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Climate Change and Australian Economic Reform

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It is good to be back again at the Economic and Social Outlook Conference. The conference has earned its place as the premier forum for assessing the state of the nation on the big domestic issues, evaluating established policy and debating a forward-looking policy agenda.

I recall with pleasure the discussions seven years ago with Paul Kelly and Peter Dawkins that started it all. I have been a speaker at all of the meetings since then. One consequence is that I have left an evidence trail on the changing contents of my mind on Australian policy and development as the years have passed.

In the opening address at the first of the conferences, in 2002, I was a bit triumphalist about the state of Australian economic policy and development.

I divided the first century of our Federation into three parts. In the first third, we went further and further in separating ourselves from the international economy. We were suspicious of the operation of markets, and sought to replace them by political processes wherever we could. In the second third of last century, we kept the protectionism of the first third in place, but generally stopped taking it further. In the final third of last century, we dismantled the isolationist policies, at first partially, with the loosening of the White Australia Policy commencing in 1966, and from 1983 in a comprehensive reform programme of great consistency and consequence.

Australia at Federation had been born both deeply integrated into a global and Asian economy, and rich. At Federation we had the highest living standards in the world, and our pride in that reality was an important part of our national self-definition. The foreign trade share of output was higher than for any other of the countries that are now rich, in all of the six colonies that entered the Federation.

In the decades leading up to the Federation, business relationships with many countries in our immediate neighbourhood contributed to our prosperity and theirs. Australia's early high incomes created the opportunity for development of early forms of the Department Store. This manifestation of modernity was taken from Elizabeth Street in Sydney to Nanjing Road in Shanghai by the Kwok family. The Wing On store, now owned by the Chinese state, is still an ornament to that great city. The creative Osaka newspaperman turned merchant, Kanematsu, relocated to Sydney to establish reliable means of feeding Japan's new manufacturing industry's voracious appetite for raw materials. The Kanematsu Trading Company became the prototype for that distinctively Japanese economic institution, the diversified trading house. Dost Mohammed, from a village near Karachi, was using teams of camels to move supplies from Port Hedland to the prospectors of the Pilbara, and taking mineral ores back, before the industrialisation of Asia had given value to the iron oxide that painted red the mountains all around. Sugar boats from Surabaya were amongst the frequent visitors to busy ports all around Australia, and on their journeys home carried items embodying the ingenuity of a creative, export-oriented agricultural machinery industry in the western suburbs of Melbourne.

In the first third of the twentieth century, we progressively cut many of the ties with the international economy that had been the source of the exceptional living standards of ordinary Australians. The White Australia Policy stopped other Japanese following Kanematsu, sent Kwok back to China so that he could live with his Chinese wife, and ensured that Dost's contemporaries would be the last in the sub-continent for several generations to apply their skills and energy to Australian development. Progressively higher Australian protection diverted the sugar boats to northern markets where their wares were more welcome. Protection, and the rigid industrial relations system that grew around it, priced out of export markets the items of agricultural machinery that had embodied the innovations of early Australian industry.

Protection, the White Australia Policy and industrial relations rigidities were eased a tiny bit at the margins in the second third of the century, but were joined by other manifestations of Australians' doubts about market exchange. Most importantly, we tied our financial system into knots with exchange controls in times of crisis, and left them there until December 1983, when their removal marked the beginning of decisive and sustained reform.

Australians' living standards, relative to those of all other people who are now rich, fell markedly through the first third of last century—the period of increasing separation from the international economy. They fell, but at a slower rate, through the second third. They began a crawl back up the international league tables with the post-1983 reforms. In the 1990s, after most of the reforms and the monetary policy recession of 1990-91, average incomes grew more rapidly than in any other OECD country.

By the time of the first Economic and Social Outlook Conference, in the week after Easter 2002, Australia had climbed out of a deep gully, and resumed an interrupted journey towards productive integration in an Asia Pacific region of an increasingly integrated global economy. Australian employment and output, having kept growing through the Asian Financial Crisis of 1997-98, were continuing to expand through the American 'tech wreck' of the early twenty first century. We could do better still; but the next steps in reform were to put icing on the cake. I cautioned that Australians could expect to have all of prosperity, reform and equitable distribution, or none of them, in the expectation that we would choose to take them all. With my fellows amongst the Five Economists, I put expansion of employment through integrated reform of the taxation, social security and wages systems at the top of my reform list.

After the qualified triumphalism of 2002, over the next few conferences I found myself reflecting on whether the late twentieth century reforms had been just a transitory phase of our history. Maybe the late twentieth century unwinding of the early Australian retreat from markets and the global economy had merely been part of a continuing cycle. Maybe we were destined to go around again.

In 2003, I reflected that we, as a polity, seemed to have lost interest in multilateral free trade, and in the excitement and discomfort that accompanies productivity-raising change. There were continuing reminders that we had just been through an election in which a substantial number of Australians thought that they were voting for greater restriction on immigration.

I took the expression of concern further in 2005. I made what I called The Great Australian Complacency of the Early Twenty First Century the title and theme of my contribution that year. Australian productivity growth had fallen from its developed country champion pace in the 1990s, to a slow walk in the early twenty first century. The economic growth that was continuing was not from productivity. The broadly based and rapid expansion of the volume of exports had stopped dead - long before the high exchange rate and the inflation from the China boom had given it cause. The new booming sectors were housing and consumption, funded by ever-increasing private debt backed by bank borrowing abroad and an extraordinary current account deficit in the balance of payments. Investment in education and infrastructure had fallen way behind the need for them, revealing potentially inflationary bottlenecks in important parts of the economy.

I myself was too complacent to mention the Australian Government's retreat from international engagement on climate change after the election of George W. Bush as President of the United States as a prime exhibit.

At the 2005 conference, I said that the new century's pattern of growth was unsustainable. Sooner or later, international markets would place limits on the expansion of lending to the housing and consumption boom. Or the Reserve Bank would need to raise interest rates considerably to contain the consumption boom's inflationary consequences.

By 2006, I found myself explaining how the virulence of the China Boom had prolonged the boom in public and private consumption. An historic lift in the terms of trade had extended the period in which rapid domestic expenditure expansion could remain consistent with reasonable macro-economic stability. They provided financial capacity that could give us another chance. Would we use these vastly expanded resources to strengthen our prospects for extending the period of prosperity?

In the meantime, sharp lifts in the exchange rate through these years moderated the effects of rises in domestic costs on the average price indexes. They could not be expected to do so forever.

The higher terms of trade were mostly the result of sustained economic expansion in major Asian developing countries, first of all China. I said that sustained growth in China and other major developing economies was well established and was likely to continue, and that this would hold Australia's terms of trade well above the average of the late twentieth century for a long time. However, this was fully consistent with a substantial retreat from the giddy heights of that time. Even with continued strong growth in China and the developing world, we would have to get ready for some downward correction in export prices at some time, as high prices encouraged large expansion of global supply of mineral products. In preparation for that time, we should be running larger budget surpluses, to avoid pushing up inflation and domestic costs to ultimately unsustainable levels.

In the week after Easter 2008, the China boom in our terms of trade continues. There has never before been a sustained period of high terms of trade like the present. Export prices are now set to be taken to new heights. Coal and iron ore contract prices under negotiation will lift the overall terms of trade by another 15 percent or more this year. Over recent years, higher export prices have made large increases in Australian domestic expenditure consistent with stabilisation of the current account deficit at high levels, alongside prodigious expansion of all categories of domestic expenditure. The new extremes in the terms of trade heighten rather than diminish the need for caution.

I am afraid that the inflationary pressures that have been building in the economy since 2005 are now deeply entrenched and will be difficult to remove. There is now much greater awareness of the need for continuing productivity-raising reform than there was in 2005, but all of the productive responses take a long time to have an effect. The excesses of private and public consumption expenditure that have been accumulated over the early twentieth century will be harder to remove than they were to put in place.

But let's keep things in perspective. The times are better than optimistic Australian economists of my generation once, a few decades ago, thought they would ever be. We have better institutions and policies for sustaining stable economic growth. We are in the process of re-learning some old wisdom about the role of fiscal policy in maintaining steady growth through fluctuations in the terms of trade. Remarkably, we are just entering our eighteenth year of economic growth - by far the longest period of unbroken expansion in our history. This unbroken growth episode is now longer than the era of instability that preceded it, with three recessions between 1974 and 1991. A far higher proportion of our people is employed now than in the low unemployment decades after the second world war. 10.6 million people are now employed in Australia, compared with 6.2 million at the beginning of the reform era a quarter of a century ago. Immigration has returned to historically high levels, with a far higher skill content than ever before. And while we have reason to regret many lost opportunities in recent times, we retain most of the dynamism that came with the end of high protection and the opening of the economy to our Asia Pacific and global environment.

No, we haven't started a new cycle with the new century. We've slowed down on a journey towards productive, market-based integration into an Asia Pacific and world economy, as we make our way through some rough country into which we strayed for a while. We have learned new lessons from recent mistakes, and won't repeat exactly those mistakes again.

The challenges that create big economic problems are usually in some sense new ones, often having their origins in changes associated with old successes. The hardest economic policy problems derive from changes in underlying structural relationships in the economy - often as a result of successful policies. New structures require new ways of applying old economic wisdom, and we take time to adapt old ideas to new circumstances. It is in the gaps between the structural change and its requirement of adaptation in ideas about economic policy, and the development of appropriate responses, that big economic problems can emerge.

We have one of these new challenges deriving from old successes with climate change.

It is the success of modern economic development that has created the risk of dangerous anthropogenic climate change. Modern economic growth emerged in Britain and Northwestern Europe in the late eighteenth and early nineteenth centuries. It spread through the regions of recent British settlement and Japan through the nineteenth century, and into other parts of insular and peninsular East Asia in the third quarter of the twentieth century. It has reached its apogee with movement into the populous heartland of Asia in the fourth quarter of last century - China, India, Indonesia and other parts of South and Southeast Asia

It is this fruition of a long historical process in the early twenty first century that is bringing high risks of dangerous climate change towards us at faster rates than earlier scientific and economic assessments, based on outdated expectations about Asian economic growth, had suggested.

The same phenomenon that has supported extraordinary lifts in Australian living standards in recent times, the increases in our terms of trade associated with the China and Asian developing countries boom, has also brought forward the risks of dangerous climate change. The prosperity and the risk are two sides of the same coin.

As I discussed in my February Interim Report of the Garnaut Climate Change Review, the continuation of the beneficent processes of modern economic growth will require fundamental change in the relationship between economic growth and greenhouse gas emissions.

There is one sense in which this is variation on an old concern. The classical and early neo-classical economists used to warn of the industrial age coming to an end with the combustion of the last ton of fossil fuel. Amongst those who warned of the limits to growth imposed by finite resources of fossil fuels was the founder of neo-classical economics, William Stanley Jevons. Jevons' teeming mind had found time during his employment at the Sydney mint in the 1950s to define statistically and to find order in the unusual and hugely expensive extremes of seasonal climatic variations in this hot, dry continent, to discover the regularity that we now call El Nino, and to lay the foundations for modern meteorology. He managed later to bring together his theorising about climate and economics in the sun spot theory of business cycles.

Incidentally, it is a comfort for an economist seeking to come to grips with the science of climate change, to realise that there is another profession for which forecasting is at once as important, and as pregnant with error arising out of uncertainty, as one's own. It's nice as well to reflect on the common paternal origins, in Jevons, of the two most valuable and most commonly reviled forecasting professions, economics and meteorology. And an Australian-connected paternity at that.

The quantity of fossil fuels available for human use turned out to be much greater than Jevons and others had feared. Sooner or later, continuing material progress was going to require the development and application of alternative energy sources. As it happens, the fossil fuels are outliving the atmosphere's capacity to absorb ever increasing carbon dioxide emissions.

I know that there are still some climate change sceptics. The sceptics include a few who are qualified to have a professional opinion, and many who are not.

I have two things to say to the sceptics. The first was said in my February Interim Report. There are large uncertainties surrounding the science of climate change. Those of us who are not climate scientists must weigh intelligently reputed scientific opinion. The weight of scientific opinion advises, on a balance of probabilities, that, in the absence of effective mitigating policy, we face high risks of dangerous climate change. In the absence of mitigating policy action, we face risks of a dimension that we would pay large sums to reduce in other parts of our lives.

The second thing that I would say to the sceptics is that I hope that they are right. What a relief, if unexpected developments in the science were to tell us that it was all a big mistake. It would be wonderful to be told with the authority of mainstream science that the beneficent processes of modern economic development could continue without any abatement of patterns of energy or land use in China and India and Africa, as well as in those parts of the world that are already rich, until we were richer still, and Chinese and Indians and Africans were rich like us. It would be wonderful if Chinese and Indians and Africans could continue to use fossil fuels and forests without concern for climate change, thus allowing them to follow a path to material enrichment that had been travelled and therefore proven by others before them.

It would be wonderful. On the evidence of contemporary mainstream science, it may also need to be miraculous. And pending the miracle, or surprising changes in our species' understanding of nature, the prudent course is to seek effective abatement on a global scale.

The prudent presumption is that unabated climate change could seriously disrupt modern economic growth. How much would economic growth in China, Southeast Asia and the Indian sub-continent be affected by the displacement of many tens of millions of people from their current places of residence in Bangladesh and West Bengal? How much would it be affected by three quarters of a metre rise in sea level around the river delta cities of Mombai, Jakarta, Bangkok, Guangzhou, Ningbo, Shanghai and Tianjin? How much would a large reduction in the ice pack on and near the Tibetan Plateau, and the associated disruption to the regularity of water flows into the Indus, Ganges, Brahmaputra, Mekong, Yangtse and Yellow Rivers, affect economic growth in Asia?

These are really big questions for Australia. After all, a rise of a couple of percentage points in Chinese and Indian rates of economic growth between the nineties, and these last few years in the early twenty first century, was the main cause of the increase exceeding 50 percent in the Australian terms of trade by over 10 percent. That lift in the terms of trade has raised the average purchasing power of Australians' output by over 10 percent.

My Final Report at the end of September will ask and start to answer the hard questions about the indirect but potentially powerful effects on Australia, of the impacts of climate change on our Asian and Pacific neighbours.

The potential direct impacts of climate change on Australia are serious enough. The Final Report will apply the mainstream science to an understanding of these issues on a regional basis.

Prudent risk management requires Australia to do what it can to secure an effective and early global mitigation effort. And an effective global mitigation effort requires all developed countries, Australia amongst them, to take steps now to secure large reductions in emissions.

How we go about securing those emissions reductions will have large effects on Australian prosperity. Some Australian minds think first of arrangements that would invite back into the centre of Australian policy-making all of the rent-seeking interests that blighted our economic performance from the time of Federation until the 1980s. That approach would have Government deciding which firms, and which activities, should be given permits to emit greenhouse gases.

We once handed out foreign exchange in this way. Firm by firm. Activity by activity.

If this course were to be followed, managers throughout the economy would find it more rewarding to put pressure on Government to secure emissions rights, than to find and to apply low-emissions ways of going about their business. We wouldn't find enough new ways to reduce emissions at low cost. When we had found some new and better ways, we would not invest enough to make good use of the new opportunities. When we made investments in new technologies, we would not run the businesses embodying the new approaches well enough to keep costs to a minimum.

An ETS is a new market, established by Government decree. The emissions rights that are traded have value only because of the coercive powers of Government. The rich possibilities for corruption of an ETS have led many economists to favour carbon taxes, which by their nature are simple, transparent, and much less amenable to manipulation by private interests.

There is, however, much to be said for a good ETS. Once the Government has established an emissions reduction trajectory (and you can go to last Thursday's Discussion Paper on the ETS to see exactly what I mean by that), a good ETS will have the singular objective of moving permits to emit into the hands in which they have highest economic value. Competition will cause those who end up holding permits to use them to good effect. The good ETS will therefore minimise the cost of realising the emissions reduction objective.

In last Thursday's Discussion Paper on the ETS, I described a simple, transparent system. The Government defines a long-term emissions reduction trajectory, and announces alternative trajectories with which the first would be replaced under clearly specified conditions. There would be five years notice of a change in trajectory. Government allocates permits amongst potential users through a transparent, competitive process. Government collects the rent value of the permits, and returns the value to the community in transparent ways that support adjustment to a low-emissions economy.

The contrast is stark, between the simplicity of the ETS that is described in the Review's Discussion Paper, and the immense complexity of alternative arrangements that have been under discussion. Most of the complexity in the alternatives derives from an extraneous objective: to shelter some interests from the adjustment that must occur if the abatement goal is to be met; and to transfer incomes and wealth from some to other participants in the emissions permit market.

Amongst other consequences of the complexity of alternative arrangements, is that they would take much longer to establish. The Government has announced that the ETS will be in operation by 2010, and only a simple and efficient ETS could be ready in that time.

The adjustment to limits on carbon emissions will not be easy under any scheme. The economic adjustments begin when market participants realise that the returns are higher from investment in new markets created by the ETS, than in seeking to influence the design of the ETS in ways that are favourable to themselves. We can call this point of realisation the turning point in economic reform. The turning point in economic reform is when the returns on management effort in adjustment, are perceived to be higher than the returns from effort in political lobbying.

The economic costs of adjustment to restrictions on emissions will be lower, the earlier the turning point in economic reform. We know from the reform experience in many countries that adjustment within well-structured markets occurs more quickly and at lower cost than static economic analysis, based on currently known technologies and patterns of trade, suggests that it will. Once markets are rewarding abatement in a systematic way, we will be surprised by the rich variety of productive responses. Emissions will be reduced in many ways, emerging from separate decisions of millions of individuals and firms.

The adjustment towards a low emissions economy will proceed more rapidly, and at lower cost, if, alongside the ETS, there is effective correction of failures in information, innovation and other markets. These are discussed in my February Interim Report.

Veterans from the protection wars of the 1970s remember the protectionist call: where will the jobs come from to replace the jobs we know will be lost in cars and textiles and whitegoods? Alan Wood will remember. We would answer that we could not know for sure. But we could say that all of the industries that were already internationally competitive would do even better. Firms and industries that were on the border of international competitiveness would cross the line. Higher real incomes would create demand for more and new goods and services.

Now we know that there are millions more jobs than in the days of high protection, and we know where the jobs are.

I do not want to take the analogy with trade and financial reform in the 1980s too far. Those reforms were designed to make us richer after some initial adjustment pain. And make us richer they did, with much higher levels of employment and public services and transfers.

Climate Change mitigation will not make us richer. It is designed to avoid longer term threats to our prosperity.

Well designed markets can unleash the ingenuity of Australians in reducing emissions at minimum cost to the standard of living. How low might the costs be? That will be discussed in our final reports, but low enough not to noticeably affect the upward trend in Australians' living standards.

I should mention one other lesson of the earlier reforms. Smoothly functioning markets make the economy much more resilient in the face of shocks. There will be surprises, good and bad, along the path to a low-emissions economy. Sometimes there will be disappointments about technologies that had seemed to hold great promise. An effective emissions permit market will quickly price the disappointment into the price structure, spot and forward. Businesses for whom price stability is especially important will have had the opportunity to hedge the price of their requirements in the futures markets.

By contrast, a shock to expectations sends a system that depends on continuing government discretion into crisis, beginning with political crisis. Anticipation of the possibility of such crisis raises the supply price of investment, and slows, and raises the costs, of adjustment to the low-emissions economy.

There are worse possibilities. Continuing disputation about parameters of the scheme, uncertainty, continuing politicisation of the ETS's operations, would dissipate resources in unproductive activity, and seriously disrupt productivity growth. Instability in key emissions permit market parameters could contribute to more general macro-economic instability, the costs of which would greatly exceed the necessary costs of abatement itself.

Within a simple, credible, transparent, market-oriented set of mitigation arrangements, there will be many opportunities for individuals to do well, and some that can substantially raise incomes in the country as a whole. As I discussed in the conclusions to the Interim Report, Australia has many advantages in a low emissions global economy, that would emerge in the context of comprehensive global mitigation.

I will conclude by drawing attention to a more sombre part of the climate change story. We as a global community have come to climate change mitigation too late. The warming that has already occurred, together with that which will flow inevitability from emissions already in the atmosphere, and from the current momentum in emissions growth, mean that, in the best of circumstances, we will have to live with substantial climate change. Australia is perhaps the most vulnerable of developed countries, both because of direct impacts, and because we will be affected more than other developed countries by stress in neighbouring countries.

How we respond to the challenge of adaptation to climate change will be as important to our continued prosperity as the effectiveness of our contribution to global mitigation efforts. We will not be able to afford to keep every aspect of Australian life as it was before. Adaptation and not conservation will need to be the keyword, unless conservation is understood in a dynamic context that embraces adaptation.

The issue of adaptation has been too little discussed in Australia so far. It will be a major focus of the Review in the months ahead, and of Australian policy for a long time to come.