

Embargoed 5.30pm 31 March 2014

Check against delivery

*Crawford School Reflections Lecture 2014*

*Crawford School of Public Policy: ANU College of Asia & the Pacific*

*Dr Don Russell: Reflections on my time in Canberra*

*JG Crawford Building, ANU Canberra*

*31 March 2014*

It is indeed a pleasure to be back here in Canberra this evening. I am on the record as saying that Secretaries should be neither seen nor heard: However it behoves former Secretaries, within the confines of their discretion and respect for the institution that is the APS, to not only make themselves available but to have something useful to say.

The national debate is a noisy one with much posturing and elbowing for position and there are real dangers for the quality of that debate if people who have a well informed and structured understanding of the issues, remain silent.

As I am wont to say, my career to date has been a rich and varied one and I have built up a somewhat unusual set of experiences.

If it has a theme or underlying logic, it has been based on the notion that the phone rings and something happens. And, of course, I have every expectation that this process has not come to an end. However, I do have to accept that the twists and turns of my career do make some people wince; but having said all of that, I must say that it has all turned out quite well.

As a starting point for my lecture tonight, let me say that I took up the position of Secretary of the then Department of Innovation, Science and Research on 20 June 2011. What struck me at the time, was the disconnect that existed between what the department did and what outsiders thought we did.

At that time, there was a quite entrenched view in Canberra, that the department was populated by unreconstructed protectionists who saw their main function as handing out cash to politically well-connected companies and propping up dying industries.

This notion was very common amongst the staff of the central agencies.

There were ironies in me becoming the Secretary of the industry department but I was pleased to find that the staff were well-motivated with a professional capacity to deal with

the peculiar complexities of industry assistance and most importantly they were deeply committed to the notion that industry policy was now innovation policy.

This view was buttressed by the broad responsibilities of the department which even at that stage, included research and science.

The other thing that struck me was the immensity of the structural change that was impacting the Australian economy.

Market economies are always in a state of flux, but something different was happening when I took on my responsibilities.

At the end of June 2011 the US/AUD stood at 1.07 up 26% from the 0.85 where it stood a year earlier.

People tend to forget that there was a period when Australian industry was highly competitive. During that time, global manufacturing companies sited new investment in Australia not out of sentimentality but because Australia ranked most attractive in the line-up of potential places to do business.

The period when Australia was highly competitive covers 17 years and starts with the “banana republic” reforms of mid-1986 and runs through to mid-2003 when the exchange rate starts to rise sharply in anticipation of higher commodity prices.

These years cover the dismantling of the industrial tariff and the resulting world pricing for input costs for Australian industry. They are also the time when the profit share rebounded, real unit labour costs fell sharply and wage determination was taken away from the Industrial Relations Club and decentralised. It was a time when productivity growth bounded ahead.

On a wide range of fronts, Australia moved up the international rankings.

For some time now, the RBA has based its real Trade Weighted Index at 100 for March 1995. This is a convenient reference point as it falls well within the period of high competitiveness. The average for the whole 17 years is 106.2; as late as December 2002 the Index stood at 99.7.

When I arrived in Canberra, the RBA real Trade Weighted Index stood at 163.1.

Whether or not you are a firm believer that relative prices matter, there is no getting around the fact that when real relative prices rise by 50% or more and stay high for an extended period, then dramatic things happen.

And that was what I found.

Large sections of industry were no longer covering their long run costs; they were cash flow positive in part because they had stopped replacing plant and equipment. Starved of new investment, they steadily became less competitive until finally they no longer could cover their short run costs. At that point the parent tended to pull the plug if they were foreign owned or they went bankrupt or merged if they were locally owned.

If they were well connected, we heard from them; if they weren't, they quietly slipped away.

And it was not just manufacturing that was affected. Any business that was trade exposed, that was not a beneficiary of high commodity prices, was struggling. And those who serviced these businesses were also struggling.

But there were success stories.

Companies which still had options, which outsourced functions that could be done more cheaply elsewhere, which had a clear idea of their comparative strengths; and which were innovative in terms of new products, were making a fist of it.

Businesses that competed purely on price or had a business model that only made sense with the real exchange rate of March 1995 were up against it.

Intellectual property was very important. Imported capital equipment was cheap but unless Australian businesses could do something clever with that equipment, they were always going to be vulnerable to foreign businesses that could also buy the same equipment but service it with cheaper labour.

It was not a question of simply hanging on, or hoping that the exchange rate would return to its long run average. By 2011 it was clear that even if the exchange rate had overshoot, it was going to remain well above historical norms as long as China continued to urbanise and develop.

Whatever the old equilibrium exchange rate might have been, the new equilibrium was going to be significantly higher and the economy would simply have to adjust.

And for many businesses, that adjustment would be driven by desperation, by a need to secure cost savings and efficiencies and increase productivity.

But to have a real future, businesses had to pay close attention to product innovation, the skills of their workforce, intellectual property, research and development and translating that research into commercially attractive products.

Australia's industrial structure had to become increasingly knowledge and technology intensive and this had to be done at an accelerating rate.

I have spent some time focussing on the plight of much of Australian business and the challenges they faced as they tried to adjust to extraordinary circumstances because it helps put the role of public policy into context.

It is also important to realise that the challenges of that period are still very much with us and the lessons that we have learnt are lessons of continuing national relevance.

My response to all of this was to realise that I had to quickly redefine my department as an economic department and to work imaginatively with the central agencies. I was assisted in this with the addition of higher education and skills to my responsibilities six months into my term.

It used to amuse the staff, particularly the Higher Ed staff, when I described the Treasury as the department of general equilibrium while we were the department of economic transformation.

The Treasury could tell you about the importance of relative prices and the new equilibrium, but we had the road map as to how you got there. Relative prices are important but the dynamics of an economy are all about skills, knowledge and creative destruction.

For those with an academic bent, I was building an economic department paying appropriate homage to Schumpeter.

With the greater scale of the department, we hired a Chief Economist and set about utilising him across the widening range of the department's responsibilities. The mission was to ensure that the whole was bigger than the sum of the parts. IP Australia, which manages Australia's patent system, also hired a Chief Economist.

To be fair to the Treasury, they quickly acknowledged the role of innovation. We exchanged charts; we used their charts on the real exchange rate and productivity growth; they used our charts on the drivers of innovation.

So how does a country go about developing a knowledge and technology intensive economy and what is the role of public policy?

Importantly, how successful have we been and what are the lessons for the future?

The first thing that has become clear to me is that a knowledge and technology intensive economy does not happen spontaneously. It is not something that you can leave to market forces to sort out once you have inflation and the budget under control.

It is well documented that individuals and businesses, and thereby nations, will underinvest in research, education and skills acquisition if they have to carry the full cost up front.

There are many factors at work.

Many of the benefits of such investments accrue to others; there are externalities involved with countries benefitting from having a large pool of educated people; while investment in higher education and skills can be financially attractive to individuals, it is often difficult for people to finance such activity from their own resources.

This is the basis for public involvement in the provision of tertiary education and research, particularly pure research.

But the role of the state needs to be much more active than simply subsidising the provision of tertiary education and research.

A moment's thought tells you that the issues confronting policy makers are very complex.

The cost of university courses varies considerably, how should the federal government's contribution be structured; what proportion of the costs should students bear and how should students contribute to the cost; should the student contribution be related to the cost of the course; what research should be assisted and how should it be conducted; what is the right balance between pure and applied research and how should research be linked to industry; should the results of government supported research be open access or should research bodies be encouraged to patent it; what is a university and are research intensive universities different from teaching universities; how should we think about regional universities; how should State based Technical & Further Education or TAFE colleges fit into the picture; what role should private providers play in the provision of skills development; where do apprenticeships fit in and who should bear the cost of their training, the employer, the apprentice or the government; how should the needs of employers and business be incorporated; what weight should the government put on lifting the participation of the population in tertiary education; with a demand driven system, should the government try and influence student and university choices; and how should the Commonwealth endeavour to manage the cost of the whole system when much of the cost is demand determined or funded by the States?

Faced with such complexity, Canberra tends to be enamoured with the simple elegant solution which relates policy back to a select number of principles.

I can report that while there is a premium on imagination and clear thinking, there is no simple elegant solution.

There is a need for governments to understand what they are doing, to appreciate the likely consequences of policy action and be able to relate outcomes back to a broader set of objectives but there is no simple set of prescriptions that can be carved on a tablet and handed down from on high.

Some of the complexity comes from our federal system but I would not want to overemphasise this. In fact over the years I have become more enamoured of the benefits

of competitive federalism and its capacity to encourage all jurisdictions to improve their game.

More of the complexity comes from the fact that education rolls together social as well as economic objectives. The Commonwealth is now involved with education from early childhood, progressing to primary and secondary school and on to university and vocational training.

While the social objectives never disappear, it is fair to say that as people progress through the process, the economic dimension and the need for educational institutions to engage with industry becomes increasingly important.

We do not want to run universities purely for the sake of business – universities serve a much broader role than that – but we are denying ourselves an important economic catalyst if we do not do everything we can to improve the level of engagement between universities and business.

Unfortunately engagement between universities and industry is not something that Australia has done particularly well over the years.

During my time as Secretary, I wrestled with the question: is locating universities and training in the industry and science department a good thing or is it just another example of Canberra Machinery of Government (MoG) madness?

I think we did useful work in my time with the universities, work that benefitted from being in an economic department rather than a social policy one.

We laid the ground work for the reform of the regulation of higher education with the preparation and release of Professor Kwong Lee Dow's Report, a report that I am pleased the current government is in the process of implementing.

I think the department's experience with minimising the costs of regulation was helpful.

We also did considerable work preparing the ground for a resolution of the vexed issue of the funding of the superannuation liability of NSW universities which has bedevilled the Commonwealth and NSW for many years.

I am pleased to see that on the basis of the MYEFO statement, the current government would appear to be on course to resolve that matter as well.

Again I think the department's capacity to view the problem as an economic one and engage the central agencies was helpful.

But the broader issue is more important. Is the industry and science department a sensible place to locate universities and training on an ongoing basis?

The answer to that question depends very much on what type of industry department we are talking about. If the industry department's main focus is industry assistance then I don't think there is much to be gained.

But if the industry department sees innovation as its key objective, then I think there is a very real opportunity to create a department of economic transformation where the whole is bigger than the sum of the parts.

All bureaucracies have a tendency to form silos and, on the basis of my experience, this is as true for private bureaucracies as it is for the APS.

Unfortunately those silos become citadels when the silos are located in different departments.

Turf battles become more intractable, people learn that intransigence can be rewarded and unless care is taken, the situation can deteriorate to the point where people in different departments see themselves as belonging to different tribes.

The benefit in internalising those differences within a single department is that the Secretary and the executive board provide a mechanism to resolve disputes. Paralysing turf battles become much more difficult within a single department.

And this is especially the case if the executive board is small.

In my case, I had four deputies and I had them tasked to be responsible for the department as a whole not for their respective areas. The mission for the executive board was to make the whole bigger than the sum of the parts and we put in place mechanisms across divisions to make that happen.

There was low hanging fruit in the skills area which saw immediate benefit in being co-located with industry.

The country has wrestled with problems that have bedevilled apprenticeships for decades; we need to encourage more commencements and lift completions and make better use of industry-designed training packages.

But the big returns will come from progressing alternative pathways to trade occupations in priority sectors and breathing life into competency based training that holds out the prospect of accelerated completions.

Collaboration between industry, governments and the workforce are central to progress; the industry department appears to be a sensible point to run that collaboration.

The Commonwealth is now directly involved in co-investing with individual businesses to help them with their training needs. This is best done in a department that has a network of relationships with individual businesses.

The differences between large TAFEs and universities are blurring; there is increasing emphasis on generic skills in Vocational Education and Training (VET) courses and work-readiness is becoming of great importance for university graduates. This means that student outcomes in the two sectors are coming closer together.

Having TAFES and universities in different departments will make it more difficult to manage this process.

An indicator of the dimensions of the problem is the fact that 90 of the 170 higher education providers registered by TEQSA, the university regulator, are jointly registered with ASQA the VET regulator.

There was also immediate and obvious benefit in having science co-located with research.

The work done on designing and funding a range of Innovation precincts around the country which were business led and focussed on particular industries, drew on the full resources of the department.

This exercise engaged the Australian Research Council (ARC), venture capital, the Chief Scientist, IP Australia and industry.

This is not something that Australia has done well in the past.

Reducing the matter to its most basic, education departments tend to have a mission to increase the number of graduates and the dollars spent on research, just as agriculture departments see their mission to increase the production of wheat and the export of beef.

Doubtless someone asks the question "why" in the education department but the answer is likely to be more compelling if it comes from an economic department which can talk about human capital and draw the links between university graduates and research and important national economic objectives and do it with some authority.

The level of funding for research will be lower if it is viewed largely as support for research scientists and post graduate students; but it will move up the priorities if it is seen as a central part of the government's economic strategy.

I can attest to this reality from personal experience.

I should also mention that the model that underlies my old department is similar to that introduced in the United Kingdom (UK) in 2009 with the creation of a single Department of Business, Innovation and Skills (BIS). BIS covers universities, research, skills and industry. BIS was a construction of Prime Minister Brown but it was kept by Prime Minister Cameron.

Martin Donnelly the Permanent Secretary of BIS has said to me that BIS is viewed very positively by stakeholders, particularly the universities and skills, who value the opportunity

to be closely associated with each other and with research and industry. Compared to pre-2009, BIS has also been a more effective policy department.

To date I have not mentioned Ministers.

At the end, I answered to 5 Ministers and 2 Parliamentary Secretaries. Over my time I dealt with 12 Ministers and I stopped counting Parliamentary Secretaries.

It is fair to say that Ministers do not like sharing a Secretary.

Each Minister with his or her own Secretary may be good for the growth in the number of Secretaries but it makes turf battles around Canberra even more intransigent.

However it has to be acknowledged that there is always a risk with large departments with multiple Ministers that the Ministers will insist that the department itself be effectively siloed, with the Secretary being the only person of common contact.

This can be testing for a Secretary but the wise Secretary is not without influence. And in most cases a combined department is better than two separate departments with adversarial Ministers.

I can say that my Ministers accepted the model and were happy for the Secretary to run the department with the objective of extracting the synergies. It helped that my Ministers seemed to get on well together but it also helped that the creation of the department was no accident. It came about at the direction of the Prime Minister who saw the linking of universities, training and research with industry and science as an important part of her economic strategy.

And it is here that I think that large departments with multiple responsibilities and multiple Ministers are most interesting because they enhance the power of the Prime Minister to set priorities, streamline processes and achieve outcomes.

Amalgamating a range of responsibilities within a department allows a Prime Minister to internalise a range of potential conflicts. Ministers can still have their say but there is a greater chance that with a single Secretary conflict will be diminished.

This potentially can give the Secretary an enhanced role, but this too can be to the advantage of the Prime Minister; all Secretaries have their contracts signed by the Prime Minister and all Secretaries these days have a dotted line responsibility to the Secretary of the Prime Minister's Department.

There is also the question of departmental running expenses. There are important scale economies with large departments which is not unimportant in a time of shrinking budget support.

While Ministers like departments they can get their hands around and they are attracted to stand alone agencies looking after particular responsibilities, it is doubtful whether Canberra can continue supporting such expensive structures.

But let me return to the question of research and the appropriate role for government.

At the heart of the problem is the need to set priorities and the need to back those priorities with funding and at the same time create a structure of imaginative interrelationships that encourages entrepreneurship and risk taking and leads to successful commercial outcomes.

There are two steps here.

Firstly, priorities have to be set.

Priority setting is hard work and consultation and information sharing can easily degenerate into the maintenance of the status quo with small adjustments at the margin.

If all we achieve are well endowed comfy workshops for research scientists then we have failed.

I have always been hopeful that a Chief Scientist with the authority to work with all the players, who has the confidence of the Prime Minister, is best placed to drive a national research and education effort that makes sense.

The Chief Scientist needs a measure of independence but he or she also needs to work closely with the department. If the department has a broad brief, then the department and the Chief Scientist can become a very effective team.

Finding such a Chief Scientist is not easy, but I am hopeful if we can get the structure right, the importance of the job will encourage the right person to come forward.

The second step is more challenging and it is where many countries fall down.

I am sure much money is wasted because of an inability to inject the right degree of entrepreneurship and imaginative connection between those doing the research and those seeking to commercialise that research.

In Australia we have had some success with health sciences.

We spend a lot of money in this area, much of the research is world class and we have been able to translate that research into commercial success which has seen the development of a range of bio tech, pharmaceutical and medical device companies.

Wealth has been created and we are beginning to see the virtuous circle of success funding success weave its magic.

One differentiating aspect of health sciences is that because of the important role of the medical institutes, in many situations, the people doing the research are also the people using that research.

This appears to be important and suggests we need to encourage a similar degree of interaction in other areas.

The Cooperative Research Centres and Innovation precincts try and bring researchers and business together with business encouraged to share the research decision but it is fair to say that we have more to do.

At the problem's heart is a need for our research intensive universities to become better at building collaborative links with industry that work for the university and for industry.

Notwithstanding the general acceptance that there is a role for government, there would be those who would still question whether it is legitimate to target the growth of knowledge and technology intensive industries.

They would argue that all that is required is to get the incentive structures right and that markets will sort things out.

There is truth in the notion that with macro-economic stability, markets will do their work and people will find jobs.

If prices and wages are flexible, adjustment will take place and everyone who wants to work at the real wage rates on offer will be able to do so.

However, there are problems for a society if the level of real wages that makes this happen is below what the community expects or finds acceptable.

It gets little attention, but Australia has had extraordinary and consistent growth in real wages over the last 20 years: November 2013 AWOTE were 37% higher in real terms than they were in November 1994 delivering 1.7% pa growth over the period.

Even less well known is the fact that the drivers of this remarkable growth have changed dramatically. In the first half, real wage growth was supported entirely by the growth in labour productivity; in the second half the bulk of the growth came from higher commodity prices.

With the terms of trade expected by the Treasury to decline from its peak in 2011-12 by some 30% by 2020, it is clear that higher commodity prices are unlikely to underwrite community expectations in the future; much more likely they will be a negative influence.

If people are to enjoy continued real wage growth of anything close to what has become the norm over the past 20 years, then labour productivity growth has to step up.

The fact that consistent 1.5% pa plus real wage growth over the past 20 years has left the bulk of the community dissatisfied and concerned about the cost of living, does not augur well if real wage growth were to stagnate or go backwards.

There is evidence that the competitive pressure of the higher exchange rate and the aftermath of the global financial crisis have been forcing companies to become more efficient and labour productivity has picked up.

In the 5 and a bit years since Q3 08, which is the date of the collapse of Lehman Brothers, labour productivity in the market sector has grown at 2.0% pa, less than the golden reform years of Q3 94 to Q1 04 (2.7% pa) but significantly faster than the indulgent resources boom years of Q1 04 to Q3 08 (0.9%).

This is encouraging because it suggests we could be within striking distance of delivering ongoing productivity growth that could deliver real wage growth close to what the community has come to see as normal.

However there are two big problems.

One I have already mentioned, being the decline in the terms of trade and the other is that an unknown component of the recent lift in productivity growth is presumably cyclical and related to one off changes by struggling businesses.

I take some comfort from the positive consequences that flowed from the removal of tariffs during the golden years of reform, and as a result I am more of an optimist about the ongoing capacity of greater competitive pressures to spark an ongoing lift in productivity growth.

However, there is no escaping the need for the federal government to harness what resources it has, and utilise them in the most effective manner it can devise, to spur on growth in Australia's knowledge and technology intensive industries.

In simple terms, these are the industries that pay well and steadily lifting their importance lifts the overall average wage in this country. Adding skills and education to all other sectors also improves the level of wages.

I have already spoken of the management and design challenges that exist for the Commonwealth in this area, but before I discuss resourcing, I should take a few moments to reassure people that equipping large numbers of people with degrees and other tertiary qualifications won't end in tears.

We know from existing experience that people with a degree have higher incomes that justify the cost of gaining that degree. We also know that university graduates have lower levels of unemployment and higher labour force participation at all ages.

On this point, I was pleased to see that David Gruen in his address to the Australian Workforce and Productivity Agency (AWPA) last month acknowledged that continued increases in the proportion of the population with a degree will be a factor lifting labour force participation in an environment where an aging population will be lowering it.

And we also know that despite the rapid expansion in the number of graduates there has been no sign that the remuneration premium of a degree has been shrinking.

We have been equipping a growing number of people for knowledge based jobs that have materialised.

No one wants to be a simple minded extrapolator but the recent experience has been encouraging and it is reasonable to conclude that continuing to support a large graduate intake is a sensible strategy for the Commonwealth.

The proviso of course is that the expansion of knowledge and technology intensive industries also needs to continue and other industries become increasingly sophisticated in their use of skills.

In the current environment where structural change is displacing large numbers of workers and closing down industries, the Commonwealth needs to be able to say where the new higher paying jobs will come from, and what it is doing to help educate people to take these jobs.

Which brings me to resourcing and priority setting.

There is clearly an unstable gap between outlays and receipts at the Federal level that needs to be resolved.

This is not likely to be a straightforward task and there is a danger that in the act of achieving a sustainable bottom line, rough and ready decisions are taken which do not do justice to the government's real priorities.

In part this is due to the political unhappiness that can follow if spending programs are cut back or revenue lifted.

But the core of the problem lies with the difficulty that governments have in determining priorities.

Setting priorities is what being in government is all about and there is no way that spending and taxation priorities can be reset in any major way without the active involvement of the most senior members of the government.

In reality, this includes the PM because without the PM in the room there will always be one last avenue of appeal.

But Prime Ministers find it difficult to sit for days going through budget matters line by line and even if a particular PM enjoys the activity, you will find that his or her media staff will be at their wits end trying to extract the PM to fill the resulting media vacuum.

Officials try to help by devising budget rules that attempt to bring more structure to the process.

Thus was born the philosophy of the portfolio budget offset – if a Minister wants to spend more in one part of his or her portfolio he or she has to find offsetting savings elsewhere.

Unfortunately such an approach makes it extremely difficult for a government to set priorities; it is also a blueprint for waste and bad decision making.

I can also report that the philosophy of the portfolio budget offset did not drive the major fiscal consolidation that occurred in the late 1980s.

Part of the problem lies with the assumption that the marginal dollar spent by the government lies in the portfolio that wants to spend more.

But the real problem is that a budget offset policy in practice rewards departments that behave badly and punishes departments that behave well.

A desperate budget process looking for a bottom line quickly learns to take all offered saves without agreeing to any spends; departments quickly learn that intransigence is the best policy; there is little incentive to give up poorly performing programs and the staff that go with them if departmental running expenses are being cut over all.

If anything there is an incentive for departments to bring forward small new policy programs with catchy names that appear to support the objectives of the government of the day in the hope that the extra staff will help with the department's running cost problem.

Many departments have found that a gaggle of cleverly named, disjointed small programs with hard to identify but doubtless highly sensitive and noisy beneficiaries is the best way to proceed.

If the Commonwealth is to make a major change to its spending and taxing then it is important that the process allows for a proper evaluation of priorities and that it provides incentives for Ministers and departments to participate on a sensible basis.

A Commission of Audit is a good starting point as it does provide an opportunity to think about big picture priorities but it is only a starting point and it risks creating a binary decision making process – yes or no – when what is often needed is a more sophisticated analysis of priorities and programs which can only take place if the budget process provides for imaginative input from Ministers and departments.

Let us now look at the size and nature of existing Commonwealth programs and the impact on Australia's knowledge and technology intensive industries.

Broadly speaking, the Commonwealth currently spends around \$8.6 billion pa for science research and innovation; \$6.1 billion pa for Commonwealth supported university places, \$2.7 billion pa for youth allowance for university students; \$1.9 billion pa for specific Commonwealth VET assistance; and \$1.4 billion pa for VET assistance to the States.

The \$8.6 billion covers what is spent on Australian Government Research agencies like CSIRO, industry R&D tax measures, higher education research, health and rural research, Cooperative Research Centres and energy and the environment.

There is a useful budget document that covers this area well. Anyone interested should keep an eye out for it on budget night.

The \$6.1 billion funds the demand driven university system; the \$2.7 billion are the cash payments to university students on top of the concession built into HECS.

The \$1.9 billion covers direct involvement by the Commonwealth with the training needs of employers covering subsidies for traineeships and apprentices and co-investment arrangements with individual employers. The \$1.4 billion is paid to the States to support their training systems including the TAFE system; the Commonwealth funds approximately 1/3<sup>rd</sup> of the total cost.

The sums are large enough for the Commonwealth to have a major influence on outcomes.

As one does, I have taken to reading the US Science and Engineering Indicators for 2014 put out by the National Science Foundation (NSF) and the US Bureau of Labor Statistics (BLS) Employment Projections for 2012 – 2022.

The BLS puts out new projections every two years.

Somewhat surprisingly for a US publication, the S&E Indicators pay considerable attention to international comparisons.

But what caught my eye was the very high share that Knowledge and Technology Intensive (KTI) industries make up of GDP for Australia and the composition of that share.

In 2012, the US had the largest KTI share of any large developed country (40%) but it is followed by Australia (39%) and the UK (36%); the average for developed countries was 32%.

Australia's share has grown by some 9% of GDP since 1997 with 8% coming from financial services.

While I am willing to believe the Superannuation Guarantee (SG) and the accumulating pool of superannuation assets has turbo charged the growth in financial services in this country, the numbers look on the high side.

It is reassuring that the NSF is highlighting Australia's success but I would want someone to check the numbers before claiming the SG as a fine example of Australian can-do exuberance.

The BLS numbers are more disturbing although on one level they too suggest that Australia has been doing well.

The projections key off detailed forecasts for different types of goods and services in the US; the BLS then projects the employment necessary to produce them. They take account of growth and replacement needs. The latest projections were released in December 2013 for 2012-2022.

Of the 51 million job openings over the next 10 years the BLS found that 66% would need no post-secondary education; 32% would require less than high school. 22% would require a bachelor's degree or better.

10 year projections are of course just that and nobody should get too carried away by such things.

However Labour Bureaus have a tendency to take an optimistic view about the future demand for skills and education and if these 10 year projection were to come to pass, then the US will face some serious challenges.

Firstly some 33% of 24-34 year olds have bachelor's or master's degrees or advance research degrees; the potential is there for considerable oversupply of graduates.

Secondly the median annual wage for those with no post-secondary education is \$27,670; it is reasonable to assume that a median wage of this order for 2/3<sup>rd</sup> of all job openings over the next 10 years will lead to a significant number of Americans feeling quite dissatisfied.

The Australian Workforce and Productivity Agency (AWPA) with its 2013 National Workforce Development Strategy attempts a similar exercise but concludes that by 2025 Australia could be 2.8 million short of the number of higher-skilled qualifications that industry will demand.

Whatever the relative gifts of the two agencies at forecasting, it is fair to conclude that Australia over the last 20 years has managed to create a virtuous circle where we have educated many more graduates and significantly expanded the number of people with post-secondary qualifications and we have seen Australia's industrial structure change in a way that has not only found new jobs for these people but has paid them significantly higher real wages.

The Americans have not been able to do this.

I am willing to believe that investing in education and skills has a capacity to influence the way an economy evolves.

Of course, we would not want the investment decision to run that far ahead of the way the economy is evolving but there is a link.

Likewise facilitating the growth of knowledge and technology intensive industries in a manner that is consistent with our investment in education and skills also makes sense.

If 66% of all job openings in Australia over the next 10 years did not require post-secondary education, as projected for the US by the BLS, this would amount to a major failure of public policy in this country.

I would like to end by saying a few words about the role of the Departmental Secretary.

My first observation would be that the Prime Minister of the day and the Prime Minister's Office spend a very large amount of their time managing individual Ministers and dealing with their problems.

Using a cricket analogy, Chifley spoke of the long tail of the batting line up of his Ministerial colleagues; Menzies too had doubts about the calibre of his Cabinet.

Having a diversity of talent in the Cabinet is not necessarily a bad thing but it needs to be managed.

Chifley liked to be surrounded by clever people who could do things; the post WWII elite of Secretaries in Canberra was the result. Menzies inherited Chifley's public service.

To Menzies it was preferable to have power in Canberra tied up in the hands of a senior cadre of talented high officials answerable to him than to have it dissipated through a collection of Ministers for whom he had only modest regard.

The next generation of Secretaries misunderstood the basis of their power; overreached and produced a bi partisan consensus that; the policy agenda should belong with Ministers; that they should be equipped to develop policy proposals; and they should no longer be hostage to powerful officials dictating what was and what was not acceptable.

The Prime Minister giveth, and the Prime Minister taketh away.

Advisers with policy responsibilities in all Ministers Offices were the result.

Ministerial advisers strengthen Ministers and can perform a very useful role working cooperatively with officials to make sure that the Minister makes the best use of the department but they have changed the way Canberra operates.

The Prime Minister still needs to coordinate and manage the government's agenda; encourage Ministers to do some things and stop them doing others.

This role fell to the Prime Minister's Office which over the years has grown in status and influence.

All of this was apparent to me some time ago.

My experience as Secretary has developed my thinking and I am now of the view that more can be done to improve the capacity of the Prime Minister, and Ministers generally, to develop and manage a policy agenda and be part of a tidier more effective government.

It can be exceedingly nerve wracking for a Prime Minister and his or her staff to know that they are surrounded in the Executive Wing of Parliament House by a group of Ministers who are working away on bright ideas guided only by the enthusiasms of their staff.

The wise Secretary realises early on that advice to Ministers is contestable.

If departmental advice is to have influence it has to be useful.

It is a mistake to think that the department's main influence comes from creating the piece of paper that cannot be ignored.

It is true that you should never underestimate the power of the written word, but if the department is only viewed as having a capacity to hem in a Minister, then over time the department will find itself frozen out and more and more decisions will be taken late at night in Ministers' Offices.

Departments should be able to provide advice on any subject within the Minister's responsibilities that is better structured and better considered than anything that can be produced in the Minister's Office; the department has resources; the adviser tends to be on his or her own.

The missing ingredient that holds back departmental advice is imagination.

We have to create an APS where departments become ideas factories; ideas that have been properly researched and tested and that are only looking for objectives and values to be harnessed by the Minister or government of the day.

Ministers should take advice from their departments not because they have to but because they want to.

And it is a mistake for departments to underestimate the importance of policy advice; it is true that most of the APS is involved with compliance, regulation or implementing programs. But Ministers are largely unaware of this; they tend to judge a department by its policy advice capabilities.

It is also a bad outcome for Ministers, if departments believe that the Minister and the Minister's Office have policy under control and that they should simply wait to be told how to implement it.

The Secretary has a key leadership role to play in all of this.

Departments should be thinking ahead, anticipating crises that should not be wasted, and waiting for their moment to be useful.

Returning then to the Prime Minister.

Generally speaking, it is easier for the PM to sleep at night if he or she knows that Ministers are being properly advised by a competent and properly coordinated Australian Public Service (APS).

Also Prime Ministers have agendas and destinies; they want to leave a legacy which may or may not be supported by their Ministerial or party colleagues.

The Prime Minister will use his Office to this effect but his or her chances are immeasurably strengthened if the dotted line responsibility that now exists between all Secretaries and the Secretary of the Prime Minister's Department can be harnessed.

The Public Service Amendment Act 2013 provides for a Secretaries Board chaired by the Secretary of the Prime Minister's Department; this means that the modern Secretary is considerably more collegiate than Secretaries from the past; the Act also stipulates that the Secretary is the principal official policy adviser to the Minister.

The Prime Minister's Department exists to service the Prime Minister; it takes its priorities and objectives from the Prime Minister of the day.

The Prime Minister also determines the responsibilities of Ministers and their departments; in this way the Prime Minister can set the broad objectives of the government and hold Ministers to account. Over time, the Prime Minister will appoint Secretaries whom he or she respects and trusts and these Secretaries will be the principal advisers to their Ministers.

It is very much in the PM's interest that the Secretaries that he or she appoints be highly influential.

### *Conclusion*

One of Australia's great strengths is that because of the reforms of the 80s and 90s we have all the benefits that come from an economy that has to be globally competitive.

At the present time, this strength is forcing extraordinary structural change upon Australian industry because Australia's place in the world has changed. This change is beneficial to our

national wealth in aggregate, but significant sections of the community are being forced to deal with inevitable and rapid adjustment.

Much of this has happened but there is more to come.

The structure of the economy is changing and this has implications for the future skill and education needs of the workforce.

However it is a two way relationship. An expanding supply of skills, research and intellectual property will encourage knowledge intensive businesses to thrive, further strengthening the economy.

Unlike the reforms of the 80s and 90s which were all about making the Australian economy internationally competitive, the task for Canberra is in many ways more challenging now because it will require the Commonwealth to be particularly adept in how it manages universities, skills development and research, how it is funded and how all of that translates into the development of new businesses and the strengthening of existing ones.

At the same time, we have to deal with an imbalance in what the federal government spends and what it receives by way of taxation.

The fiscal imbalance has to be addressed but solving that problem will not help deal with the education, skills and research challenges we face.

We have to be able to deal with all the challenges.

What is needed is sophisticated and well considered decision making.

It is fair to say that Australia has developed a political culture where it has become common place for decisions to be taken in Ministers' offices with little or no departmental input or awareness. Departments end up with an implementing role.

Such a dishevelled approach makes governments look untidy and confused. But more importantly it stops governments achieving the outcomes they want; they make decisions without all the information and without fully understanding the consequences.

It may seem harsh, but much responsibility for this unfortunate situation lies with Departmental Secretaries.

Ministers and Prime Ministers should have the wisdom to appreciate that nobody builds a respected legacy on the back of a confused collection of reactive press releases and disjointed policy announcements.

Politics is a relative profession – you only have to be better than your opponent – but a legacy is absolute. All political careers end badly and to answer the question what did it all mean you have to have done things that left the nation a better place.

Secretaries have more authority than they think.

They can build imaginative institutions that Ministers want to consult and they themselves can be effective advocates encouraging their Ministers to do sensible things that are good for the Minister and good for the nation.

At the risk of feeding the cult of the Secretary, I can say that only the Secretaries can save the APS.

But at the end of the day, Prime Ministers determine how government runs in Canberra,

If the APS is to perform the key role that it should, then the Prime Minister needs to view Secretaries and the APS as important assets that strengthen the Prime Minister's capacity to manage an agenda and run an effective government.

Thank you for the opportunity to talk to you this evening and I would be pleased to take questions.

31 March 2014