, but much more importantly the structure of growth changed, with much more focus on environmental amenity, on equity and internal income distribution – all of that meant much less focus on the heavy industry and infrastructure that had dominated economic expansion in the high growth period from 2000 to 2011. And that was reflected in a much slower rate of growth in demand for metals and energy and the prices of these products started to fall. They’re still falling and there’s a fair way to go.

Now, we were just gearing up for very big investment and expanding production of these things when the Chinese growth models changed. Chinese demand started to fall just as we were investing in expanding supply and so as a result, we’ve had very large falls in mineral prices and there’s a long way to go. And that’s bringing down government revenue, ever since 2011, every new six monthly update of the treasury of our budget has shown lower growth in revenue than expected, and that’s still continued. We’ll see if the half year report at the end of this year, or early next year, will do the same thing again. I won’t be surprised if it does. And since the peak passed and we’ve been on the down slide, employment has grown significantly less rapidly than the labour force, and work age people, and so the ratio of employment to population has fallen steadily, now adding up to a lot, but the worst thing is, this is all continuing, and it will continue unless we deal with the basic problem of the real exchange rate.

Well, just very quickly, bilateral real exchange rate and real exchange takes relative inflation rates into account, but against all the developed countries, who are our competitors for advanced services and manufactured exports, we’ve had similar appreciation. There is it against the Euro, against UK, against Japan, and here … I’ve just picked up the data from 1990, but this is the story of the continuation of the rapid growth in services and manufactured exports and here the percentages are as a share of GDP, as a share of the economy, manufactures and services exports grew from 1990 about 2½% , up around 5% by the early 21st century and already by 1990, that followed seven years of rapid growth. And just slide your eyes over to the left hand side, the beginning of the century, the percentage in our economy that was exports of manufactures, or exports of services, either of them, was higher than the exports of resources or the rural sector. Well, it reached a peak around 2003 and then went into a big slide, that’s continuing, whereas resources kept rising.

That’s the basic story of what’s happened to manufacturing in Australia.

Here, business investment by sector. You see that at the beginning of the century, manufacturing investment was typically bigger than resources, the purple is resources, the red in manufacturing. Manufacturing reached a peak about 2004. It has been steadily falling since then. Those data end in 2012. It’s slid quite a lot since 2012. It’s worse now than it was in 2012, whereas resources just took off. The black line at the top is total.

Then, what this has done to exports of various non-resource commodities. I’ve picked up beverages. At the time of the reform era, ’83, we exported about as much wine as we imported Scotch whisky and French champagne. We were roughly in balance on grog.

In the period of improving competitiveness up to early this century, we had huge growth in exports, net exports of alcoholic beverages, and there’s a large processing component in wine, much more value-added in the processing than in the growing of the grapes. It reached a peak around 2001, or 2002, and it steadily declined since then. By 2011, we were back where we were at the beginning of the reform era. We were drinking it all. We became, with China, the world’s biggest market for French champagne. Now you can’t say that’s a waste, but it did have consequences and the consequences are the problems that we’ve got at the moment.

Automobiles – a different story. There’s been a steady decline since 1990. A couple of stronger periods, but certainly an acceleration of decline after 2003. Processed food, roughly stable. It grew quite a lot in the late ‘80s. Fairly stable until the beginning of the resources boom and exports of processed food just collapsed with the resources boom. Metals – fairly stable, just below a percent of GDP until the end of … well, until the beginning of the resources boom, have collapsed since then. We’re a substantial steel exporter at the beginning of the resources boom. That disappeared. And then I’ve just got a little bit about how we get a way out of that.

Now all of that is going to continue for a while, while this very high real exchange rate continues. And the damage that’s done from the lack of competitiveness gets bigger all the time. That’s going to be compounded over the next eighteen months by a huge lift in energy prices, especially gas prices. We haven’t quite focused on how serious that is. A lot of Australian manufacturing, especially Victorian manufacturing, has been built on cheap gas. Because we’ve now got an export industry for gas, which we didn’t use to have in eastern Australia, our very low domestic price is going to rise to international prices. Actually, it’s going to rise above international prices for a while because we built so much capacity for LNG at Gladstone, that to fill that capacity, they’ll have to absorb a lot of gas from other activities and the price will have to rise until you close down the other activities, using it for gas-based power generation or manufacturing to free up the gas to go into the LNG plants. That’s a much under-discussed story. But that’s going to compound the competitiveness problem.

So I think we’ve got a very big problem for our manufacturing sector but it’s part of the general problem of competitiveness after the resources boom, of all of our trading exposed industries. It was a mistake to let the real exchange rate rise as much as it did. We could have avoided that by not spending all of the increased income as it came in, putting it aside for the end of the boom. We didn’t do that. We let the real exchange rate rise. It’s always much harder to get a real exchange rate down than it is to let it rise. A lot of resistance to it. And that’s our struggle over the next few years. If it doesn’t happen quickly, then we compound all of the other problems. And now we’re further compounding the problems of the manufacturing sector with the quite extreme increases in gas prices that are coming through.

To get the real exchange rate down, my suggestion is that we have to get interest rates down to the levels of other developed countries. The Reserve Bank doesn’t want to do that at the moment because it thinks we’ve got a housing price problem. Well, we may, but you don’t distort the whole economy to deal with a boom in one relatively small sector, the housing sector, you do something specific about the housing sector, if you think that’s the reason. We can’t make the macroeconomic adjustments that are necessary to be competitive again in our services, manufacturing industries, because we are going to need a lot more production from trade-exposed manufacturing and services industries as part of the adjustment we have to make to maintain high employment in the period ahead.

**Robert Manne**

So, our second speaker from the point of view of the ACTU, is Dave Oliver. I’m very pleased that he could make it today.

**Dave Oliver**

Well, first of all I want to thank you for the invitation to be part of this forum today dealing with a topic very close to my heart: the future of Australian manufacturing.

I’d like to congratulate Robert Manne on putting this event together. I look forward to the discussion with the other two panellists, and certainly some of the tough we’ll get later today.

Today’s forum is a testament to the important ongoing role of our universities as the home of independent, provocative discussion and debate – and I have to say, long may that reign.

In the same vein, I’d also like to briefly acknowledge Robert’s other hat, as chairman of the editorial committee of *The Monthly* magazine.

*The Monthly*, and I’ll give it a plug, is a valuable addition to Australia’s media landscape, and certainly in the current environment of an ideologically bent government which is intent on reviving the culture wars and silencing any dissent or opposition, independent media – like an independent voice for academia – is essential.

Thirdly, I’d also like to acknowledge the presence on this campus, and others around Australia, of the National Tertiary Education Union.

The NTEU does a very fine job not only in standing up for the working conditions and pay of its members, but also advocating for a properly funded, accessible and independent tertiary sector.

So the future of Australian manufacturing, as I said, is an issue I care deeply about for personal reasons.

My working life began as a 15-year-old apprentice fitter and then as a lift mechanic, and my career as a union official has predominantly been with the Australian Manufacturing Workers Union.
And over the past two decades, I have seen manufacturing in this country go through some enormous challenges, and those challenges are far from over. Unions fully understand the pressures the sector has been under for several years, particularly as a result of the high value of the Australian dollar, which is putting a major burden on domestic producers. The dollar has compounded other pressures from free trade and the emergence of low-cost, low-skilled manufacturing in developing economies in our region.

Other domestic factors, including rising energy and other costs, a tougher competitive environment and slowing demand have left many parts of manufacturing certainly doing it tough. But I think it’s also important to recognise that despite the doomsday predictions, manufacturing does continue to employ close to a million people, it generates billions of dollars in export income and certainly makes a huge contribution to our skills base, to innovation and to research and development.

The contract of manufacturing has been taking place over a long period, well, it’s been going on for a long period, but we have to acknowledge that the last couple of years, with the number of jobs in now falling below a million for the first time in several decades, means it can’t be business as usual. This requires extra vigilance against government inaction, because we should not allow this country to be a farm, quarry or simply a nice place to visit. I’m a strong believer that Australian manufacturing does have a bright future as long as we’ve got the right settings in place, and that includes strong support from government.

Now, the settings have to include Investment in infrastructure, incentives for research and development, attraction of investment through co-investment programs, investments in skills and training particularly in the area of apprenticeships, and removing barriers to overseas markets through trade negotiations and removing the barriers to overseas markets through genuine trade negotiations.

We also need strong anti-dumping measures but importantly, we also need an environment that fosters collaboration, not confrontation.

So at a time when manufacturing has been under intense pressure for the reasons I’ve outlined, you would expect that a government would provide strong support for industry. But here, since the election of the Abbott government a year ago this Sunday, we’ve seen the exact opposite.

When he was opposition Leader, Tony Abbott, of course, never let pass an opportunity to have his photo taken in a workplace with a fluoro vest or a hard hat on, saying he would be out there fighting for Australian jobs. He was out there trying to convince Australian workers that he was their friend. In fact I think the term he used was he was going to be their best friend. He boasted of creating a million new jobs over a five year period.

But actions in government speak louder than words in opposition, and within a couple of months of the Coalition being elected, we had seen the demise of the domestic car industry, and this is going to have a huge, significant impact, well beyond manufacturing, and of course the auto industry, but an impact on innovations, skills and training in this country.

So you have to ask yourself, what government behaves in a way where they were actively goading a manufacturer to go offshore? Now at the time when all the debate was raging about Holden and whether or not the government should invest and whether or not workers should take pay cuts, Mike Deveraux, the CEO of Holden Australia, he came out and he was very clear about it. He said, make no mistake about it, the only game in town is this. Governments actively compete to have car manufacturers set up their operations in their countries. And they do it by a number of ways. One is, you either have a strong tariff regime, or you have strong industry policy.

As you know, this government, many decades ago, we reduced our tariffs but replaced it with industry policy. Well, now what we’ve seen is, the tariffs are gone and this government now is withdrawing industry support.

So, other nations are fighting hard and investing to keep local industries and they encourage exporting and innovation because they can certainly see the value of doing this. But this government is more than happy to sacrifice the jobs of Australian workers on some ideological, free market altar. Now, as the Productivity Commission reported recently, the result of the loss of the car industry, will result in 40,000 jobs. Now that’s direct jobs out of the industry. The implications are going to be far broader than that.

Again, when the future of SPC Ardmona, here in Victoria, was in jeopardy in February this year, and they sought investment to restructure and modernise, the government turned their back. Instead, loyal, hardworking employees at the factory had their reputations dragged through the mud as the government sought to make a political point in its campaign to cut wages and conditions. And demonising workers, their pay and conditions, isn’t justified by the facts ant’ counterproductive if we want to build prosperity in this nation.

Recent economic data has blown out of the water the case for changes to our workplace system based on false claims of wages blow outs. In fact, the opposite is occurring: real wages in this country are actually falling, while at the same time, labour productivity is up and profits are up. The only declining part that we are seeing is actually the workers’ share of those benefits.

It seems that under this government, if you work in manufacturing you can expect no assistance whatsoever – unless, of course, your business happens to be in a crucial marginal electorate and it’s called Cadbury. Because then you can win the jackpot of $16 million in assistance, and there’ll be no questions asked.

Now, recently, Australia’s rate of unemployment was reported at a 12 year high of 6.4%. Now, what is of most concern about this figure is that unemployment in Australia is heading up at the same time, we’re seeing in the US and in Britain, it’s going down.

Youth unemployment rate, well that’s three times the overall figure. One in five people aged between 15 and 19 in the labour market are out of work. And despite its boast of a million jobs over the next five years, we are now fast approaching 800,000 people unemployed, which is almost 200,000 more people looking for jobs now than before the Coalition was elected.

On top of this, in the recent budget, the government announced that they were going to pull out $1 billion out of vocational education and training, while at the same time creating a cost incentive for employers to overlook local workers through the use of temporary 457 visas. We only learnt last week there was a proposal about providing a 10% premium, a discount, on employers for accessing workers overseas, which creates an incentive to go overseas as opposed to trying to get employers to invest in their own local workforce, and try and source the market locally.

The other thing we know the government is doing is to reduce the requirement than at employer has to demonstrate that they’ve tried to source labour locally, before accessing workers overseas. And the requirement at the moment is barely an obligation for an employer to demonstrate that they’ve at least put an ad, trying to look for workers.

The employment situation will be worsened by this year’s tight Budget, and the cuts of thousands of public sector jobs, along with outsourcing and privatisation of services. And rather than work with unions and community groups to find work for the unemployed, the government instead has launched a series of vindictive and punitive measures to make life even harder for jobseekers.

And on top of all this, the scrapping of the price on carbon, and the uncertain future of the Renewable Energy Target, are adding to these concerns.

Now without clear R & Direct incentives to drive investment in renewables and clean energy technology, and the jobs they will create, Australia will miss out on gaining a slice of what is globally a multi-trillion dollar industry. Cleantech is a multi-trillion dollar, global industry and I know that this was an opportunity that was recognised by Professor Ross Garnaut, when he was formulating his views about tackling climate change, he was looking at what we would refer to as the other side of the equation, because you remember the hysteria that was around when the debate was out there about an emission trading scheme or a carbon tax, and the shrill was that it was going to cost jobs. Well, the secretary of the Australian Manufacturing Workers’ Union, we recognised if you got it right, and looked at the other end of the equation, particularly through the establishment of the Clean Energy Finance Corporation, we would be able to build a Cleantech industry in this country that will create tens of thousands of jobs as opposed to buying the shrill argument that jobs were going to disappear.

So take, for example, Australia’s last remaining solar panel manufacturer, Tindo Solar, which says last week’s Warburton report which will clearly put a stake through the heart of renewable energy target, this manufacturer said, that alone is going to put at jeopardy at least 600 potential jobs from this one employer.

So rest assured, the union movement is not going to give up on Australian jobs and we’re not giving up on Australian manufacturing. We’ll be out there campaigning and continuing to argue that it is essential the government has to play a positive role in growing industries and jobs and you can’t leave it to the market. Manufacturing is crucial because only a broad-based economy can generate long-term prosperity.

So what is the answer going to be for manufacturing? Well, governments need to respond. We don’t want their response simply is sending ambulances in after a closure has been announced, but what we need them to do is supporting industry to plan ahead with longer term policies to innovate, to transform and upgrade the industrial base. We need policies which enable businesses to take advantage of and encourage local innovation, to support investment and the take up of advanced manufacturing processes and products, and to access new markets and global supply chains.

Now I know my old union has offered up two practical solutions. One, looking at a corporate tax break for manufacturing that uses patents based on locally-developed research, development and innovation. And two, the establishment of a publicly-funded Manufacturing Finance Corporation – which is based on what I was saying before, about the successful Clean Technology Finance Corporation, which this government wants to get rid of, but that finance corporation would have the task of supporting investment that moves Australian businesses up the value chain and would allow them to deploy advanced manufacturing techniques and products.

And in addition, a raft of policies that are currently slated for cuts or closure by this government need to be retained, including the Industry Innovation Precincts, the industry participation plans, with supplier advocates and industry participation officers, support for research and education, by reversing the cuts to the CSIRO and backing the apprenticeship and vocational education and training systems, alongside universities.

But of all the ways governments can back manufacturing, none is more immediate and direct than procurement. And cost should not be the only factor in assessing procurement contracts for both small and large projects. Procurement decisions should also be judged on what outcomes they can deliver for industries and jobs, particularly in regional areas. And there is strong merit in certain industries to be designated as being in Australia’s strategic interests to support.

And one obvious would be the Defence industry, where contracts are currently up for grabs for the construction of state-of-the-art Navy ships and submarines. And I was concerned when Prime Minister Abbott announced several months ago that he had managed to negotiate the free trade agreement with Japan. And I said at the time, my concern is that they would have done a nod and a wink deal to get that trade agreement over the line. It was an arrangement for Japan to supply us with the submarines as opposed to building them here.

Now when you look at the submarine project, it shouldn’t be viewed as being a project because what you’re talking about, it is building a highly sophisticated marine engineering industry in this country. And if this government sources their submarines off the shelf, they get them from Ikea, might be a big allen key to put that together, but if they source it, well, then they are putting the knife to our maritime industry in this country.

And it is not only the federal government that has a role when it comes to procurement. Here in Victoria, scores of manufacturing jobs in Ballarat and Dandenong, both areas where there is high unemployment, are under threat because of an outsourced procurement process that has now locked out local companies out of tendering for dozens of new public transport trains.

Meanwhile, Australian manufacturers already face considerable hurdles because of the value of our dollar, the fact that’s it’s been so high for so long, throw on top of that the number of free trade deals being struck. Now I get sick and tired of having the mantra of free trade shoved down our throats when manufacturers know all too well, that there is no such thing, no such thing as a global level playing field. And one of the clear examples of that was that when Australia did a free trade agreement with Thailand, before the ink was even dry on that deal, the Thai government moved and introduced a commercial vehicle tax which literally overnight killed Ford’s export program of Ford Territories into Thailand. So I don’t want to be lectured about free trade while that’s going on.

Two years ago I also had the privilege of standing alongside Julia Gillard and the Australian Industry Group’s Innes Willox, for the release of the Smarter Manufacturing for a Smarter Australia report by the Prime Minister’s taskforce in manufacturing. With a focus on skills, training, research and innovation to deliver real productivity, it certainly was an optimistic report which confirmed Australia’s manufacturing can continue to underpin a broad-based national economy.

And under the previous Labor government, we had unions and industry co-operating successfully in forums like the Prime Minister’s taskforce and the Manufacturing Leaders Group, which encouraged collaboration and encouraged forward planning. This was certainly in contrast to the period between 1996 and 2007, and that’s one of the points Professor Garnaut, was the shift in the political economy, because prior to 1996, we had significant challenges in the manufacturing industry and we worked, employers, unions and governments, saw our way through it. We developed the structural efficiency principles, we took the Metal Industry Award, took out 380 classifications and got it down to 14, we had national portable recognised skills and we transformed that industry, and a lot of hard work was done.

In 1996, when John Howard was elected, literally overnight, those tripartite bodies were shut down and we disengaged. Between 1996 and 2007, we had a decade of disengagement and a decade of decline. In 2007, when Labor was elected, and employers once again found our phone numbers, and we started to re-engage, many employers conceded that that approach by the Howard Government was a mistake.

Now unfortunately I have to say it feels like Groundhog Day again, as we again have a government more intent on conflict rather than collaboration. And it’s unfortunate too that some employer groups have now also jumped onto the bandwagon. I was disappointed last week to see Innes Willox, the head of the Australian Industry Group, arguing by cutting penalty rates it’s going to improve our productivity. I mean, seriously? Are they serious?

We know that there is another way. Research and common sense shows that an engaged, respected and consulted workforce is a key driver of productivity and an ideological IR debate that sets workers against bosses and makes productive engagement impossible.

Unions are ready and willing to work with industry to secure manufacturing’s future by taking the high road of innovation, investment, smarter management, and I hope Roy will talk a bit about that today. Smarter management and skills, and not the low road of cutting workers’ pay and conditions, which essentially is a race to the bottom that no one will win.

Thanks.

**Robert Manne**

Thanks very much Dave. Our third speaker is Roy Green, from Business at University of Technology in Sydney.

**Roy Green**

Great, thanks.

Well, thanks first to Rob, for organising this event. I’m delighted to be here, but like the other speakers, less delighted with Australia's predicament and I would like us to zoom out for a moment and look at ourselves in a global context here. Even though you may not have read it, you will at least know the title of Tom Friedman’s book *The World is Flat*, in which he described a world which is interconnected, where barriers have fallen to trade, investment and the mobility of people, and in which everyone has a change to be competitive on this flat playing field. But almost immediately, there was a very interesting response by another academic, Richard Florida at the University of Toronto, in the Atlantic, in which he talked about a world very different, entitled, not *The World is Flat*, but *The World is Spiky*. Spiky, because there are spikes of superior competitive advantage, which essentially are driven by knowledge and ingenuity.

Certainly there are countries that are growing through low cost competition but we cannot be one of those in Australia. We have a high-cost economy, as Ross has pointed out and as we will see in a moment, this is not an option open to us. Obviously cost is important but not as important as other areas of competitive advantage in particular the development of innovation, design and quality in trade-exposed sectors such as manufacturing.

And if we look at this, look at the bright spots on this map, these are the technology hotspots around the world, much of which is driven by manufacturing. And not in just the recent past, Alfred Marshall, the British economist at the turn of the 19th century, was one of those who, and possibly one of the first to study the phenomenon of industrial districts, looking at the potteries of the North of England, what was it that gave those potteries superior competitive advantage? It was very much the proximity of the people and the organisations, to one another, the connections with education, the connections with design, and we see that replicated in different ways, and certainly in a way that has evolved through technology is the post-war period, the so-called industrial districts of Northern Italy, clusters of manufacturing expertise and most recently, the very prominent examples of Silicon Valley, with ICT but with a very significant manufacturing presence there as well, less so perhaps as some of it is off-shore, but still significant. Bio sciences clusters in Cambridge Massachusetts, and Cambridge UK, Cambridge Massachusetts being an interesting one because that was the centre of the Wang Economy, the computer hardware economy in the 1980s, which collapsed the turned Massachusetts into part of the US Rust Belt, with 15% unemployment, and no one is referring to Massachusetts in that context now. It reinvented itself through the connections of manufacturing to world-class universities.

And similarly around the world. Cambridge England with bio sciences, Munich, with its car manufacturing cluster, parts of northern Europe, Scandinavia, but also East Asia, Singapore, Korea, Taiwan, small countries which find niches in world markets and create their own competitive advantage.

So where are we in Australia? In this context? Well, this is a diagrammatic representative of Ross’ talk in effect. I won’t spend too much time on it therefore. But what it points to is the way in which we have experienced a structural deterioration of our productivity performance, during the period of windfall gains from the unprecedented commodity boom that we have just experienced, and what you see in the third to last bar there, is our performance in the 1990s, the grey bit being the productivity contribution to the growth in our national average income over that period.

But as you will see in the next column, the grey bit has decreased dramatically, but is compensated for by a big green bit, which is the terms of trade contribution to that growth in our national income. It is the source of those increased standards of living that we had over this period, about 15% increase over a six year period. But the problem now, as you can see, is that the green bit has not just disappeared, it has gone into negative territory, which means that we not only have to reach our long term average productivity growth but increase beyond it, to see any improvement or even to maintain the growth in our current living standards.

This is a graph that was drawn up by Treasury, originating from David Gruen, I think, and it is a rather frightening graph, because it tells the story in a way that words cannot. Where is the gap going to be made up in our national economic life? And the problem is made much worse, as Ross also pointed out, and Dave as well, with our competitiveness challenge, the appreciation of the real exchange rate, and the fact that we’re now uncompetitive in many respects in our trade-exposed industries, with other high cost areas, the US, and Euro area, in our manufacturing exports.

And this is really the source of the discussion that occurred in the Prime Minister’s Manufacturing Taskforce, 100,000 jobs have disappeared over an eighteen month period. If that’s not a crisis, I don’t know what would be. And the government has set up this tripartite forum to analyse and discuss, just as Obama had just previously done with his Advanced Manufacturing Partnership, chaired by Andrew Liveris of Dow, and also the President of Yale. They did effectively a technology foresight, trying to understand where in ten years, fifteen years, the US would be best positioned in terms of emerging technologies, in terms of its existing and potential competitive advantage. We did something in this taskforce report, and we made the case for manufacturing as certainly an important part of the solution to the problem identified in that graph, and what that graph identifies, is the need to source new sources of growth and productivity in the Australian economy to compensate for the end of the mining boom, or at least the prices phase of the mining boom.

Manufacturing enters the picture because it contributes enormously and even disproportionately to our R & D, which is important not just for manufacturing, but right across our economy, including in mining, and in construction and in telecommunications. Manufacturing accounts for a quarter of our R & D. You may think that’s quite a lot, but it’s not a lot, by comparison with other manufacturing countries. In the US, it’s 80%. It also contributes to the development of a high productivity, high skill economy, through the growth of high skill jobs, and again, these are jobs which can apply in telecommunications and elsewhere and if we don’t have those jobs, some of those other sectors will also be in trouble.

And ultimately as well, manufacturing contributes to our trade position. If we want first world living standards in Australia, if we want to import first world consumer goods, we have to have an opportunity to export as well, in areas that are going to add value to our economy, and manufacturing is certainly one of those areas, and if we don’t have it, we have a third world economic structure, reliant on unprocessed raw materials, and therefore one that is unsustainable in the long term, one that is open to the kind of price volatility that we’ve currently been experiencing.

Does that mean we need large mass-production plants? Probably not, although it is interesting to compare ourselves with the Scandinavian countries in this respect. If you look at … we’re about the same size in population terms, but if you look at the global Fortune 500 companies, Scandinavia has five manufacturing companies in that category. We have none. Does that matter? Maybe not, because the future of manufacturing is going to be determined by our effective participation in global production networks and value chains, rather than the development necessarily of large vertically-integrated organisations.

We’ve seen in many countries now the growth of what we call micro multinationals, highly globalised SMEs that find a niche in global markets and value chains, and often in situations where they geographically cluster as well as establish links virtually, through technologies. Britain, for example, has fostered these companies recently after the collapse of its own and hollowing out of its own manufacturing sector. It has introduced very focused policies to connect to universities with industry, around what they call catapult centres. This was a policy mentioned very favourably as well in the recent BCA report submitted to the government. These are companies which have been able to grow through knowledge-based manufacturing, and become part of effectively, the German car industry, part of the health sector, part of all kinds of sectors. Formula 1 for example, has been a real competitive strength for the British economy, formula 1 technology monitoring speed of turnaround etc, is now used widely in the health sector, worldwide.

These are technologies that spill over way beyond simply manufacturing, but it’s manufacturing technologies that are driving these processes and indeed in Britain now, it has its own version of the German Mittelstand, some call it the Midland Stand, which is growing as fast if not faster, than the German equivalent. And it’s achieving competitive advantage, not just through new technologies. Innovation is not just about technology but is also about new non-technological innovations such as new business models, of the kind that we’ve seen in the ICT sector, design and systems integration, and particularly high performance work and management practices, which I’ll come back to.

And these innovations go beyond continuous improvement and are transformative and we have companies like that in Australia. We have small to medium sized companies that are the best at what they do in global value chains. We have for example, up in Sydney, the publicity for this company recently, Rode Microphones, run by a guy who took it over from his father and it was a company producing maybe 600 microphones a year for the Sydney market, now 60,000 microphones a month for the world market. No one even knows it’s an Australian company. Is it a German company, American? Actually Peter Freedman, the CEO, doesn’t care what people think about where the company is based, he is just interested in design and technology and he’s one of the top microphone manufacturers in the world, exporting to China, if you can believe it.

Farrar Engineering, Boeing’s global supplier for the year for Dreamliner, where is that? It’s based in Queensland. Techstor Technologies here in Melbourne, Kimberly-Clark’s global supplier of the year for smart fabrics. Hoffman Engineering, linked to the mining industry, producing mining equipment in Peru, Chile and around the world. Clipsal in Adelaide, precision engineering, diversifying out of car assembly in Australia, into Chrysler’s supply chain in Detroit. And we’ll be seeing a lot more of that.

The myth has been propagated that the end of car assembly means the end of the car industry in Australia. Well, nothing could be further from the truth. There are more people employed in car components than in car assembly. It’s a central growth area for manufacturing in Australia. The government really needs to understand the structural change that’s happening in the economy and facilitate it.

But it means investing in knowledge. And here again we fall behind, not only our … the people to whom we aspire, the Scandinavian countries, but also our immediately comparable countries and competitors, like Canada another resources economy in terms of the percentage of GDP that we devote to this area. And this is a composite index by the way, that the OECD uses, combining higher education percentage of GDP allocated there, percentage of GDP to R & D, and percentage of GDP to ICT investment as a kind of proxy for technological proficiency.

The other element that we need to invest in is a national innovation system. This was a proposition of the Cutler Innovation Review of 2008 if you can remember that far back, and the government’s own Powering Ideas White Paper, which was Kim Carr’s 10 Year Plan for innovation, cut short somewhat, but still very relevant, which asked the question, do we even have a system in this country? And no, we don’t. We have a lot of ad hoc policies but they don’t really connect nor do the institutions, which is why we are at the bottom of the OECD table when it comes to collaboration.

We know from all the evidence, including a very interesting study in the US, looking at who won the innovation awards there for the last forty years. Initially, forty years ago, more than two thirds of them were solo runs and now two thirds or more are collaborative ventures between business, universities and among businesses themselves. The true winners in the innovation race will be the collaborators, and not just the collaborators but those who are able to transform the business models of their organisations.

But before I move on to that, just to understand the concept of national innovation systems is not simply the relationships between institutions and business and universities at a national level, it’s very much a regional and local exercise. A very good example of that was one I observed in Germany a few months ago, in a village or town that very few Germans had even heard of, called Schwenningen where we have a university partner, the Hochschule Furtwangen university, and interestingly in this rural area of southern Germany, this was the former clock-making area in the 17th, 18th centuries. It no longer makes clocks. It makes surgical instruments and it makes only surgical instruments and they are the best surgical instruments in the world. And they have developed their own innovation eco-system between the university, which has internships with the companies in the villages around this town and in the town itself, with the managers in those businesses participated in experiential learning within the university and the Fraunhofer institute contributing to technology foresight exercises with the businesses and the university which is a very science and technology focused university, looking at where the surgical instruments market is going to be in 2030 and why this group of villages is going to be the best in the world at doing it.

This is a place with very little infrastructure, no autobahn, no airport, just trucks coming out with little packages that are worth millions of Euro and which contribute to an unemployment rate in that area of 2.6%. But the enterprises themselves are characterised by high productivity, high skilled jobs and high waged jobs as well. And this is the source of a study that we undertook together with the London School of Economics, a few years ago, to look at the relationship between management practice and productivity, because a large part of this, a large part of the innovation agenda, is about the ability of our managers, the ability of our institutions, to develop innovative products and services and to improve the way that they work and interact at the workplace.

And so the Australian government decided to underwrite our participation in this sixteen-country project, which compared management practices and the degree to which they contributed to productivity in all of those countries, and of course the result was that there was certainly a relationship between the two, a very strong one, but that Australia didn’t necessarily figure at the top of the list when it came to the measurement of management calibre and performance. We were not at the bottom either, as you can see. There are many below us, but effectively if we are to be competitive in a high cost economy, we have to be in the bracket with other high cost economies and be able to develop innovation capability in our organisations to the same or to a much better extent.

This measurement is across eighteen characteristics of management. I can certainly go into more detail, but they were characteristics divided up into operations management, performance management and people management, and the best management or better management, was associated firstly with larger companies, understandably because they had more systematic processes for recruitment, for promotion, for mobility. The long tail of poor performing SMEs is our big problem in Australia, by comparison with other countries. That’s the key differentiator. All the other countries in the survey had uniformly high management in their large globalised organisations. It was in the small ones where we see the differentiation. Another factor is management autonomy at client level, but the biggest factor of all was the level of skills and education among the managers in those companies, and indeed there are plenty of managers who will, from anecdotal evidence, be very high performers without formal education, but statistically this is not the case. Statistically there is a strong relationship between attainment of tertiary education and management performance, and we are right down the bottom of the table there, when it comes to the proportion of our managers with tertiary education.

And we see how this plays out in this graph which looks at, and the blue column is Australia's management performance in those three areas, measured across eighteen metrics which I don’t go into in detail there, and the red bar above, is global best practice in each of those areas. We fall most behind world’s best practice in the people metrics area, and most of all in this one, which is the most worrying I think, result of the whole exercise that we fall most behind world best practice in the characteristic entitled, ‘Instilling a talent mindset’. Our ability to engage the talent and creativity of the shop floor of our people who work in our organisations in the strategic decision making and operational functions of our organisations.

But we do have an ingenious country. We have many people who are capable of both invention and innovation. It is what we bring as well as our ability to produce and export resources to the Asian Century and it is a point made in the Asian Century White Paper that if we can only develop the creative and design-based skills that we have here to solve complex problems, we can have an impact that goes well beyond our capacity to export raw materials.

And we do see this, at least anecdotally, in East Asia and in China in particular. One company that we’re associated with in the building of our new business school building in Sydney, is a company based in Shanghai and Sydney, Global Art Projects, who undertake design for large manufacturing firms and construction firms across China, made up of Australian professionals. This is an area of tremendous export potential for us, but also tremendous capability that we need to exercise in building and re-building our manufacturing competitiveness. We talk about it in a recent report that was prepared for the Australian government and launched by the new Minister for Industry, Ian McFarlane, quite recently, so one can only hope that in launching this paper, he understood the implications of the findings for the report that he is about to launch in the next few weeks, the government’s Industry Competitiveness Paper which has been in preparation for some time.

Just quickly on this as well, it isn’t just a question of individuals being creative, it’s changing the whole way in which we interact between businesses and universities. And this is such an interesting study that was done of 5,000 companies in the US and UK a couple of years ago, about what kind of factors contribute to innovation in their interaction with universities. Usually you would think businesses would say, universities should be more commercial. Well, they’re not saying that at all. They’re saying, but universities should be more like universities, centres of dispassionate enquiry and critical thinking, because technology licensing is not at the top of this list. The top of the list is informal contact, meetings in conferences like this, or in cafeterias. Innovation is no longer developed in labs – it’s coming out of discussions and design thinking that is being undertaken between companies and universities in informal settings, and there’s increasing evidence of that, and we’re seeing more of it in Australia. We’re seeing it for example, where I am at UTS, we have about, within two kilometres of UTS, 40% of Australia's creative industries employment, and my hope is that is the kind of thinking that will connect with the manufacturers in Western Sydney, and we need a framework to do that, and that’s where we come to policy.

We need to firstly understand what are our comparative and competitive advantages as a country, how do we take advantage of them? We only do 2% of the world’s R & D, we’re not going to be excellent at everything. We don’t need to pick winners in terms of companies, although it would be nice to do so occasionally, and we have picked a few through ARC linkage grants, Cochlear being the result of one of those, but we also need to more sensibly pick of sectoral activity or enabling technologies which deserve our support.

We need to build our SME participation in global markets and value chains, developing this new category of micro-multinationals, invest in knowledge creation and knowledge sharing and the development of innovation eco-systems, design and technology and business model innovation. These non-technological forms of innovation are also important and that has implications for the way we prepare our secondary school students and our higher education students, for the world of work in very different ways than we have in the past, not necessarily for hierarchical roles, but also to develop their own ventures. New entrepreneurial start-ups are an important part of the business school experience these days in Australian universities, and in particular as I have indicated, upgrading the ability of our management to understand the purpose and the role of workplace talent. How do we engage that talent more successfully, in the re-invigoration of our manufacturing sector, its transformation and its preparation in particular for very rapidly markets and value chains?

So that’s it. Thank you.

**Robert Manne**

I was going to ask some questions of the panel, but I actually think because we don’t have that much time left, I might ask one question very briefly to be answered and then throw it open because I do think we need some time for questions from the floor.

My question is a very simple one, and if you could all answer quickly. Your impression of the quality of debate in this country. The national conversation. I mean, we’ve heard three, I think, outstanding analyses, very different, the three of them, a better mind than mine would work out their connection. But what’s the very quick impression of the quality of the national conversation about an issue as significant as the one we’ve been talking about today?

**Ross Garnaut**

On this and other big economic and other issues, we’re in a desert of serious discussion of the big issues. We’re not even focusing on the important challenges facing the country.

**Roy Green**

I think the tone was set by the Treasurer, when he said ‘it’s the end of the age of entitlement’, which basically ended the conversation about which … exactly as I was saying in that last slide, which of the areas of enabling technologies current and future, competitive advantage that we need to think about, in order to develop a framework for certainly not support for entitlement but for understanding where we need to invest our resources most cost-effectively for future success, including knowledge-based manufacturing.

**Dave Oliver**

I’m with Ross. It’s certainly non-existent from our point of view. And as I’ve said in my remarks today, unfortunately I think there’s a lot of ideology that’s hijacking it, and when you’re out there, and talking to people about manufacturing, what cuts through is this narrow caste thing that we pay workers too much, we can’t compete with China, there’s no sophistication to it, and no one’s leading that debate.

**Robert Manne**

There are questions from the floor? There’s a microphone that will go around.

**Q:**

Tim McLean. I’ve worked in manufacturing for 26 years and the last ten years I’ve worked a lot with smaller, medium sized companies and one of the things I’ve seen is that there are a number of second tier, like, if you just look at the automotive sector, we think about cars, but there’s a number of second tier fantastic little clusters or supply chains in Australia, that have had no real … it doesn’t seem to be that the government is able to provide any nuance in terms of assisting or cultivating those ones, so I’ll pick on one which would be looking at the age of the panel, the Grey Nomad phenomenon and the camper vans, camper trailers and caravans.

I’m not quite in that generation, maybe Dave, I’ve worked out your age, so you’re probably more my generation, so not quite there.

But like, where we are now, there’s an enormous cluster of companies in that sector to the north of us, they’re all around Australia, they’re woefully inefficient. I’ve been to so many of these factories and a lot of them are really terrible. What’s happening is that imports are coming in, fully knock down imports to be assembled. Now without creating a sort of a dependency, how would you craft an industry policy for a sector like that, because it’s an area where Australia could develop a competitive advantage.

Another one that I would hold up would be heavy trucks, you know the Kenworths and the Volvos of this world. And their supply chains, outstanding. But how would we build those smaller second tier innovative supply chains into something that could be an export driver.

Probably addressing this to Ross from the point of view … Roy, from the point of view of his knowledge in this area, and maybe Ross also, and how do you make an industry policy that doesn’t create dependency?

**Roy Green**

Okay, well, I’ll start that off. Firstly, I think we need to understand that that’s an issue or a potential target for our interest, and most people wouldn’t have a clue what you’ve just been talking about, least of all in government. And government is not going to solve the problem for us either. But what government can do is set up frameworks in which the players themselves identify the challenges and I think Kim Carr was on the way to doing that, to some degree, with his various working groups and you know, some people thought that he was just creating discussion circles, but these were very important discussions and among manufacturers themselves who were connected through the discussions with the agencies that can in fact underpin their success, Enterprise Connect which can contribute to business improvement, the Industry Capability Network, which can feed Australian engineering and design into those local and global supply chains. Commercialisation Australia, that can contribute to business start-up activity.

What is required really are the eco-system of contributors to success around design, engineering skills, where those companies need to understand the benchmarks for success, rather than muddling through, where they can connect with other companies and compare themselves and also exchange R & D, and with universities and TAFE and with other research and education institutions. We just don’t have those eco-systems. Government can play a part in establishing those, possibly without necessarily giving a penny to the companies themselves.

**Ross Garnaut**

Broadly, consistent with Roy’s point and I won’t try to add to the micro dimension of what he was putting forward, because he works in that area and I don’t, but I think there are a lot of things that you can do that don’t involve support for specific companies. It’s very difficult if you’re handing out government money to individual enterprises to avoid slipping into difficult relationships. Regrettably in the 21st century we do have a corrupt political culture in which money buys political influence, and you really leave yourself at the mercy of an expansion of that type of activity if you’re handing out money to particular enterprises.

But the general mechanisms are very important. Any business in the trade-exposed area which is doing reasonably well now will do brilliantly well in five years’ time when we’ve got a realistic real exchange rate. It will be 20% better off now.

Unfortunately a lot of companies are dying now that would have done well with a realistic exchange rate in five years’ time. Part of our automotive assembly industry may have even been in that character, at the exchange rate we will have to have to be competitive generally and to keep growing with strong employment in a few years’ time. At that exchange rate, maybe parts of the automotive assembly would have survived but unfortunately that’s water under the bridge.

I think in the research and development area we did move towards general mechanisms that are very helpful to the innovative enterprise and I think those of schemes, administered well could be very important. The general support for R & D, which have been under fiscal attack recently, but I think there’s a very strong case for that sort of support for innovation.

And the points that began with are very important. Lots of competitive manufacturing industry can emerge out of the particular patterns of demands of particular economies, and we do have some unique features about Australia that generate demand for some sorts of goods and services that can mean that we’re making those things better, earlier than others, and you mentioned the requirements of the rich aged of whom we’ve got a lot more than Asian countries have. We were the first country in which labour became scarce, self-confident, well organised, and had Saturday afternoons off, and so we invented modern sport, Australian football attracted crowds of twenty-odd thousand in Melbourne in the ‘80s because our demand pattern had developed beyond others because we had Saturday afternoons off. Long before soccer in Britain, or American football had organised this new institution of mass sport, and lots of areas where we have done that and we can build on those.

And I think the general improvements of competitive means that any niches that have started to do all right, can do very well. But I think the improvement of the overall competitiveness is urgent. We’ve lost a lot of capacity in the last couple of years since 2011, and I fear we’re going to lose a lot between now and the time we fix the problem.

**Robert Manne**

Ross, I have to ask this very quickly. Is Treasury open to your argument?

**Ross Garnaut**

Treasury will agree with the broad diagnosis. I don’t want to speak for them, but in mainstream economics there’s a bit too much confidence that everything will fix itself. And that the economy will adjust. The exchange rate will fall at the appropriate time and adjustment will be easy. I’m concerned that some of my friends and colleagues with policy authority think that the adjustments are easier than they are.

**Dave Oliver**

I agree with Ross’ view that, my goodness, if we leave Treasury we’re in trouble and the reason that we are in this predicament is there’s been too much of this idea about simply leaving it to the market and government not intervening in this area. I note your concerns about the corrupt nature of politics. It’s not a reason for governments not to make the investment. I think one of the smarter things we’ve seen governments do recently, when it comes to industry support, is to do it on a co-investment basis. It worked well in the auto industry, it worked well in a number of other areas where companies required to put $3 of their own money, the government will match it with a dollar there, and it’s tied to results. And we have picked a few winners, as Roy indicated, over that. But if we simply have this mindset, no, everyone’s just got to fend for themselves, well, look at the nations we’re competing against.

Now several years ago I had the opportunity to go to China and have a look, and quite frankly before I went over there I expected to see you know, these huge warehouses with rugs and production workers just doing repetitive work practices. Far from it. It was the country that invested in the latest in innovation, technology, research and development, they had university clusters next to their innovation precincts, next to their manufacturing hubs, infrastructure to export, and significant government support. And that’s what we have to compete with. And when people raise it with me, being a union leader, oh well, we can’t compete because of wages in this nation. Well, that’s a nonsense. Wages are a factor but it’s not the overall factor, and if we’ve got governments that just simply say, no, you’re on your own, well, we can’t compete with those nations that recognise that they’ve got to intervene and support those industries and cultivate them and make them grow.

**Robert Manne**

We’re already a bit over time but I don’t think it matters. We’ll go for a few more minutes at least.

**Q:**

I was just more likely to make a small comment. I’ve got a small manufacturing company in this area. We export, we export heaps of work into Beijing, we’ve recently picked up a contract out at Fort Worth of $33 million, we’re in high tech manufacture.

My biggest hassle has been not government, although they’re in the way. They penalise me for everybody I employ. I say that particularly to my union representative. We have to pay payroll tax, constantly, for everybody I employ. I’ve got around about a hundred on the payroll, in two separate organisations, very close to this place here.

I am here to just basically say, it is possible. Keeping up with the rate of change is the biggest hassle we have had. The high tech machines that were necessary to buy at this stage, generally run over $2 million each. I say we’re an engineering company. I banned drawings, engineering drawings out of the company, five years ago. I banned micrometres and verniers, three years ago. Too slow, too subjective. There are heaps of other techniques that are available.

Why would somebody on the other side of the earth send us out a contract to have it made here when in actual fact they know I’ve got to buy the titanium out of America. It comes out here, we machine it, and send it back, and we’re still cost-competitive. There are lots of small organisations like mine that are still surviving here in Australia. I just wanted to sort of make the overall comment that it’s possible. It depends whether you’ve got sufficient fire in your belly to keep it going.

We’ve got contracts with Boeing for fifteen years, we’ve got contracts with Lockheed Martin. We’ve got contracts with nine some nine other aircraft components, very precision, high tech components. A niche market, to large companies. I’m not here to boast but I found the first two speakers almost saying, pack up and go home now. I think we need this sort of technology and manufacturing in Australia, for many, many reasons.

I’ll stop there because I’m not a good speaker.

**Bob Oliver**

Can I just say, that is a very good example and I hope I didn’t leave people the impression to walk out of here with razor blades to slash our wrists because the industry’s dead. That was not my intention. But it’s a very good example.

Companies that will survive have got the same attitude that you have. You know that you’ve got to innovate. You’ve got to invest in machinery. Now, I’ve been a union official now for 25 years. I’ve been working in the industry for 30 years. I’ve been in workplaces right around this country. I can walk in the front door of a workplace and you’ll know it’s got the stench of death in it. And they’re companies that have just stagnated, haven’t innovated, haven’t invested in technology, haven’t invested in their workforce, they will perish.

In your case, you’ve ticked those boxes. You’ve invested in the new technology, you’re innovating, you’re engaging with your employees, you’re internationally competitive. That’s the formula. And the real concern that I have is that there aren’t too many businesses that have got the management capability that are actually thinking that way on a large enough scale, and it’s indicative with Roy’s report. It’s an area that we’ve been concerned about for some time.

**Q:**

Hi, my name is San and I’m an international student here at La Trobe University. My question is, I’m not sure who to address it to, but in general, I’d like to know when acquiring talent – that was one of the areas that was identified as increasing manufacturing in Australia, or making up for loss of manufacturing in Australia, is trying to acquire talent. But why aren’t there enough internships or work opportunities for international students, when we know for sure that when we’re actually investing so much of finance into the international education industry in Australia? So my question is, why don’t we have talent coming from outside of Australia, settling in Australia, and helping Australia and the manufacturing industry, when there is so much talent already there, instead of worrying about how much of manufacturing is going out from Australia?

**Ross Garnaut**

Well, I think the large numbers of international students in Australia are a big source of advantage for Australia in many ways, in the way you’ve drawn attention to it. One of them. I don’t think we make, through our economy and society as a whole, as much use as we should of young talent, both indigenous and overseas students, and really this touches on some of the points that both Roy and Dave made about training, linking education into the growth of businesses.

We’ve got a lot more talent than we use and this should be an area that we try to strengthen.

**Roy Green**

I think anywhere else they’re referring in particular to international students and their opportunities to undertake internships with companies. And this has been a very vexed area I think for all universities. We do provide opportunities for domestic students to undertake internships, not on the scale we would all like, but they are provided and there is no systematic attempt to do the same with international students. And I think that is a gap in our thinking and performance as universities. In our university, up in Sydney, we are thinking very deeply about how we can do this. The logistics are quite huge, given that it does involve a lot more students then than we can actually cater for, given that in particular, a lot of … we don’t have the network of companies who are prepared to accept large numbers of internships, but it is another area, potentially, of policy, for government working with universities to encourage employers to make those internships available.

I think it would be a wonderful addition to our talent, and many of the students involved would then go on and become employees of those companies. That’s really the idea.

**Robert Manne**

I think this must be our last question. We’ve gone well over time.

**Q:**

Thanks very much for all your comments. I agree with all of them, really, in the ways that we could improve manufacturing.

And Dave, it was particularly good to hear about Cleantech which unfortunately as we know, our federal government’s policies is not supporting in the way it needs to. I work in the area of business efficiency, so resource efficiencies, and we work with manufacturers here in the north to help them to be more competitive through resource efficiency, which I see as applicable to both the current industries transitioning, as well as to the new models of industry that we really need in the future. And my question is, how can we get this on the agenda in a bigger way and support industries to be more resource-efficient because the money that they save through that efficiency, they can pay their people more with. So, they can redistribute that wealth into the company to re-invest into it, as well as into wages.

**Ross Garnaut**

Well, we had a very good program promoting energy efficiency in Victoria that was generating real results, of reducing requirements of energy, saving costs for a lot of businesses. Recently that was abolished and the reason given was that it was reducing … using less energy, using resources more efficiently was reducing the sales of electricity from the coal-based generators. I don’t think that’s a very good reason.

**Dave Oliver**

I also recall that there was a federal scheme similar to that, which provided a payment for companies who are more energy efficient and more efficient generally, and alas, that’s another one that’s been chopped as well.

**Robert Manne**

I really do regret that I feel we have to … we’ve gone fifteen minutes over time. For what I’d hope to achieve with Ideas and Society, this to me, has been an extraordinary panel, privileged to have the head of the Australian trade union movement with us. I think the most innovative industry policy academic that I know of, and I think the most impressive public intellectual economist in the country.

I would in some ways like this discussion to go on for much longer. I’ve learnt an enormous amount but I’d like, if you could, to thank our three speakers.