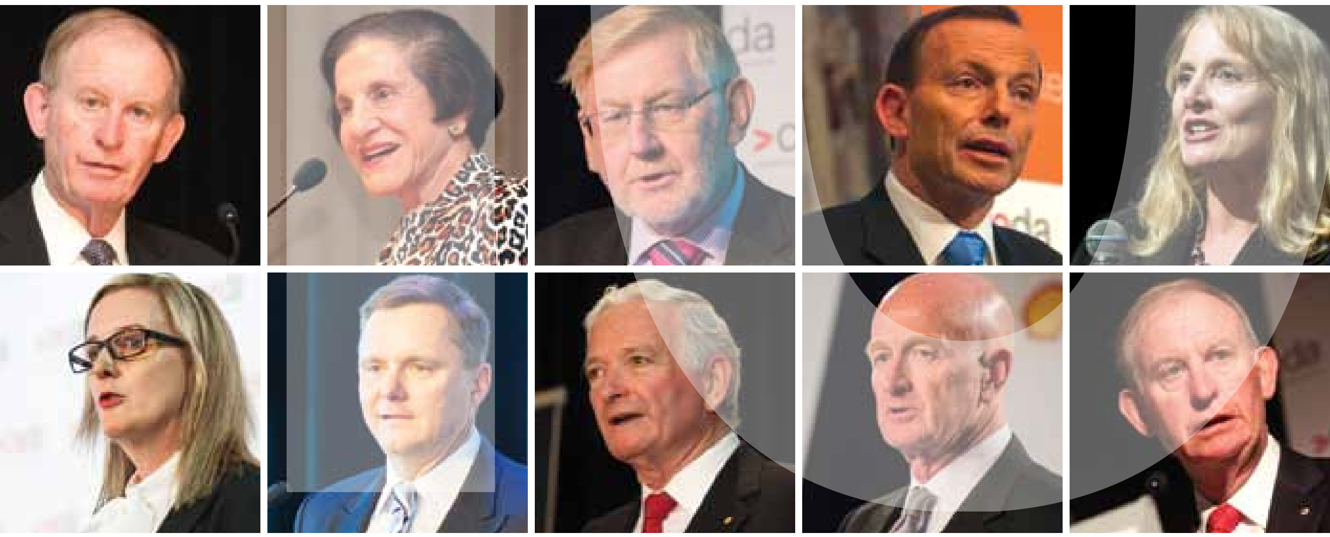

CEDA's Top 10 Speeches **2014**

A collection of the most influential and interesting speeches from the CEDA platform in 2014

ceda
committee for economic development of australia

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About this publication

CEDA's Top 10 Speeches 2014

ISBN: 0 85801 297 9

This publication is a collection of edited transcripts.

Designed by Robyn Zwar Graphic Design
Images: CEDA Photo Library.

About CEDA

CEDA – the Committee for Economic Development of Australia – is a national, independent, member-based organisation providing thought leadership and policy perspectives on the economic and social issues affecting Australia.

We achieve this through a rigorous and evidence-based research agenda, and forums and events that deliver lively debate and critical perspectives.

CEDA's expanding membership includes 700 of Australia's leading businesses and organisations, and leaders from a wide cross-section of industries and academia. It allows us to reach major decision makers across the private and public sectors.

CEDA is an independent not-for-profit organisation, founded in 1960 by leading Australian economist Sir Douglas Copland. Our funding comes from membership fees, events and sponsorship.

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committee for economic development of australia

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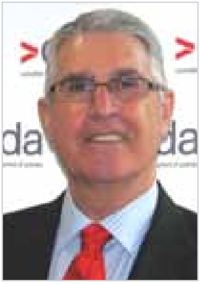


It is with pleasure that I present the third annual publication of the Top 10 Speeches from the CEDA stage.

Each year through this publication CEDA aims to provide a review of the range of critical issues discussed at our significant public policy forums.

In 2014, CEDA hosted more than 600 speakers, holding more than 300 events across Australia with a record-breaking 31,800 attendees, which confirms the quality of speakers and the content of their contributions.

As always, due to the high calibre and range of speakers CEDA has hosted this year, it has been an extremely difficult task to select only 10 speeches.

The speeches included in the publication are not ranked, but are simply in chronological order and this year the speeches selected discuss topics that fit into four key categories:

- Major emerging issues on the national agenda;
- Areas needing more focus for Australia to remain globally competitive;
- National agenda items requiring ongoing attention; and
- Those that provide a high level global or national perspective on our economy, and potential challenges and opportunities ahead.

I would like to thank all our speakers and attendees in 2014 for ensuring that the CEDA stage has again delivered robust, interesting and forward-looking discussion and analysis of the critical issues for Australia's economic and social development.

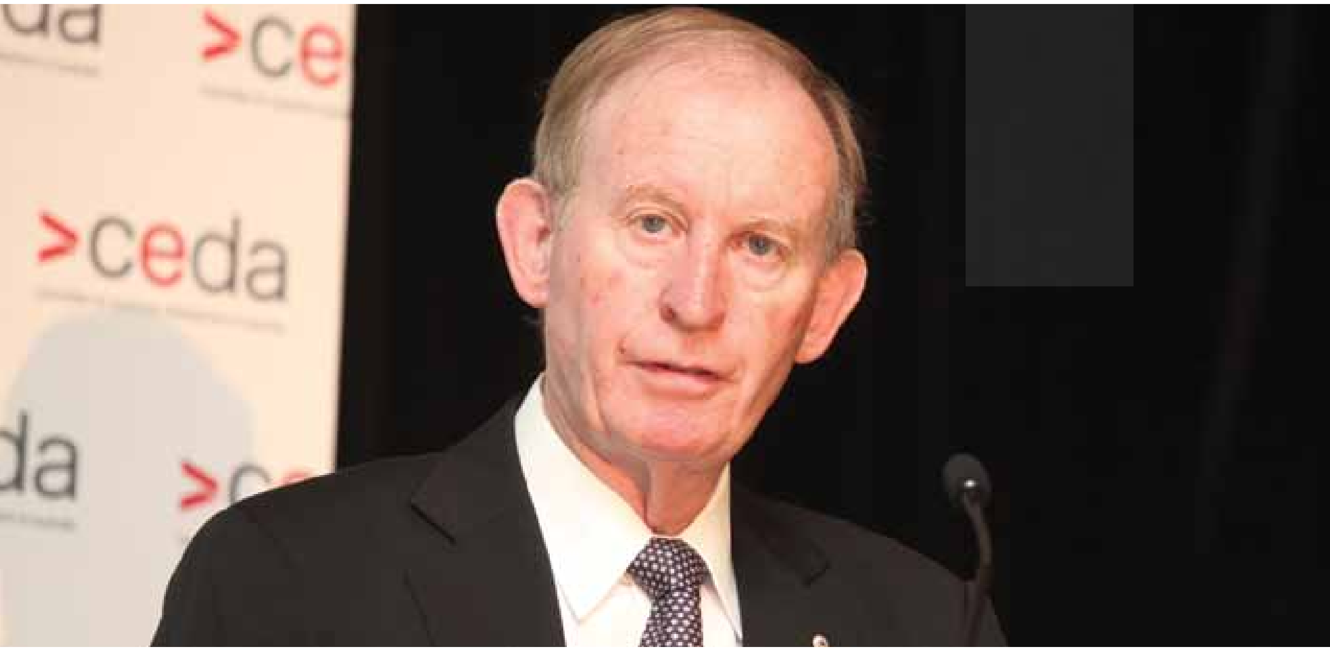
I hope you enjoy reflecting on these speeches and look forward to seeing you at a CEDA event in 2015.

Professor the Hon. Stephen Martin
Chief Executive, CEDA

> ECONOMIC AND POLITICAL OVERVIEW

> 14 FEBRUARY 2014

> SYDNEY



Financial System Inquiry: Supporting Australia's economic growth – Part 1

David Murray AO

Chair, Financial System Inquiry

In February, David Murray AO spoke at the CEDA Economic and Political Overview event in Sydney in his first address since being appointed the Chairman of the Federal Government's Financial System Inquiry (FSI). He provided an outline of the Inquiry's objectives and gave examples of issues it would consider, including competition and cyber security.

Let me start by thanking CEDA for hosting this event and, of course, the sponsor, and also for the work that CEDA does in promoting debate about the economy and what's good for us all. This is the first of a series of discussions I'd like to lead during the term of the Financial System Inquiry so that we can inform the community of the work of the Inquiry and its importance to our future economic development.

Regarding past inquiries we've had, Campbell was critical in fronting up to a complete deregulation of a formerly completely regulated system. The Wallace Committee is important because it took a further major step in the manner in which the system should be regulated. It is 16 years now since that Inquiry.

In the intervening years, the economy and the financial system have undergone some major and unforeseen changes. We know the economy expanded consistently for more than two decades and its terms of trade has been the highest in 50 years. Globally we've seen this shift in economic weight to emerging economies in Asia. Those economies have increased their share of world gross domestic product (GDP) by approximately 12 percentage points since 1997 and now account for about a quarter of world GDP.

Here, since the Wallace Report, we've seen a substantial increase in household indebtedness, a noticeable rise in Australia's net foreign liabilities and more recently, some deleveraging of the corporate sector. At the same time, the Government's net fiscal position has gone from being out of debt to being back in debt. These changes serve as a reminder that within the financial system we continually adapt to changing patterns of fund flows, the sort of invisible hand of our financial system. We know, as a consequence, the fundamental importance of that system to the Australian economy.

Throughout the same time span, Australia has undergone some changes. Some of these were as a consequence of the Global Financial Crisis (GFC). For example, one of the key tenants of the Wallace Report was that the Australian Government should not guarantee financial institutions. So who among us would have thought before 2008 that the Australian Government would one day have to guarantee bank deposits and wholesale funding?

Some of the other changes we've seen in the intervening years have been slower in coming about yet they still have significant implications for the way the financial system operates. Annual growth of the financial assets of government, businesses and households has averaged nine per cent since 1996. Growth in bank assets has averaged nearly 11 per cent over the same period. But in that time, nominal GDP has only grown at about 6.5 per cent per annum. Put another way: Why is the growth of financial assets continually higher than the growth of the economy itself?

Similarly, we've seen this rapid rise in the growth of superannuation funds. Those total $1.6 trillion in this year. They've had a compound annual average growth of 12 per cent since 1996 and, of this amount, $506 billion, or about a third. (I've got to check the maths as I go because in banking, maths is helpful if you're no good at it. The margin goes down if you're too good at maths.) So, about a third of this is in self-managed (superannuation) funds, which has had a compound growth rate of 19 per cent since 1996. Some of these trends were, of course, becoming apparent at the time of Wallace, but the passing of time has emphasised their significance for the financial system as a whole.

So the challenge for me and my colleagues on the Committee will be to evaluate the impact of these developments as well as to identify major drivers that will shape our system and its contribution to the economy for the foreseeable future. In turn, the quality of our work will very much depend on the nature and breadth of its consultation with industry – that is, how much interest we draw from the community, industry and end users of the financial system.

Today, above all, I want to encourage submissions on the issues in the terms of reference. I want to explain why this is so important to all of us by outlining, firstly, the context for the Inquiry. Second, I want to give examples of issues that we think we'll have to consider at this point. Thirdly, I want to explain the Committee's plans for the conduct of the Inquiry so that you're better informed.

In relation to the context, the treasurer in opposition proposed a comprehensive inquiry in 2010 as part of his intention to reform banking policy. This was prompted to some extent by concerns about the adequacy of competition in domestic banking. That was raised following increases in interest rates over and above changes in the official cash rate. It reflected some general concerns also about the legacy of the GFC.

As the Treasurer has since noticed, experience during the crisis challenged some of the key assumptions of the Wallace Report. One of these included the assumption that failure of financial institutions is a normal part of a market-based system and that governments should not guarantee them. While this may have been undermined to some degree by the response to the collapse of HIH Insurance, the financial crisis highlighted the difficulty of applying this principle and the extent to which taxpayers underwrote the stability of the financial system.

Other assumptions were also undermined by the crisis. For example, it had been implicitly assumed that crises and failures were more likely to emanate from within Australia rather than externally. It had also been assumed that markets are self-equilibrating and less prone to failure than individual institutions. One legacy of the crisis has been to question these assumptions, although it is not clear that we've landed on viable alternative positions.

Another legacy of the crisis has been a global wave of regulatory change with significant implications for Australia. For instance, we've revised our own standards in some areas to reflect global standards, for example, the Basel III changes. We've had to adjust to major regulatory changes in Europe and the United States (US), both of whom have become much more emphatic in asserting their jurisdiction over foreign market participants. So we've seen this withdrawal of boundary. We've witnessed long-term structural changes in the global economy and financial systems including the shift to emerging economies and the Asia Pacific region.

The effects of the crisis were also felt by many Australian retail investors who suffered substantial losses associated with the failures of financial firms or mis-selling of financial products. These consequences have called into question whether disclosure is effective. I'm also reminded with Steve (CEDA Chief Executive Officer, Professor the Hon. Stephen Martin) here that this is nothing new. Steve's inquiry (into the Australian Financial Services Sector in 1990-91) was significantly derailed by the foreign currency loan issue.

So it is against this background the Government has asked the Inquiry to do four main things:

1. To work on how the financial system has changed since 1997, including the GFC. For example, what have these changes revealed about the strengths and weaknesses of the system, remembering that, compared with elsewhere in the world, it has served us relatively well.

2. To consider what the developments since 1997 mean for Australia's regulatory philosophy. For example, do we still believe that the Government should not intervene to guarantee financial institutions? If not, what do we now believe?

3. To identify the likely drivers that will shape the financial system over the next decade and assess their potential implications. We know that it is notoriously difficult to forecast the future or even develop credible projections. However, it should be possible to assess the potential implications of some different scenarios.

4. To develop policy recommendations to ensure our financial system builds on its strengths and remains appropriate for the Australian economy. In this area, the Committee is particularly keen to ensure that we have a system that balances competition, innovation, efficiency, stability and consumer interest, and meets Australia's needs from the perspective of both the end users of the system and the institutions within the system.

I mentioned all of this context to emphasise the importance of the Inquiry in developing a policy blueprint for the Australian system in a post-Wallace, post-GFC world. A blueprint needs to take into account a broader role and many interdependencies in the financial system, which explains why the broad terms of reference in the Inquiry are both necessary and valuable. The blueprint is intended to ensure that the financial system is fit for purpose to promote growth and productivity in the economy over the foreseeable future.

So, turning to my next point, inevitably there'll be many themes we'll need to consider. I'd like to pick on three of these today by way of illustration. The advantage of doing this is to spark debate. I've been accused of sparking debate in the past, often to my own detriment, but here we go. Also I must pay tribute to the media who've been publishing submissions already, none of which, of course, carry any element of self-interest. The first of these themes is the funding of the economy itself. One view is the economy will fund itself one way or another inevitably. The markets will do that.

Another view is that there may be circumstances where funding of the economy may be at risk with issues of contagion and loss of confidence, potentially causing significant structural damage to the economy. Irrespective of which view you take – and we welcome views – what matters is the quality of the funding of the economy. In that regard, the Committee will be interested in the efficiency of the financial system itself and how it can improve productivity to its operations in the economy generally.

Equally and perhaps more importantly, the Committee will be interested in the allocative efficiency of the financial system in funding the economy. For example, we'll be interested in how well the economy funds small and large businesses, households, governments, agriculture, industry, infrastructure, new and developing ventures, whether these are in urban or regional areas in Australia. An issue will be whether there are distortions in the system that favours the funding of users and/or providers of capital over others.

The Committee will also be interested in the dynamic efficiency of the financial system. In other words, if the system is continuously adapting with new types of claims and obligations better suited to the issuers and holders of financial security. For example, there's been discussion for some time on the development of Australia's bond markets, or lack of development; the nature of our venture capital markets, whether they could be more exciting than they are and the mechanism for funding infrastructure. Also, there have been interesting innovations in the not-for-profit sector such as social bonds.

One aspect of this issue is the growth of superannuation funds that I referred to earlier. Here, for example, we're interested in the manner in which these funds are invested in the economy because that itself is very important to questions of allocative and dynamic efficiency.

In considering these issues that I mentioned earlier, the next one I want to cover is the balance between stability, competition and efficiency objective. The Committee will need to examine the state of competition in banking payments, insurance funds management and financial markets, and whether it drives or impedes efficiency – that is, both administrative and allocative efficiency.

A key issue in this area will be the impact of regulation on competition, including whether firms face a level playing field. Moreover, regulation can promote competition, for example, by helping consumers make more informed decisions. It can also create barriers to entry and increase compliance costs without varying outcomes for financial institutions of different sizes. More broadly, we need to consider whether we have the right balance between competition, stability and efficiency.

In the wake of the crisis, it's not surprising that the focus of regulators and global standard setters has been on stability rather than competition. Accordingly, we'll be very interested to examine the extent to which stability objectives might hinder competition or even perhaps in some cases promote more competition and reduce systemic risks. Inevitably the object of regulation for stability creates a cost to the economy. We would welcome views on the trade-off between these objectives.

The third illustration I want to make is about technology. I recall that in my banking career, we used to often discuss, not just the way in which banks add value to the economy, which we knew internally was very, very strong but externally mightn't have been as well regarded, but the issue is what do we actually do every day to undertake that process? What we figured out was that banking is about keeping books and passing messages. This is why it's just not as exciting as some other fields. It's also why it's a business that is somewhat intangible in its nature and hard to explain. If the keeping of books and passing of messages, which is also fundamental in other aspects of the financial system, is what actually happens, it's not surprising that the development of computing and communication technologies in recent history should have a profound effect on the system.

Perhaps we should bear in mind that these computing and communication technological changes have been one of the greatest generally applicable developments in technology that we have ever seen and that we are still working through. It is still working through its way on all aspects of industry. Some of the more obvious impacts involve high-volume payments and trading and settlement systems, for example, the decline of cheques and the popularity of mobile or compact options. At the end of 2013, the use of cheques was around one-third of 10 years' earlier. This may mean that we will stop using cheques in material numbers by 2020. We'd be very interested in whether government can assist that process of change and make more out of technology.

Another example is the ascendency of automated trading in our equity markets where trading is now in microseconds. In the three years to December 2013, the order-to-trade ratio on our main equity markets rose from 5.8 to 8.6. The number of orders nearly doubled from 3.2 million to over six million per day. The average trade size dropped from $9300 to $5300. However, the overall impact is much wider than these types of activities.

Technology opens up the prospect of self-service. It also facilitates more effective management of highly complex asset/liability management systems with large volumes of data in very short periods of time. It assists managing large volumes of client data to continually hone financial product offerings, sometimes for the better, sometimes for the worse. But, of course, new technology carries adjustment costs and new risks. One such risk is the security challenge, which the Committee would like to consider.

I hope that the reference to date of technology in some selected scenes helps understanding of the complexity of the financial system and the importance of our work, and adds to the debate by prompting some thoughts for you. There really is a more exciting opportunity for us to take from this Financial System Inquiry. The work of the financial system is necessarily intangible. Addressing such concepts as the intermediation of time, amount and default in banking – this is not a concept that you can get across on the *7.30 Report,* the intermediation of time, amount and default. But it is that intermediation process that actually creates a value to the economy that could not be created another way.

Another is the adverse selection in insurance. Ask anybody who has tried to claim for flood damage or the social discount rate that encourages superannuation savings. That is, it's not apparent when I'm 20 and indestructible why I should save for my future. Because these concepts are not easily understood, the mismatch between the true value of the financial system and the perception of its value in the community adds pressure for ad hoc policy decisions which can easily incur more costs than risks to the detriment of the community.

Because our terms of reference are broad, because the Treasurer wants us to consult widely and because there's been so much written since the crisis, we have a unique opportunity to close that gap between reality and perception, and increase education in the system. Taking that opportunity will be much easier if we get submissions of high-quality, thoughtful arguments and realistic suggestions to back them up. We're going to do our bit in encouraging that. I want to emphasise that the Inquiry tends to be as consultative and open as it can be. We haven't got a predetermined starting position. We'll be taking a proactive approach in seeking views from the community and encouraging debate. The Committee and the secretariat intend to hold ongoing meetings with the community. Our consultation will include international engagement and gaining perspectives from the ideas of the Inquiry's international advisory panel foreshadowed by the Treasurer.

We intend to produce an interim report mid-year in which we will describe the system, summarise views and present the issues from the submissions, and present issues with different ways of responding and managing them. We'll then call for further submissions before completing our final report and recommendations to the Treasurer in November.

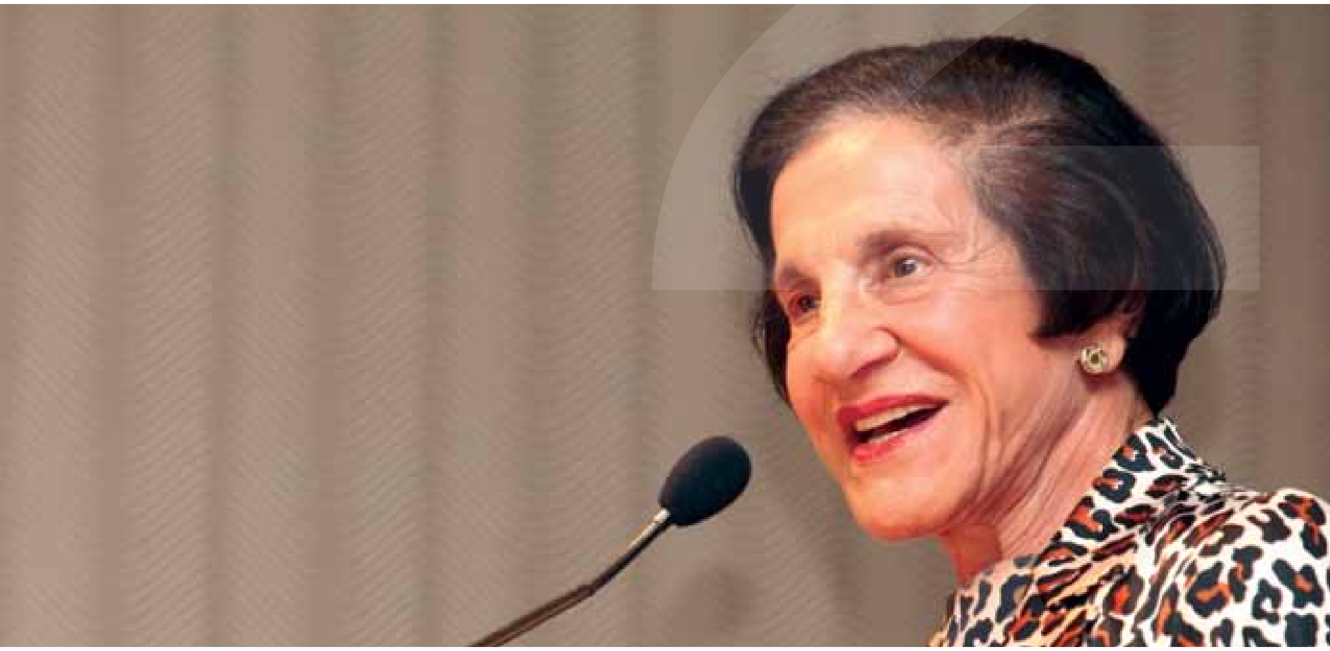
In undertaking this work I'm privileged to have such an expert group on the Committee. Carolyn Hewson, (Dr) Brian Mcnamee, Professor Kevin Davis is with us and Craig Dunn who's with us today. We're aided by the International Advisory Panel and an expert secretariat headed by John Lonsdale from the Treasury.

That said, our work will only be as valuable as the breadth and quality of its submissions allows. Accordingly, I encourage as many submissions as people would like to make from any quarter. I encourage a robust, high-quality debate with Australia's best interests at its heart.

> WOMEN IN LEADERSHIP

> 28 FEBRUARY 2014

> SYDNEY



Perspectives on women in leadership

Her Excellency Professor the Hon. Dame Marie Bashir AD CVO

Former Governor of New South Wales

In the opening session of CEDA's *NSW Women in Leadership* series, then Governor of New South Wales, Her Excellency Professor the Hon. Dame Marie Bashir AD CVO, discussed her perspectives on women in leadership roles.

Delivered prior to her retirement as the longest-serving Governor of NSW, this speech has been included because it provides insight from a pioneering female leader in Australia on what is important to make a good leader.

It is a pleasure to join you for this special gathering, at which I have been asked to provide some perspectives on leadership, and in particular, women in leadership. While leadership is a concept which conveys to me very complex implications, it is indeed appropriate that we meet on this issue – on one hand, women who are considered to have a significant role in leadership and the many younger women who have potential for leadership; and myself on the other hand who has had the honour to be appointed to the oldest, historically speaking, leadership position in modern Australia, a position established at the time of the first European Settlement in Australia, 226 years ago.

It is not easy for me to speak about leadership, for in recent times idealists have tended to become cynical and disappointed about what constitutes genuine leadership, particularly in the international environment, and especially when the destiny of millions of people are at stake. However, good leadership models – often the finest models of leadership especially with women – emerge quietly when unobserved; and I am sure that you will have experienced this already from earlier decades in your life – teachers who brought out the best in you through encouragement and stimulation, and fine role models among your peers – and of course among family members. And certainly your own efforts including intellectual development; these powerful ingredients must never be underestimated.

Perhaps you will allow me to summarise the issues to keep in mind which I consider important and helpful for women destined for leadership:

1. Have a positive – but not arrogant – attitude. Expect to do well and to be fairly treated on your merit, your non-materialistic efforts, if you consistently complete your expected task. Where demand beckons, go beyond it. Do not expect gender bias. It is significantly less than a decade ago, and diminishing rapidly – even in our armed services. These changes have come about in the societies where gender equality is growing because of the impact of education – education across the wider community. And also from the example of impressive models such as Angela Merkel, Chancellor of Germany, and Christine Legarde, Managing Director of the International Monetary Fund.

2. Provide, and expect in return, open, clear, and informed communication, mindful of the disadvantages, as well as the advantages, and the costs of what you are proposing as leader.

3. Never gossip, or share confidences or comments about a colleague. There is a high risk of being quoted somewhere later, possibly in a gravely distorted form, which can be very destructive to team cohesion, as well as to one's reputation as a trustworthy professional.

4. Continue the learning process, whether informal continuing education, or through postgraduate courses. Lifelong education is life enhancing, I believe, and wards off the ageing process. And people from minority groups can educate you informally on key issues long before you see them published in special reports or even in speculative reports in the newspapers.

5. Know what is happening, and also the key attitudes prevailing, in the economic sector of the wider community.

6. Encourage and support peers and junior team members. Good leadership will nurture their professional development and psychological equilibrium. It is part of nation building. I recall Mao Tse Tung's pragmatic and wise assertion: "women hold up half the sky".

7. Provide or arrange a mentor relationship for those young people who may not yet have developed an adequate level of self-confidence. This particularly applies to colleagues from an indigenous, refugee, new immigrant or disability background. Don't be reluctant to recognise that a good leader can be a caring and nurturing person. And also that success and promotion can be very anxiety-provoking for some, and supportive mentoring can be priceless. This may have particular relevance for certain ethnic or religious subgroups where societal expectations for women may be more constrained than in the wider community and impact even on career choice. But courageous examples which refute this generalisation are seen from time to time, for example, women in aeronautical and space engineering.

8. Good leadership does not ignore situations of conflict within the team. It is important to conduct sensitive interviews to identify the real problem. If the situation in a team has become complex and destructive, seek the assistance of someone skilled in conflict resolution. If a colleague leaves to go on to a superior appointment, this reflects well on the leader and the team. But if someone leaves who is disgruntled, exit interviews conducted with respect and confidence following resignation can be constructive, and can alert you to developing concerns.

9. Caring for one's own health and emotional wellbeing – and also appearance – is all important. That includes no smoking and a healthy diet. Contain stress levels. And enjoy looking good.

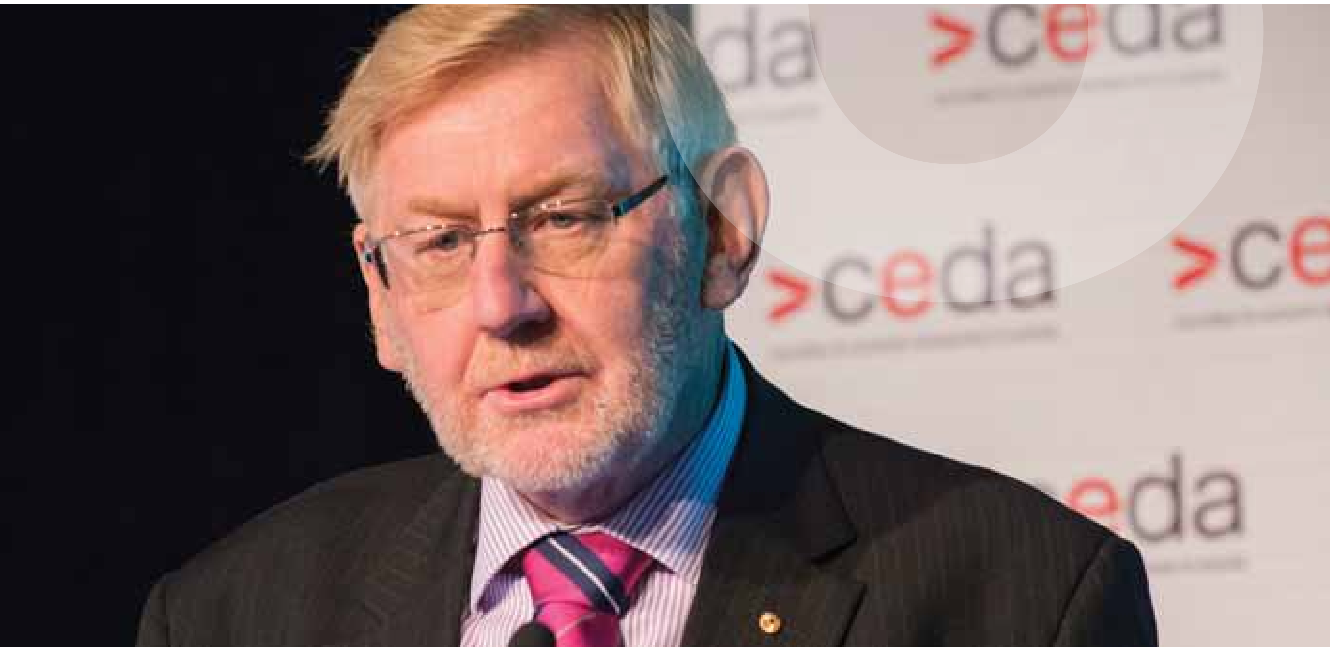
10. Make sure you have some joy, something or someone to turn to during periods of major stress. A truly trusting friendship is life-enhancing, as are the cultural riches of music, the theatre, or sport.

I am sure that each of you will find your own special qualities which are contributing to your good leadership. My best wishes are with you all as you face the challenges ahead.

> ENERGY AND RESOURCES

> 28 FEBRUARY 2014

> PERTH



Competitiveness of the Australian gas industry

The Hon. Martin Ferguson AM

Chair, Australian Petroleum Production and Exploration Association Advisory Board

In this speech, the Hon. Martin Ferguson AM discussed the Australian oil and gas industry, its contribution to national prosperity and the increasingly harsh global economic environment.

This speech has been included because as the terms of trade continue to fall following the mining boom, it is important that we re-examine how this important sector can remain globally competitive.

His speech explored ways to close the competitive gap that has opened up between Australia and overseas producers, including addressing Australia's high labour costs and low productivity.

Today I will discuss the Australian oil and gas industry in our national economy. I'll outline the industry's widely underestimated contribution to our national prosperity, and how in coming years it can contribute even more to our economic future. I will discuss how the global economic environment is becoming harsh for Australia and how our country's business environment is now in transition. I will outline why industry and governments in Australia must adapt.

Ladies and gentleman, our country has experienced a remarkable run of economic growth, more than two decades without a recession, quite an achievement that we can all be proud of. Australia's gas export industry has become one of Australia's most important economic opportunities. It is experiencing unprecedented growth and transformation driven by Asia's insatiable demand for clean, safe and reliable energy. Yet I, unfortunately, think the liquefied natural gas (LNG) story is poorly understood by many Australians. Too few people and too few political leaders recognise the benefits to Australia are enormous.

In 2011–12, Australia's LNG cargos earned almost $12 billion in export revenue and put $29.4 billion into the Australian economy. In the same year, the oil and gas industry also paid more than $8 billion in tax. Importantly, the industry contribution is set to grow substantially because $200 billion worth of new projects are today under construction. This investment has generated more than 100,000 jobs across the Australian economy. Within a few years our country could overtake Qatar as the world's leading LNG exporter. It is expected that, by the end of the decade, the industry's annual tax revenues will be more than $12 billion.

So we have an industry that is already a huge success and something that all Australians should be proud of. But Australia's LNG industry also has the potential for a further $180 billion in investment over the next 20 years. This would create up to 150,000 new jobs. In Western Australia (WA) alone, Gorgon could potentially have a fourth production chain, and new projects including Browse and Scarborough are being considered. If Australia can secure the next wave of LNG development then we must adapt to the macroeconomic changes afoot.

When you think back, when the Australian Petroleum Production & Exploration Association (APPEA) last hosted its annual conference in Perth only three years ago, the future of LNG investment in Australia was blue sky. Construction of Gorgon was underway. Prelude, Wheatstone and Ichthys would all receive final investment decisions within a year. Browse was being planned as an onshore LNG project.

Next month, I'm pleased to say, APPEA returns to Perth. But unfortunately things look very different. International competition is growing. Australia's international competitiveness is declining. Our capacity to build seven LNG projects on time and on budget is under serious question, not just in Australia but unfortunately in the boardrooms of the many overseas companies who make those final investment decisions. You and I appreciate that advances in technology have caused a huge surge in North American gas production and massive gas fields have been found off the coast of East Africa. Companies operating in Canada, the United States (US), Mozambique and Tanzania are advancing plans for LNG projects targeting our markets in Asia.

Last year unfortunately, a McKinsey report showed Australian costs for delivering LNG to Japan, our traditional market, are up to 30 per cent higher than competing projects in Canada and Mozambique. Rising costs in this country mean onshore development is no longer viable for Browse and major expansions of existing projects are no longer as certain as they once seemed. I consider that there is a very real danger that Australia may be pricing itself out of the global LNG market. There is a very real danger that we mightn't actually get our house in order to attract that investment in the future.

By way of example, here's a sobering point: Floor price global demand for LNG is 470 million tonnes per annum by 2030. More than 200 million tonnes in new capacity will be needed to meet that annual demand. But plans exist for more than double the number of LNG projects needed to meet that demand. Clearly not every project on the world's drawing boards will proceed. And that's the challenge to Australia. Competition for global capital will be fierce. It's not just the LNG sector that is finding things tough. Australian terms of trade are falling. Our manufacturing, processing and the tourism industry are struggling.

At such a time we need as a nation to reflect on the fact that Australia has had almost 23 years of uninterrupted economic expansion. We need to reflect on this success and the fact that it's built on a shift from protectionism towards open markets. Australia became much more internationally competitive thanks to good policies, leadership and an endeavour to actually encourage productivity and innovation. I must say, I'm proud to have had a role in helping develop and implement the reform agenda, both as President of the Australian Council of Trade Unions and as a federal minister.

However, it does sadden me that this legacy is now under threat. Perhaps our success has made us complacent as a nation. Certainly many of our leaders and commentators have forgotten the lessons of history. Yes, there are specific policy changes that would help the oil and gas industry develop our national petroleum reserves for the benefit of all Australians. But there is no point in making reforms in one sector if we allow backsliding across the whole economy.

There are increasing signs that Australia is regressing towards a new phase of inefficient regulation and of increasing government intervention in business. Veteran manufacturing sectors have returned the call for protectionism. A radical environmental movement has arisen that despises market economics. It is unfortunately adept at creating fear campaigns to advocate for new layers of unnecessary regulation. Regulatory processes for approving progress are becoming increasingly inefficient and there are a series of weaknesses in the development of a skilled workforce and support for industries' supply capacity.

My friends, this is not the time for anyone to be reverting to a mid-20th century mindset, or adopting the view that somehow we can integrate with the global economy on our own terms. When the terms of trade and our competitors grow stronger, there is only one way to maintain, let alone increase, our prosperity. We, as a nation, must fight to improve productivity and reduce the costs of doing business in Australia. Australia's economic strength will not be underpinned by the propping up of unsustainable sectors or by any government subsidy or handout. Strength will come through policy and reform that makes it easier for business to invest with certainty. Therefore, we must reduce red and green tape, commit to a market-based economy and re-evaluate how our workplace relations framework influences access to labour and how it affects the economic viability of new projects.

You and I know that the oil and gas industry is regulated by around 150 statutes and more than 50 agencies. Its regulatory burden unfortunately continues to grow. The Productivity Commission has estimated that unnecessary regulation could be costing Australia around $60 billion, or four per cent of gross domestic product (GDP), each year. Less intrusive regulation will stimulate business activity and increase revenue from tax and royalties without diminishing environmental standards. The Federal Government's move to establish a framework for a one-stop shop to streamline environmental approval processes is therefore a very sensible reform.

APPEA is also pleased that most Australian governments have rejected calls for the protectionist policy that is gas reservation. And we should call it for what it is. It is protection and it's about time the manufacturing sector started walking away from that campaign. I simply say that policies that manipulate gas markets to deliver non-commercial outcomes would deter further investment in gas operations in Australia. This type of subsidy doesn't just harm the oil and gas industry but it also hurts residential, commercial and industrial customers.

I'm also pleased that the national mood appears to be swinging towards sensible industrial relations reform. High labour costs and low productivity are an unsustainable mix. Therefore, elements of the *Fair Work Act* must be looked at. Change is never easy. It can be disruptive and is usually resisted. But, unless we are prepared to see unemployment rise and living standards fall, we must improve productivity. However, the activities of the Maritime Union of Australia (MUA) with regard to the current Vessel Operator Enterprise Bargaining Agreement here in WA are particularly short-sighted. The way in which that particular union leverages its bargaining position threatens the economic prospects of its members and the state as a whole. The manner in which the union conducts its industrial agenda will have major impacts on productivity.

It demonstrates the need for a clear-eye assessment of the *Fair Work Act* with regard to some key issues:

1. Firstly, the continued ratcheting up of wages and conditions under Greenfields agreements with the last agreement outcome becoming the starting point for renegotiations over the next one.
2. Secondly, the scope of matters that can be included in enterprise agreements and over which legally protected industrial action can be taken. This has meant restrictions in some circumstances over the use of contractors and other productivity-enhancing measures.

3. Thirdly, the nominal life of enterprise agreements, at typically three to four years. This is far too short for major projects like those in the LNG sector. It effectively means a renegotiation point often coincides with a critical point in the project time such as on Curtis Island or Gladstone at this very point in time.

As a country I consider that we have to be hungry for investment and the jobs that go with it. We need to think about our workplace relations system and how we can attract investments. It is in this context that the current debate about the reintroduction of the Australian Building Construction Commissioner (ABCC) should be conducted. Rather than seeing the ABCC as a tool that allows one side to get an upper hand over the other in some never-ending ideological skirmishes, it should be seen for what it was: a mechanism that holds both sides to account and which can help deliver projects on time and on budget.

If our international competiveness is put under the microscope, our priority should be to keep people employed by ensuring we are attractive to investors, both domestic and international. As the son of a bricklayer I know a thing or two about the building industry. Well, it is time that some of today's union leadership recognise that their members' long-term interests are aligned with their long-term job security. Certainly the objectives of the *Fair Work Act* also need to be examined to make sure they truly reflect the need for Australia to be internationally competitive for major capital projects.

APPEA believes that we need to look at building special purpose-built provisions. This could include a new category of agreement that will give project developers more long-term confidence about their workforce costs and the capability of attracting those large investments that hang in the balance. The Government has tabled some changes to the *Fair Work Act* to bring into effect their pre-election policy commitments. To be fair, while the changes are a step in the right direction, they are really quite modest and timid. I urge the Government to keep an open mind on the need for further reform in this area.

APPEA acknowledges that, as a representative body of the oil and gas industry, it needs to be prepared to do more than talk about the problem. It also needs to develop some proposed solutions and it is actively involved in that at this very point in time under the leadership of (APPEA Chief Executive) David Byers.

Ladies and gentlemen, this is a matter in which APPEA, in conjunction with likeminded groups such as the Business Council of Australia (BCA) and the Minerals Council, will be doing further development work in the coming months and you will be hearing more about this over time. A workplace relations system that drives investment to other countries is in nobody's interest, certainly not those union members and their families who'll be bargaining themselves out of a future. We must change our policy framework and our business environment. We must do new things or old things must be done in a better way. We must innovate, both in business practice and in technology.

On that note, can I say that the oil and gas industry has a long history of innovation. In actual fact, it's prided itself on its achievements. It is one of the world's most technologically advanced industries. Technological shifts have helped this industry find and develop resources that once were considered unreachable or uneconomic. In essence, they were stranded. In recent years, innovations such as horizontal drilling have enabled the production of gas from shale rock in the US in some coal seams in Australia – $60 billion worth of investment in Queensland of that industry at this point in time – which was not even thought about in December 2007 when I had the first ministerial responsibility to the industry. What an achievement for Australia.

You also think about less than a decade ago it was widely believed that eastern Australia didn't have enough gas. Plans were being developed to pipe gas from Papua New Guinea (PNG) to Queensland. I remember being spoken to about that with the shadow minister in the lead-up to our election in 2007. But some pioneering onshore gas company said that they could use gas from coal seam investment. Not only has the PNG gas pipeline been scrapped, but the State is now developing a $65 billion export opportunity.

Australia also has the potential to export natural gas held in shale rocks in WA, the Northern Territory (NT) and South Australia (SA). The challenge is for New South Wales (NSW) and Victoria to also sign up to those opportunities. I'm pleased to see the governments in those jurisdictions of WA, NT and SA support their onshore gas industries. Please talk to your minister and premier or colleague in those other states of NSW and Victoria.

This takes me to the next major innovation in Australia in terms of the oil and gas industry. That is the floating LNG here in WA. Shell's Prelude LNG project will develop fields 200 kilometres off the coast of WA. This will be the largest vessel built in human history. It is designed to withstand a category five cyclone. That's what I mean by innovation. The floating LNG innovation is exciting because it actually enables development of reserves that were otherwise non-economic and in essence, as I understand it, stranded. It's true that floating LNG projects cannot be subject to the state-based gas reservation policies. Well, I simply say that gas reservation is bad policy and floating LNG's inability to co-exist with flawed policy should not be the criteria against which it is judged.

It's true that floating LNG technology construction creates fewer construction jobs than an onshore gas plant does. But developing these fuels will create jobs and tax revenue that Australia wouldn't have otherwise been able to access. Once an LNG plant starts operating it requires more support staff than an onshore plant. Many of those will be high-skilled, high-paid jobs. More importantly, these are long-term jobs. WA is very fortunate. An entire new industry. And that's what Australia's got to be about: new industries. That's what the Asian Century White Paper was about. Where is our future?

Well, here in WA you're on the verge of grabbing a new industrial opportunity for Australia. Floating LNG will emerge and your requirement to actually service this industry must be top of mind. It will create well paid jobs and offer training that will take Australians around the world. We will become the world experts sought after by other nations as they develop floating LNG technology. I actually consider it an exciting innovation. And the responsibility of government is to chase it, not resist it, to embrace it and to make sure that those involved are willing to take the risk to actually develop these new technologies, have the support of government and the support of the broader community.

For those reasons, it will also require us to change the way we think and operate. But it will open new doors to Australian businesses and workers. My friends, we shouldn't fear innovation, nor should we fear change. Innovation has increased economic security for Australia and its acuity and enhanced our prosperity. Innovative policy reforms introduced in the 1980s and 1990s transformed our business environment and took Australia from being a closed shop, an inward-looking nation, to a prosperous nation that is actually prepared to be part of the global economic community. It is not the time to retreat into our shell. That is the worst approach we could take when times get tough.

We are challenged as a nation at the moment as we go through a period of transition, no different to what the Hawke and Keating governments actually had to take on in the '80s and '90s. We therefore must get serious about closing the competitive gap that has opened up between Australia and our rivals. It's no different playing football or cricket. We're out there chasing investment. Our job is to win that investment, not to come second.

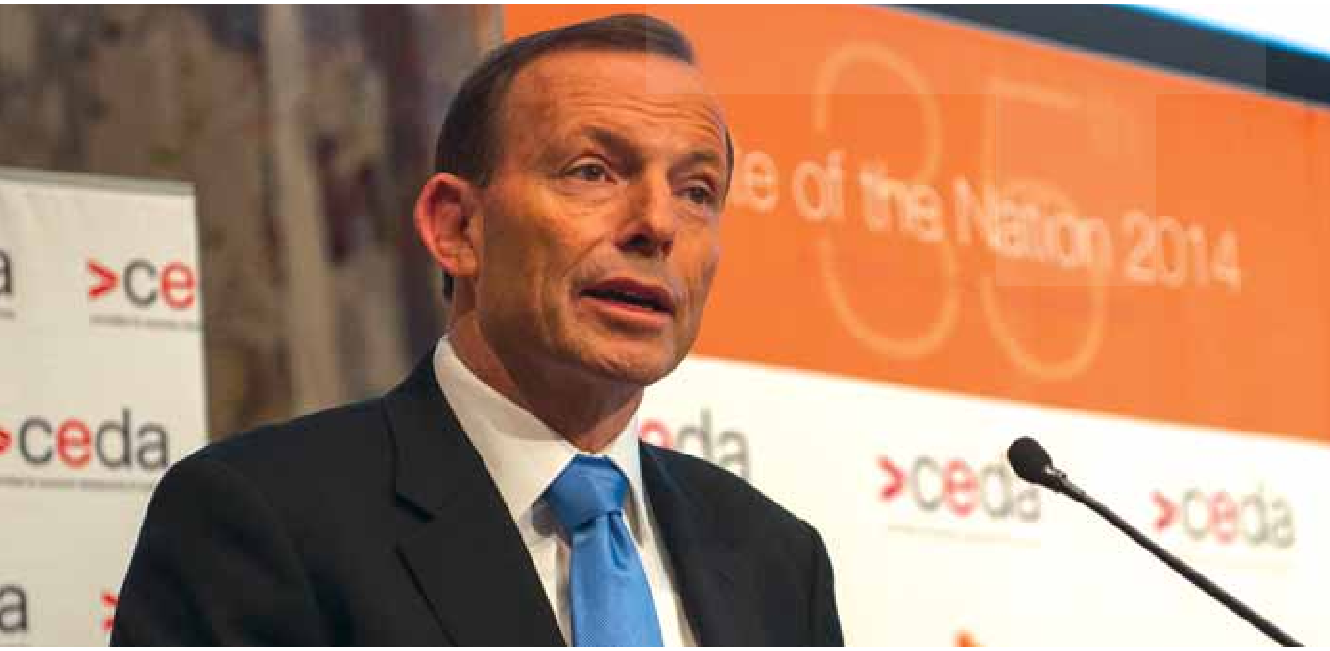
I simply say that, if we get our act together, more LNG projects will be developed here in Australia. If we get our act together, and it's our joint responsibility led by APPEA, our nation will become more competitive across the board and we'll extend our run of prosperity that we are so proud of.

Can I say in conclusion that the opportunity is before us but, if we don't grab it, we will lose it. And that's the challenge out of my responsibilities at APPEA at this particular point in time.

> STATE OF THE NATION

> 24 JUNE 2014

> CANBERRA



State of the Nation address

The Hon. Tony Abbott

Prime Minister of Australia

As part of CEDA's annual *State of the Nation* conference at Parliament House in Canberra, Prime Minister of Australia, the Hon. Tony Abbott, discussed the Coalition Government's objectives for its term in office.

In his first appearance on the CEDA stage since being elected Prime Minister in 2013 and a month after the 2014–15 Budget was released, the Prime Minister provided an important overview of the Government's budget measures for the CEDA audience.

Ladies and gentlemen, it is a real thrill to be here because this committee of yours, this Committee for Economic Development of Australia, has for a very long time now been one of the best forums for the development of serious thinking about where our country is going.

For over 50 years, CEDA has helped to drive debate about our country's social and economic development. Now most people have an opinion about what's best for our country, unsurprisingly it's often whatever's best for the person expressing the opinion. But because CEDA has no institutional self-interests to push, it has been better than most at taking a long-term view focused on what's genuinely in the national interests.

The decisions that we now acknowledge have shaped our country and have set up our prosperity have often been unpopular in the short-term, and initially difficult for the governments that made them.

Prime Minister Menzies, for instance, opened up trade with Japan at a time when Japanese cars were still banned from RSL club car parks. Prime Minister Whitlam opened the door to China when many Australians thought that communism and trade could not mix.

Prime Minister Hawke's opening to foreign banks, privatisation and tariff cuts were deeply unpopular inside the Labor party. Prime Minister Howard's tax reforms, waterfront reforms and welfare reforms were ferociously opposed by the then opposition.

It's always easy to pander to fear and short-term self-interest, but Australia has succeeded because at least some governments have been better than that. Especially between 1983 and 2007, a golden quarter century of political courage and economic reform. Good governments from both sides of the political fence made Australia more competitive, more innovative and more productive.

As this State of the Nation conference meets, we again see tough choices that will lay the foundation for a stronger Australia. What must surely be clear is that doing nothing is not an option.

In 2007, the Commonwealth Government had a $20 billion surplus and $50 billion in the bank. But by 2013, consistent surpluses had turned into the sixth-biggest deficits ever – with no end in sight – under the policies of the former Government, despite the best terms of trade in our history.

The former Government was addicted to borrowing and spending. In real terms, spending grew almost twice as fast as the economy, and debt was forecast to grow to $667 billion, so the task for this Government has been to get spending down while maintaining and even increasing economic growth.

We do need to boost the three Ps – population, productivity and participation – without taking the soft option of pretending to do so just by spending more.

So, today, I want to focus on the Government's measures to encourage more people to join the workforce or to stay in the workforce. But first we need to be clear about the scale of the challenge. Longer lives are a cause for celebration – I'm celebrating more the older I get – but all of these extra retirees have to be paid for.

The ratio of working-age people to people over 65 will decline from 5:1 to under 3:1 by 2050. So to preserve generous social security benefits and good health and education services, we need relatively more taxpayers. We have to find ways to increase the proportion of workers in our economy. We need more people who are 'having a go' to preserve the fair go that has always been such a crucial part of the Australian way of life. And we need to start addressing these issues now, and changing policy now rather than later when change will be even harder.

Policy drift is the refuge of the political opportunist who has forgotten the purpose of public life. Now, almost everything that this Government does is designed to ensure that more people have jobs. But there's a right way and a wrong way to boost the number of jobs. More government spending might boost employment in the short-term, but in the long-term, more government spending usually makes it harder to sustain the profitable private businesses that are the real engine of jobs growth.

Lower tax, less red tape and green tape, and freer trade are the best and the most successful means to higher economic growth and more jobs. But in particular, we need to make it easier for young people, for older people, and for women to enter or to re-enter the workforce, because these are the groups with the most potential to boost employment participation. Lifting participation among these three groups is an important economic outcome that would help offset the pressures of an ageing population.

Over 60 years ago, Sir Robert Menzies put the case for greater workforce participation. He said, “a job is much more than a source of income; it is also a source of personal satisfaction and individual dignity. The pursuit of happiness lies along a self-made road, seldom along a road made by others, no matter how good their intentions. The sense of individual dignity which comes from doing a job, gives to the doer the personal satisfaction of helping oneself rather than having to rely on a social security benefit.”

So the policies of this Government are very much in the tradition established by our distinguished forebear. You’ll note that Menzies wasn’t just referring to more self-reliant people; he was celebrating more self-fulfilled people. This Government is not promoting more jobs because that’s what economic theory tells us to do. We are promoting more jobs because that is most likely to lead to happier, more self-fulfilled people. We are building a stronger economy because that will lead to a happier society. Empowered citizens can do more for themselves than government will ever do for them, and the best form of empowerment is a job.

My friends, work is so much more than just a way to gain a living. Work gives people’s lives meaning and purpose. Work gives individuals the satisfaction of providing for themselves and their families. Work helps to give people the practical, intellectual and social skills needed for a full and rewarding life. Indeed, the camaraderie of workmates is something that we don’t often appreciate fully until we don’t have it anymore. To be without work is a disaster, especially for young people. It locks them out of the economic and social mainstream of our community. It stops them achieving their potential. That’s why there’s no compassion in having people start their adult lives on unemployment benefits. Even in difficult times there’s little that’s more satisfying than finding a job, making a success of it and providing for yourself. That’s why all fit young people should be earning or learning, and expected to persevere for six months to find a job or to choose a further training program before accessing welfare payments.

That’s why all young people who do find themselves on unemployment benefits should be working for the dole. Fit young people should be working, preferably for a wage, but if not, for the dole. So from 1 January next year, new jobseekers up to the age of 30 will have to look for a job for six months before receiving unemployment benefits. Young people who have been working will wait a shorter time because they have been having a go and making a contribution, and of course there’s no change to access to income support for young people in education or training, or for young people with a significant disability or parenting responsibilities.

But these changes do mean that the days of doing nothing on the taxpayer are over. Gone. The era of something for nothing is no more. Being an adult means taking responsibility for the choices you make and making the best possible choices in the circumstances you face. And only after six months will young jobseekers receive income support, and then there will be a requirement to participate in at least 25 hours a week of Work for the Dole.

Work for the Dole is giving, as well as receiving, that's why there's a dignity to Work for the Dole that's not there for people who simply receive unemployment benefits, especially long-term recipients. And given a choice between being useful in the community and taxpayer-funded idleness, governments, parents and society at large should prefer purposeful activity every time.

Now, as Employment Minister I spent a lot of time with people on Work for the Dole projects. I never saw anyone demeaned by it. I never saw anyone who hadn't benefited from participation. Most unemployed people are yearning to show the world what they can do, not what they can't do, and Work for the Dole does give them that chance.

Because there is no time to waste, next week Work for the Dole will commence in 18 areas across Australia for all jobseekers between 18 and 30 years old. Work for the Dole will move to a full national scheme from 1 July next year.

Under these reforms, young jobseekers any time may commence eligible study or training and receive youth allowance for students until this is completed, because Australia's training completion rates are too low, only about 50 per cent of the people who commence an apprenticeship actually finish it.

One of the reasons young apprentices don't complete their training is because they can't afford the costs of being an apprentice, especially when their workmates are earning more in less skilled jobs.

So from 1 July this year, we will support those learning a trade by providing concessional trade support loans of up to $20,000 over a four-year apprenticeship with the loan structured to encourage completion. And from 1 July 2016, the Government will remove the 25 per cent loan fee that applies to VET FEE-HELP for eligible full-fee-paying students in higher level vocational education and training courses.

Now, along with support for younger Australians seeking training, this Government is determined to make employment more attractive. First we will make the existing childcare system more flexible and accessible than it already is, and the Productivity Commission will report shortly to the Government with its recommendations.

Second, we're implementing a paid parental leave scheme that's based on people's actual wage rather than the minimum wage. It's important to remember that of the 34 countries of the Organisation for Economic Co-operation and Development (OECD), 33 offer paid parental leave schemes, and of these 33 countries, Australia is one of only two that fails to pay leave based on a replacement wage.

Paid parental leave isn't a gift, it isn't welfare, it's a workplace entitlement, and to ensure it doesn't make it more expensive to employ a woman, it's administered by government and paid for by a levy on big business.

So as well as boost youth participation and female participation in the workforce, this Government is determined to boost senior participation too. Ability, and not age, should be the test for employment, but all too often older workers face prejudice when they apply for jobs. Older workers have the experience, the wisdom and the stability to be the very best of employees.

So from 1 July this year, the Government will introduce a new wage subsidy, Restart, for businesses to take people over 50 off welfare and into sustained work. Employers who employ an eligible older jobseeker for full-time work will receive $10,000 over two years. This should be sufficient incentive for employers to step outside their comfort zone and give mature jobseekers a fair go.

As well, we want to ensure that disabled people with some work capacity are supported to seek employment, especially those under 35. So the Government will strengthen the measure introduced by our predecessor to create participation plans for disability support pensioners under the age of 35 with some capacity for work.

I want to stress that Australia has always been the land of the fair go, but part of giving people a fair go is encouraging them to be their best selves, making it easier for them to have a go too. The new Government wants more Australians to be economic contributors, as well as social and cultural contributors, and the best way for that to happen is through work.

I want more Australians to be workers. I want our people to be more productive because that way our country will be stronger, and our citizens will be more fulfilled. I want this Government to be the best friend that the workers of Australia have ever had, and making it more likely that more Australians will join the workforce is part of that.

So, ladies and gentlemen, I thank you so much for the opportunity to be here this morning. Again, I very much appreciate the work that CEDA does to promote informed and intelligent debate about the problems that face our country, and I want to thank all of you for your participation in that debate. Every single one in this room is a busy person, and the fact that you are prepared to give up a couple of days to come to Canberra and participate in these discussions is a sign of your commitment to our country, and we need more people more committed to our country if we are to succeed as we should in the years and decades ahead.

> ENERGY AND RESOURCES

> 7 AUGUST 2014

> BRISBANE

Promises and pitfalls of autonomous systems

Professor Mary Cummings

Director, Humans and Autonomy Laboratory, Duke University

International speaker, Professor Mary (Missy) Cummings, spoke to a CEDA audience in Brisbane in August on automated technology.

Australia's ability to remain globally competitive is predicated on it being able to keep up with and take advantage of new technologies, as has been done in mining in Australia. This speech has been included because it provides an interesting perspective on the future direction of automated technology.

Professor Cummings also shared her experiences from throughout her career, from being one of the United States Navy's first female fighter pilots to undertaking research for the Defence Advanced Research Projects Agency (DARPA), and in her current role as Director of the Humans and Autonomous Laboratory at Duke University.

Thank you. Thank you very much for having me today. It's a little bit of a reunion for me with several companies while I'm here, which is kind of funny being that I'm halfway around the world. I have to apologise – I should be sleeping right now. In fact, I was just asked what my favourite bottle of wine was and I can't think of it right now. So I'm kind of tired but hopefully I'll be on my game.

So I'm going to talk to you today about the promises and pitfalls of autonomous systems. I think it's good to anchor people. You've done a lot of really great work here in terms of advancements. One of the questions I get asked as a futurist is, "where are we going to go and how should we think about where we're going to go?" So I'm actually going to give you my trade secret today about how we're going to get there. You heard about this part of my path, it is true. In fact, I'm *The Picture of Dorian Gray*, for those of you who like a literary reference. I am so old that every aircraft carrier I ever landed on is a museum now.

Okay, so I did fly F-18 Hornets. I flew A-4 before that which, if you've ever seen the *Top Gun* movie, it was the little Delta wing plane in that movie. When I made the jump from an A-4 to an F-18 it's like going from an MG to a Lexus of today. It was an amazing leap in technology and capability and an amazing leap in computer technology where every hour that I flew the A-4 was hand-flown. That's actually not very true for an F-18, as it's so automated.

One of the things that really caught my attention when I was flying the F-18 was the fact that it could land itself better on an aircraft carrier than I could, always. It was not only the landing – in fact, at least with the landing you had your hands on the controls and you could still do something from the cockpit to follow along. But the take-off was even more humiliating because, when you take off in an F-18 on an aircraft carrier deck, you have to put your hands up and you have to show everyone to the left, "I'm not touching anything". Then you show everyone to the right, "seriously, I'm not touching anything". Then you grab these hand bars and they shoot you off as long as you're not touching anything. That's because the computer system is flying so close to the margin that, if you touch the stick, you would cause a pilot-induced oscillation and cause a crash.

I kind of looked around at my fellow male pilots like, "doesn't that bother anybody? I mean, we're not even allowed to touch anything. That's not good." I spent my whole life being trained that I'm the best of the best, and certainly better than any air force pilot. Anybody can land on a runway. So I'm the best of the best but I'm not better than this computer. That really did not sit well with me. This was in the mid-90s.

About that same time, you have a Tactical Tomahawk Missile. This is a missile that can be fired about 1000 miles from its intended target with less than a metre precision accuracy. It can be shot out of a submarine, which is the ultimate in stealth – pilots are not very stealthy. This is actually happening on another side of the navy, the sea-going navy – the submarine navy does not speak at all to the aviation navy, they don't like each other at all.

But I was tech-savvy enough at that time to say, "one day these technologies are going to come together. This missile technology that's so precise is going to merge with an aircraft that I'm not actually allowed to touch on the take-off anyway. What are the odds that I'm going to have a job in the future?"

I will tell you that recently that came to fruition because, about a year ago, the air force achieved an important safety statistic. It's actually safer now to send a drone on a fighter bomber mission than it is to send a human. That happened a lot faster than I thought it was going to.

So that, kind of coupled with a lot of the social upheaval that I was experiencing as one of the first female fighter pilots in the military, which is a book that you can have now for free. It's on the Internet. There are some crazy stories. Then I decided to go into research and kind of figure this out. That's where I created the Humans and Automation Lab at Massachusetts Institute of Technology (MIT), which I've reformed now as the Humans and Autonomy Lab at Duke University. There is a joke in the name. There are sufficient people in here who get the joke. There's an age line that happens. Pretty much, 40 and over you get the joke. Forty or under you don't get the joke. So, for you young pups out there, just find somebody else in the room, ask them what the joke is and they'll tell you what it is.

All right, so let me give you a brief history in automation. In fact, Hugh (Durrant-Whyte, Chief Executive Officer, NICTA) just made a funny joke about this at the table. It's like around the turn of the century, what was the innovation of technology? It was a faster horse, right? There was actually, especially in the United States (US), a lot of pushback against the horseless carriage, that this was a mixed technology, which is funny because about eight years ago I wrote a paper on drones and where drones were going to be in the future. A journal reviewer came back and said, “nobody cares about this. This is a niche technology. Drones are never going to go anywhere.” So glad to be on the cutting edge.

Elevator/operator is another one. In fact a few of these still exist, at least in the US. There are a couple of buildings in Chicago you can go to where they actually still operate elevators. People thought that this job was never going to go away. More recently, the trading environment. I think it comes as a big shock to a lot of people just how automated trading is. In fact, the level of automation and certainly the human machine interface was implicated in the issues of 2008, at least in the US. So we’re in a brave new world.

Of course, I get a lot of hate mail. You should see my inbox, actually mostly from FedEx pilots. They really don’t like me at all because I go on the national talk circuit and I talk a lot about how in the future we’re not going to have, not only, fighter pilots – which, by the way, Israel has formally stated that within 40 years they’re going to do away with all human fighter bomber pilots. The US will follow suit and Australia will eventually go that way too.

Let me give you a little bit of a lecture. I want you to walk away having learned something today. So the kind of research I do is called human supervisory control. It’s where you’ve got this human – in this case a UAV operator, drone operator – flying the drone, but they’re not really flying the drone because it’s mediated by a computer in the middle. The actuators and sensors are closing the control loop. The human is sitting on top of the loop supervising. So sometimes we call it a human on the loop as opposed to human in the loop. There’s lots of goods and bads about that. I’m going to talk to you a little bit about how today you know where you are in that loop.

There are lots of other applications than just drones. There is a robotic forklift project that I worked on at MIT for the US Army. The army goes into fields and has to create warehouses where none exist in unprepared areas, mud, dirt, sand. It’s not the nice, slick Amazon floors where they’ve got little robots that follow lines on the floor. So being able to go and to create a warehouse in a field that doesn’t exist with forklifts that move around, they actually save lives for the US Army. Of course, Rio Tinto reached out to me. They’ve been a great supporter. I’m also, likewise, a great supporter of what they do.

When I give this talk around the country and around the world, people are floored, first of all that the trucks are that big. Then, of course, when they realise that the trucks are so big that they’re robots, I mean, I think that even blows them away. Then finally I tell them, "and they're really very well-behaved". The important thing about well-behaved trucks is that they don't get into fights at the end of the week. They don't get into bar fights. They don't have to go to the bathroom. In fact, the human physiology limitations and the social limitations are actually a big reason why we want robots, particularly in these hostile, remote environments, because this isn't a really good environment for people.

It's not just vehicles and transportation. There's a lot of work that's been going on in supervisory control for medical devices. A tumour ablation device is coming out of Israel. It kind of looks like an MRI. The automation will margin your tumours and set the radiation exactly and be able to radiate to millimetre accuracy, sub-millimetre accuracy to put just the amount of radiation right where it goes. A human cannot do it. The automation can only do this precisely.

The last but not least – coming, maybe, to a road near you – is the driverless car. We're going to talk a little bit more about why that is actually a lot harder than you might think. Mining automation is way ahead of driverless cars. We'll talk a little bit more about why that is.

So, how do you know when your job is about to go away? It's actually an important question. It's something called the SRK Taxonomy. It stands for Skills, Rules, Knowledge. This actually came from a Danish researcher, Jens Rasmussen. I added on a couple of things to his taxonomy. I added Expertise and Uncertainty so you can understand this is where the balance is and, maybe could be, between computers and humans.

So skill-based reasoning is one where, in this case, you're a pilot. You spend a couple of years of pilot training for the military learning how to keep the plane in balanced flight, how to make sure that you're on heading, you're not losing altitude, what's the correct pitch, what's the correct airspeed to make sure that you don't fall out of the sky. It's only after you learn the skills that you actually learn all the criteria. When you're driving on the road you're skill-based reasoning when you first learn how to drive. You have to tell yourself: "Track between the white lines. Stay between the white lines." Then after a couple of hours, it's automatic.

It's a skill that you've reduced to automaticity, which is true for pilots too. I mean, after you go to flight school long enough, I could probably get in any plane, including an airliner right now, and keep that thing on altitude because it's a core skill that you, like a monkey, are trained over and over again. If you can say that about your job, it's going to be automated. In fact, computers actually do this for airplanes really well. Computers are so much better at keeping planes on heading, on altitude, all the right parameters because computers don't get tired. They don't have fights with their wife that cause them to be in an emotional upheaval state. They're not drinking – I'm not saying pilots in Australia do it but occasionally we do it in the US.

Now, once you've mastered the skills, then you go to the rules. The rules in the aviation world are procedures. We know that, for example, if I get an engine fire light there's a set of procedures that I go through. We need procedures because the world can be fairly complex and we can't reduce everything to memory. So we actually have to follow procedures, which are effectively a set of rules. Well, you know what? If you can put something in an algorithm, there's a good chance that you can automate that. Not always, because it really depends on your sensors in the world. How well can you sense the world around you to what degree of uncertainty. The more uncertainty you have, the more difficult the problem will be to automate.

Then last, you get knowledge. Knowledge-based reasoning is when you start to have to make guesses about your world because you don't have perfect information. I like to use the example of the miracle on the Hudson – a US flight where they took the bird strike and then had to land the plane in the Hudson. That was knowledge-based reasoning. Chesley Sullenberger had to make a guess, "can I make that runway or can I only make the Hudson?" He had to then rely on that judgement of the situation. But this is also where I think expertise is really important.

It's funny, I think I added expertise because as I get older I want to show that there's actually something good about getting older, which is you do gain expertise. You gain knowledge in a way that's expressed over time that allows you to make judgments that the young pups cannot make because they simply do not have the experience to understand all the different degrees of freedom that potentially could be in a situation.

Computers do a good job of skills. They can do some rules-based reasoning depending on the sensors that they have in the world. But for now, in the world we live in, for the most part you cannot automate knowledge-based reasoning and certainly not expertise. If somebody tells you they have an expert-based system, they're lying to you. They do not have an expert-based system. They probably have a rule-based system, but there's just no system yet that embodies experience and judgement.

Now, let me show you how that plays out in the mining world and related worlds.

In mining, automated drills can be automated because it's a very skill-based task. If we've got the sensors on the drills, we know what to sense, when to stop, when to start. This is why it's been very successful in this world.

Rule-based trains. This comes as a big shock to America, which is probably the most embarrassing country in the world in terms of lack of automated rail. In fact, the one part of your news world that will actually for sure make it to America is when you start talking about automated rail because unions over there are really paying attention. That made big news in the US because we're just askance, "How could you possibly automate rail? You can't automate rail. You need me for that job."

In fact, actually it's pretty low on the cognitive continuum and that's because your uncertainty is low because it's on rail, right? I mean, you've got one axis that it can move on and you're pretty sure you've got good sensors. It's not perfectly low on the uncertainty continuum. It's not way low like maybe the drills are, but it is one step above. And definitely Rio, I do not mean to trivialise what you have done because it's an amazing feat. If only we could get you over in America to do some of our rail lines. But you can see why they've been successful because it's off that rule-based reasoning.

Now the automated truck moves up the continuum a little more. They're not on rails anymore. They've got some degree of uncertainty, particularly when they approach another vehicle. They might have to negotiate between maybe two trucks, the distance between them. It's more of the continuum. We haven't really replaced knowledge-based reasoning. That's why we actually need humans at the control stations to actually give the truck some higher level direction, particularly when there's an unexpected set of situations that might arise.

But where are you actually going to see vehicles and knowledge and expertise? Driverless cars. I will tell you that driverless cars are the most dangerous technology out there right now. The United Kingdom (UK) is going to start a new test program next year. There are a few in states in America. I tell you what I want – I want an app that shows me when a driverless car is near me because I don't want to be anywhere near it. I've worked with Google. I'm actually doing some research right now with Google trying to help them. But the problem with driverless cars is they operate in a much higher world of uncertainty. That's because you are out there.

Now you, I will have a guess – let me know if I'm wrong – you're all bad drivers too. It's not just America. I see you texting out there right now. I'm a professor too, by the way. I'm used to that. It doesn't offend me at all. But you're also texting when you're driving. Don't say you're not. Some of you are not very good drivers. I would actually have a guess that most humans are really not good drivers because we get tired. We get distracted. That's part of the human condition. So you actually will do unexpected behaviours that cars may not be able to anticipate.

I will actually tell you there are some core problems with the sensors, the light sensors, for example, that are used on some but not all cars. They actually don't do very well in rain or right after rain because there's some scattering issues with the way that the beams hit the water. So right now Google has driven a lot of miles in California in sunny conditions, actually a lot like Australia, and the cars are doing great. But when I went to Google and I said, "well, what do you do when it rains", all the cars come home. There may be some good test cases when driverless cars will do really well. For now, the cars do not have the sensing ability to drive down the uncertainty. They also don't have the ability to understand how to negotiate uncertainty in the world.

One of the funny things to me about some of the limitations of driverless cars is with gestures. Cars really do not do well with gesture recognition. It's not something that you probably do every day but I'm a mum of a seven-year old. Who else drives their kids to school with the traffic cops in the morning around the school that are only there a couple of hours a day during pick up and drop off. The driverless cars of today's world cannot negotiate something that is basically cognitively effortless for you to do. There's a lot of uncertainty because gesture recognition is very difficult with the clutter in the background. It's hard for the sensors to make sense of your fingers as opposed to your limbs moving. So I do believe with people like you that we will drive uncertainty down. The technology will get better and better and we will get to a driverless car world someday. But we're going to have to make a lot of technology innovations to get there.

By the way, this image being displayed is from DARPA. DARPA is the Defence Advanced Research Projects Agency that does all our military super-secret projects in the US. They consider this (a humanoid robot called Atlas) their 'friendly robot'. They advertise Atlas as, "This is the robot that's going to come and save your life." I told those guys, "You need to get on message.

That robot scares people." If I saw this coming after me, I would definitely run. So the humanoid robot research, I mean, that's kind of like the ultimate of uncertainty because they're going to get these robots to work in a world where they're trying to predict human behaviour and maybe talk with humans, negotiate with humans. That's ultimately where we would go in terms of this robotic world. So hopefully you can figure out where your job is in there and where you are not going to be.

Now, speaking of DARPA, this picture was given to me by DARPA a few years ago when I was working on a project with them. This is the way that DARPA envisioned warfare of the future. We've got unmanned air vehicles talking with manned air vehicles, some robots on the ground, some man soldiers on the ground. They're all integrated in what they call network centric warfare. So this slide is about nine years old. We're actually not that closer today than we were probably when DARPA released this slide in terms of the military. But do you know where this is? If I took unmanned autonomous trucks in a mine, manned trucks in a mine, drills and rail, this picture actually did come true. It came true in mining. It's getting better every day. So I think what's important is that when you see the growth of automated systems coming together, but I think not necessarily replacing humans but augmenting humans because these systems work with man systems. They work in and around people.

In some ways they do replace jobs, which is really important, I think, when we're talking about jobs in Western Australia, for example, where you can't get enough people. But they're actually there to augment human systems, to make the human system better. I will tell you that so, in that way, the mining industry has led the world in automation. When I give this talk around the world I point very strongly to the mining industry to show what's achievable. I think everybody in this room that's been working towards that deserves a pat on the back.

In some ways they're also playing catch-up. I would actually say the big area that mining is lagging in is software development, particularly in the world of uncertainty. So envision a world where you're going to have to merge the mining industry with Google, which is a little scary when I say that. But that's kind of the world of the future where you're going to have to have a lot more automation in your systems. That's going to drive an entire new space of human/machine interaction.

I'd say regulatory agencies are behind. I think it's good that you've been setting the pace here in Australia as a good test case. The rest of the world is still struggling to get their arms around, "What does this mean? How are we going to certify these systems as being safe?"

I think that it's interesting to me as I watch the mining world to see the original equipment manufacturers (OEMs), the people who had the trucks and are designing the drills, I look out at them and I see companies that are really struggling because of that software issue. This is actually something that I probably lecture the Department of Defence in the US about once a month, that we have a problem in this world – not just in mining and defence but in most industries – in that we love hardware. We're all about the *thing*. We want to buy the thing. We feel like if we have a thing, if we build a thing, the more big capital investments we make, the better our world will get.

But the world has changed because it's software-driven. So I think large capital companies are going to need to figure out how we evolve from a world of the thing to a hybrid system of the thing, the hardware and the software. That's actually the biggest hurdle that the mining industry is going to face, as well as defence industry. Along with that, your workforce is going to be completely different, the workforce in defence, the workforce in mining. Anywhere you're going to see a robot show up, that means that everybody is going to have to raise the bar. I tell people the number one commercial industry you should get into right now if you want to start your own business is robot maintenance because the systems are going to grow more and more complex with the software, underlying how much it's being driven by software. That's very true now in the automotive world. You need entirely new maintenance systems, a whole new maintenance paradigm that you never had before.

For operators, what used to be an acceptable level of education is going to have to come way up. The good news is that I have a seven-year old who was iPad savvy by the time she was 18-months old. So we have a whole culture that is coming up but we're also going to have to change training paradigms, standardisation paradigms, and the way that we think about how we're going to be working with these systems in the future.

I think the thing that you should walk away with though when we think about autonomous systems is that's where the world is going. The bottom line is, particularly for mining, it's going to reduce accidents. Autonomous systems, for example, in the agricultural world, as soon as we can replace all crop dusters with drones, the safety is going to go way up. That's actually an incredibly dangerous environment. Of course, mining follows suit. Mining, as safe as it's gotten, is still a dangerous area. People still can get killed. The sooner we can replace a lot of those skill-based and particularly rule-based areas with automated systems, the safety will improve but the bottom line is going to improve. Efficiency is going to improve.

In fact, your people will be happier. Nobody should be doing a tedious job. Nobody is happy doing a tedious job. That's not where the human brain was meant to be. The human brain works best when it's challenged. I talk about this with some companies where they feel like, especially in third-world nations, "if we put in autonomous systems, we actually are not being socially responsible because we're taking away jobs, menial jobs, that otherwise would have gone to labourers". I think that's a short-term truth. But in the long-term, by putting in autonomous systems, you eventually raise the bar for everyone. It might take a little bit longer in third-world nations, but you're raising the quality of life for a group of people who otherwise would have never had that.

> AUSTRALIA'S BRISBANE SUMMIT CHALLENGE: SECURING G20'S FUTURE

> 19 AUGUST 2014

> BRISBANE

The role of the G20 in taxation regulation

Professor Kerrie Sadiq

Professor of Taxation, School of Accountancy, Queensland University of Technology Business School

At the launch of CEDA's policy perspective, *Australia's Brisbane Summit Challenge: Securing G20's Future* in Brisbane, Professor Kerrie Sadiq gave a speech highlighting the key points of her chapter for the publication.

Professor Sadiq's speech recommended the role Australia should play at the G20 Brisbane summit to ensure real and substantive progress is made in international tax reform. Following this speech the need for the G20 to address international tax regulation became a focus in the lead up to the Summit receiving media attention both at home and abroad.

It's a pleasure to be here today to talk to you about some of my thoughts on the role of the G20 in tax regulation.

It's no secret that the international tax regime is broken, and it's going to take significant global efforts to fix it. But is this possible? Well, that's the question I pose to you today.

Among the general population, the notion of the problem for the international tax regime tends to stem from reports by the media on multinational entities such as Apple, Starbucks, Amazon, Vodafone and Google. For example, it has been reported in the Australian media over the last few months that Apple paid tax at the rate of 0.7 per cent of its turnover to the Australian Tax Office in the 2012–13 financial year.

More broadly, we also see reports by civil society groups reporting on the effect of developing nations, and I raise this because ensuring that developing nations benefit from the G20 tax reform agenda is an important issue that I'm going to look at today.

I'm aware of one recent study that found that India's tax base would go up by over 180 per cent under more progressive corporate tax rules. Unfortunately data limitations in this area – we don't know how much we're not capturing – means that it's difficult to estimate the cost of aggressive tax planning, but if you do want some dollar figures to give you some idea of the magnitude of the problem, a Christian aid report in 2008 estimated that if transfer pricing and the falsifying of invoices were addressed, developing nations would actually raise US$160 billion per year in additional revenue.

To put that in context for you, for every $1 billion draining out of developing countries via commercial tax evasion, 11 million people at risk across Africa's drought stricken region could have enough to eat. So if you want to bring it back to the people, they're the kind of figures that we're looking at.

What are we really saying when we see reports like this? What we're saying is that there are problems of fairness in our tax system, and at a very fundamental level, it's this fairness issue that we're trying to address. Fairness because there are some multinational entities simply not paying their fair share of tax, and fairness because some nations are not receiving their fair share of tax.

The root cause of this problem is that the current tax regime has failed to keep pace with an increasingly global economy. The result is that multinational entities are able to take advantage of these outdated international tax laws to minimise their tax liability, or what we see recently in the media and from the Organisation for Economic Co-operation and Development (OECD), partaking in base erosion and profit shifting (BEPS).

The three key areas of international tax reform on the G20 agenda to address this issue are first of all addressing tax avoidance, or this issue of BEPS; secondly, promoting international tax transparency and the global sharing of information; and, thirdly ensuring that developing nations benefit from reform. I'm going to take a couple of minutes to address each of those three key areas.

Before I do so, however, I would like to make a broad comment about the report that has been launched by CEDA today, and that is that there is a common theme in each of the chapters of the report, and that is the need to ensure that the Brisbane Summit is not just a 'talk fest'.

To that end, in addressing each of those three key areas, my view relates to where I believe Australia can be an effective leader. That is, actions, not words. Priority one is addressing tax avoidance. It's actually the OECD that is currently undertaking the work on BEPS, but they do so at the request of the G20 finance ministers. There's a BEPS 15-point action plan, which was introduced at the G20 finance ministers' meeting in Moscow.

We need to keep in mind that this is a process of reform rather than a whole-sale or a one-off remodelling of the current system, and it's critical that we do remember that. The ultimate aim of that project is to introduce measures to ensure profits are taxed in the location where the economic activity takes place. Getting back to that idea of fairness, what do we think is fair? BEPS is a multifaceted problem. There are no clear or apparent solutions, and what that means is that any measurable outcome requires a significant degree of cooperation and consensus from all nations, and that's where the potential difficulty lies, not just at G20 level, but across the globe.

I'd like to propose that possible reforms also require a consideration of a move away from a traditional developed nation OECD model to models that better reflect the reality of the modern global economy and also the structure and form of multinational entities.

Fortunately for us in Australia, Australia's role in this particular project goes beyond the G20 presidency. Our own OECD membership results in representation on all of the OECD working groups and committees involved in the G20

BEPS OECD project. We have the advantage through the G20 of being able to synergise and capitalise on our involvement in the broader reform program.

To that end I do commend the process leading up to the Brisbane Summit and Australia proactively encouraging discussions around the tax reform agenda, and we saw that with the Tokyo Tax Symposium in May. Unfortunately, my biggest concern is that there is very little indication that bold steps will be suggested in any reform proposals, and the OECD has actually said that. They're wanting to fix the flaws in the current system rather than look at replacing it with any new system.

The second priority which I will move on to is promoting international tax transparency and the global sharing of information. Obviously the aim of this priority is to ensure that taxpayers comply with their tax obligation, and greater transparency is called for on the basis that it increases compliance and informs public debate. So there are broadly two ongoing transparency initiatives at the G20 and the OECD, and that's the automatic exchange of information and also mandated taxpayer disclosure.

Automatic exchange of information is actually a success story. The G20 has continued to work very closely with the OECD on this, and in February this year we saw the G20 agreeing to implement a global standard for automatically exchanging information between tax authorities. Implementation is meant to be complete by the end of 2015. Implementation is going to be the difficult stage with this. The OECD is going to deliver a commentary on the new standard, as well as technical solutions to implement the actual information exchanges during the G20 finance ministers' meeting in September, so next month.

Automatic exchange of information is so far a success story. The one that concerns me the most is the mandated taxpayer disclosure. There have been a lot of calls for things like country-by-country reporting, and they've been growing in magnitude over the last decade. At first glance it may seem to be on the G20 agenda, because it falls within the scope of the BEPS project; however, it may not necessarily be the case because at this stage it seems like the OECD and the G20 have adopted the view that the point of mandatory reporting is to provide tax authorities simply with information, so this information could remain confidential, yet much of the purpose of this reporting is to inform the public about the activities of multinational entities, to allow an informed assessment of how those entities affect society. So the G20 could certainly broaden the scope of its feedback processes, support a comprehensive reporting framework and adopt a wide purpose.

The third and final priority that I want to touch on with the G20 is to ensure that developing countries benefit from anything that comes out of proposed reforms. The OECD has generally taken the lead with its developed nations' memberships, and I absolutely applaud the OECD for doing that. The G20 partially fills the gap in terms of developing nations, but those developing nations as part of the G20 tend to be the much more advanced developing nations.

My concern is that all developing nations and emerging economies do actually benefit from any of these tax reforms. These developing nations actually need to be part of the process. My concern stems from things like the symposium in Japan where there were actually very few delegates from the emerging economies and the numbers were clearly swayed towards major accounting firms as sponsors of that particular symposium.

Certainly, I would encourage the G20 and the Brisbane Summit to be more proactive in involving developing nations. To conclude: The key message is that the G20 has made progress in relation to tax reform, but it requires international consensus and multilateral adoption, which is difficult to facilitate. Bold moves and lateral thinking is needed, so there's still a great deal of work to be done, and to this end Australia is in a unique position to highlight this, not only to deal with the current problems but also to offer solutions for the future.

> REGIONAL DEVELOPMENT

> 19 SEPTEMBER 2014

> BRISBANE

Northern Australia: Policy for prosperity

Steve Johnston

Group Chief Financial Officer, Suncorp

Speaking to a Brisbane audience in September, Suncorp Group Chief Financial Officer, Steve Johnston, discussed the constraints to economic growth in Northern Australia with a particular focus on insurance in the region.

With Northern Australia expected to be an increasing and significant contributor to Australia's economy in coming decades, this speech provided an interesting perspective on a key area identified as an impediment to growth.

Mr Johnston discussed the current inquiries underway and the recommendations that have been made to boost economic activity in the north. He also proposed other ways to tackle the obstacles facing insurers in the region, principally the need to address the fundamental issue of risk mitigation.

Obviously very delighted to be here and it is an honour to present at such a forum as CEDA presents. At the outset I would acknowledge the role that CEDA plays in both domestic and international issues and topics of interest, and stimulating debate and discussion on matters that are of national importance, and this is particularly one that a lot of people are focusing on at the moment.

Now in framing my contribution today I am going to largely focus on an area that I and my company are most familiar with, that being North Queensland. I'm also going to focus very much on a topic that we're very familiar with, that is insurance, and a lot of people would not put that into the action-packed category but it is nonetheless an important issue and when you put it together with North Queensland, it is very topical. I do recognise there's more to Northern Australia than just North Queensland and I hope that my fellow presenters who will obviously have far greater credibility and focus on those areas, will be able to cover them in their addresses.

Now it has long been said that North Queenslanders are different, they think differently, they vote differently, they organise themselves differently and some would even say they speak differently. I've had the pleasure over my working career to have spent a lot of time working with a lot of high-profile North Queenslanders and have spent a lot of time in North Queensland. I fondly remember as a very junior public servant in the Queensland Public Service being shown the sights of the Kennedy electorate by none other than Bob Katter who as we all know is a passionate advocate for the redirection of public funding from the popularist areas of the south east to the remote regions of the north and the north west.

I also fondly remember touring Northern Australia as a junior Telstra executive during the period of the closure of the old analogue telephone network. Indeed at one public meeting I was confronted by a local mayor who felt I had no authority to address their issues as I travelled the 2000 kilometres to the meeting by plane and not by car. I needed to personally feel every single pothole or gravel road along the way to truly appreciate the differences of the outback. In Julia Creek late one night, the local ringers decided to take their telecommunication issues directly to the travelling Telstra team by noisily visiting our hotel at two in the morning, accompanied by quite a lot of rum and coke, I think.

The first thing about the north that confronts you is the sheer vastness of the region. If you got in your car today and set off to Cairns you could expect to cover over 1700 kilometres. Yet if you got in your car at Piccadilly Circus in London and travelled the same distance you would be in Oslo, Norway, having passed through Belgium, the Netherlands, Germany and Denmark.

The second thing that confronts you about the north is the resilience. Turn on a TV during a cyclone and you'll witness a southern-based journalist standing in front of the obligatory bended palm tree as they do their live cross while the local in the backdrop is very calmly casting a fishing rod. Now if you could bottle and sell that resilience then any economic issue facing the north would be rapidly solved. But it feels like the real opportunity available in Northern Australia has never been effectively captured, certainly considered, most definitely reviewed, but not yet captured.

But today I take the opportunity to discuss some of the current inquiries in Northern Australia, of which there are many, and just briefly discuss Suncorp's view on some of the preliminary recommendations, particularly as they relate to insurance, which have been called out as key impediments to economic growth in the north.

Northern Australia is no stranger to review. First off, in 1947, the Northern Australia Development Commission first published its report on the development of the north. Today we are participating in a 2014 Northern Australia inquiry and again committing to removing barriers and growing industry and employment. This inquiry is run concurrently with the Federal Competition Policy Review, the Northern Australia Strata and Home Insurance Review, and the Productivity Commission's Inquiry into Disaster Funding. All have an impact on cost of living and business confidence in the north.

The preliminary recommendations of the Northern Australia inquiry are of particular interest to Suncorp, which of course is the largest insurer of Queenslanders. The cost and availability of insurance is identified as a key impediment to growth and opportunity in Northern Australia and the inquiry has come up with some quite novel means of addressing the issue.

Now to put this issue into some context and to understand the pre-conditions, you have to understand that over the past decade, declared catastrophes in Northern Australia have seen insurers and their re-insurers pay out more than $3 billion in claims and of course that doesn't take into account the social damage and the damage to infrastructure, loss of income and business interruption. Unfortunately, our company – with market shares as high as 70 per cent in some areas of Northern Queensland – has borne the majority of these costs. And again, this manifests itself in significantly higher costs of insurance, which impacts our retail customers and obviously business customers and the cost of doing business in the north.

The history of disasters and the current insurance affordability pressures demonstrate how challenging it is to get natural hazard risk management right, particularly in the north. Insurance is the business of pricing risk where risk is proactively reduced either by individuals taking action themselves, or the government taking action through policy, then premiums will reduce. Now, take the community of Roma in Central Western Queensland as a case in point. Regularly inundated by flood, insurance premiums rose until the council and the government joined forces to create a levy. The risk reduced and insurance premiums have fallen as a result. Now I acknowledge that cyclone risk, which is a key risk in Northern Australia and North Queensland, is far harder to mitigate than is flood risk, as was the case in Roma. This is especially the case in North Queensland where the building stock is so diverse and homes right on the water's edge sit up and down the coast.

But the cost of insurance in the north to some extent reflects the sloppiness of local and regional planning over many decades and the lack of data that ultimately allows insurers to accurately price risk. Managing risk and resilience through the delivery of transparent information, stronger buildings, smarter planning and investment in disaster mitigation is crucial to a sustainable northern economy. And while we continue to do nothing or very little to address these issues, the north will continue to pay more for its insurance than its southern cousin.

That is why we remain slightly concerned at the direction of some of the current inquiries and investigations, which always tend to focus on things like insurance aggregators or comparison websites and forcing insurers to become involved rather than focusing on mitigation and resilience. If an insurer does not want to insure in Northern Australia – as many don't because the risk doesn't meet its underwriting criteria – then they won't insure. An aggregated site or a comparison site would arguably tell customers little more than what they currently know and that is that there are one or two insurers, of which Suncorp is one, who are prepared to underwrite across the entirety of Northern Queensland. And of course an aggregator, a comparison site does nothing to address the fundamental issue of risk mitigation and the information gaps that currently exist.

I recall, and you will recall, Fuel and Grocery Watch, which started out as good ideas but did little or nothing to practically affect change. Now in the United Kingdom where aggregators are prevalent, these in fact have led to a number of adverse outcomes for the consumers they purport to protect. Government-sponsored websites bring the authority of the government but there is no one size fits all when it comes to insurance protection. Different insurers and different policies provide different levels of cover and we saw that all too clearly in Brisbane in the flooding event 2011. Consumers who purchase insurance based on a government-sponsored aggregator site with price ultimately as a motivating factor may find themselves with inadequate cover and a protracted repair process in the event of a large-scale event.

In our view, a far better approach is to remain focused on improving the data that is available to insurers. Put simply, if councils provided large-scale data on new and renovated properties that had been built for the catastrophe four plus standard across North Queensland then we as an insurer and other insurers would more accurately be able to identify risk and make better pricing assessments.

Now insurance aside, one of the other key recommendations of the Northern Australia inquiry was the establishment of a federal government department located in Northern Australia in order to progress development opportunities. Now of course this is a sensible initiative but it needs to be backed by real and meaningful reform to avoid it being seen as little more than political window dressing. In particular, it needs to be backed by a preferential corporate taxation regime and improved regulatory conditions as well as fundamentally improved infrastructure, whether that be in the form of ports, roads, rail or water.

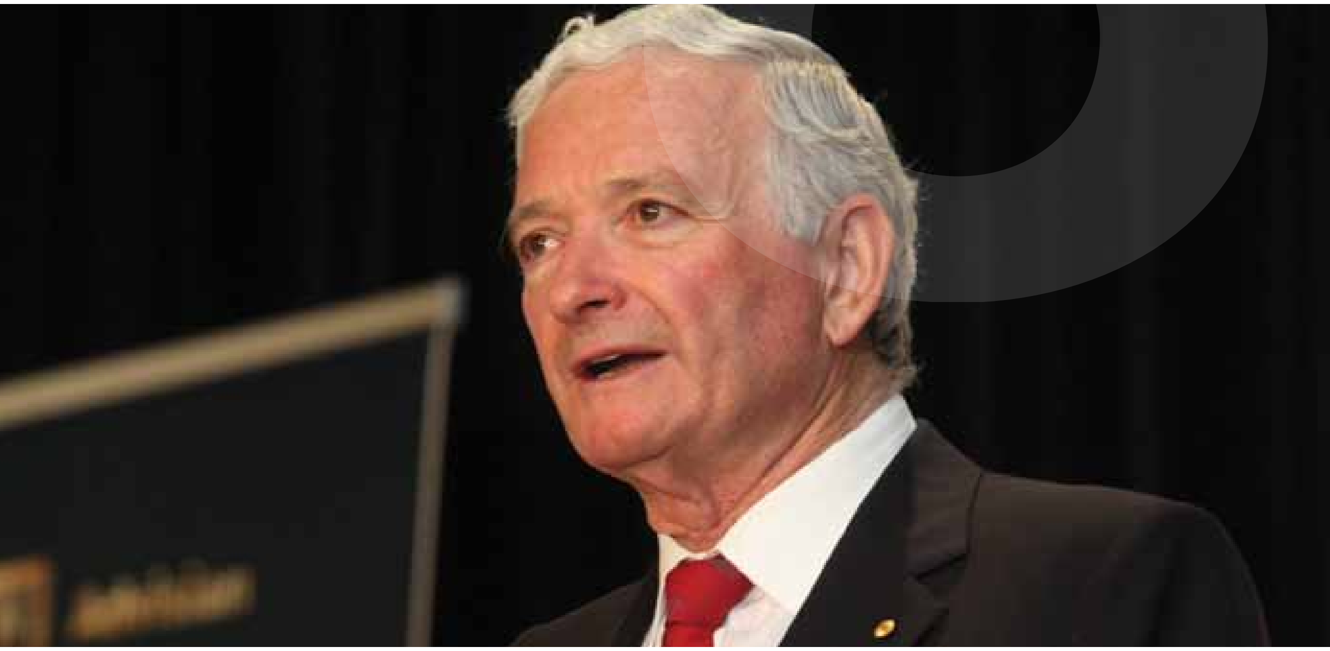
As always there are plenty of obstacles on the horizon. Firstly, the regions we're talking about are remote and they're challenged by isolation, meaning investment both of the capital and recurrent form is incredibly expensive. Any development, whether private or public, must carefully consider and incorporate the cultural sensitivities around access to land from both environmental and indigenous perspectives. However, the fact remains that the key enablers for industry development will always be, and must remain, infrastructure. The Bruce Highway is a classic case in point. The most important artery to support prosperity in the north has long been overlooked in terms of government outlays. The fact it is now being addressed is a very positive step.

So in concluding, the focusing question remains: Does the political will exist to deliver such sweeping reform while the majority of the elected members of parliament represent urban and southern electorates? The reality is that 4.4 per cent of the Australian population live in what is defined as Northern Australia and the region generates 7.5 per cent of national gross domestic product (GDP). Southern Australia has 78 per cent of the population and generates 74 per cent of national GDP, thereby underscoring the social and political challenge that the north faces. But perhaps this time, with the right level of focus and political will, we'll all be pleasantly surprised.

> A FEDERATION FOR THE 21ST CENTURY

> 27 OCTOBER 2014

> SYDNEY



The reform of the Federation

The Hon. Nick Greiner AC

Former Premier of New South Wales
Governor, Committee for Economic Development of Australia

The Hon. Nick Greiner gave this speech at the national launch of CEDA's major policy perspective for 2014, *A Federation for the 21st Century*.

The launch coincided with the 125th anniversary of Sir Henry Parkes' famous oration calling for the formation of an Australian Federation and a significant speech by Prime Minister Tony Abbott on the same topic.

Mr Greiner's speech has been included because it provides an important overview of an issue that is set to continue to be a national agenda item in 2015.

CEDA's timing is simply wonderful. I think they have picked the very best day to release what is a very important and worthwhile piece of research on what, I hope, will be the most significant reform of the Abbott Government.

I certainly believe that the Prime Minister's speech in Tenterfield on Saturday night has the potential, along with the tax paper which will follow, to be the most transformational thing that occurs in the life of the Abbott Government.

I don't propose to speak precisely on the subject that I was given some time ago, which is about infrastructure, which seemed to me to be a bit of a side issue in a way. I really am going to speak about the reform of the Federation in the context of the paper that CEDA has released today.

My starting point is simply that we need to persuade the community that the Federation is a problem. If it is not a problem, if the community is happy with mumbling and bumbling through the existing inter-governmental situation both in terms of who does what and in terms of money, then we are obviously wasting our time here and there will be much wasted time in terms of the debate.

So we do need to start with a sensible discussion about whether it is a case of "if it ain't broke then don't fix it". I think the answer to that is self-evident to anyone, not just a business person, not someone operating within the belt weigh in Canberra, or operating in state government or state bureaucracies. The fact is that the present federal situation provides poor outcomes: poor outcomes as to speed, poor outcomes as to effectiveness and poor outcomes as to efficiency, cost if you like. And of course it provides very, very poor accountability – and one of Kevin Rudd's more felicitous turns of phrase was about blame shifting and cost shifting. That is of course endemic, in fairly substantial parts, of the activities of governments in Australia. I would say in passing that I think infrastructure has actually made greater strides in terms of the institutional framework than most other areas of government, both at a federal and at a state level, and I think that's in fact directionally an indication of what one can do to improve the overall Australian community approach, in that case to infrastructure.

So firstly, it is a problem. Secondly, it's a problem *now*. It is not because we are 112 years into the Federation or any of the other nice examples you can give. I think the truth is we have got a window of opportunity, partly because of the financial difficulty that all governments in Australia and around the world are in. That's not necessarily the real reason and I don't think it's the real reason, but it does provide a political window of opportunity when governments have both weaker revenues and strong growth expectations in the community in terms of spending and the hardy perennials like health, education and disability.

But I think it is important to say this is not primarily about waste. It is easy to say, "well there is duplication, triplication, why would you do that? You should get rid of some of it and you would save some money." I think that's true. I think it is manifestly true. I also think it's manifestly not the real reason to worry about this. The real reason why the Federation is important is because it has a direct impact on national productivity and it has a direct impact on the quality of the services provided in the nation. So it is essentially about productivity in every sense of the word that the argument goes that for the reform of the Federation, it isn't just to get rid of a certain number of public servants at this level or that level.

So the window of opportunity I think is now. The real question, the hardest question I suspect – and it's dealt with in many different ways within the CEDA document that has been released – is how you get it done. I think it is reasonable to say that there has been very little effort since the time that Bob Hawke was Prime Minister – and I and various other people, (former Premier of Queensland) Wayne Goss, (former Premier of Victoria) Jeff Kennett were involved in whatever that stage, the "New Federalism" I think it was called. There has been very little effort. Mr Keating was opposed to it; Mr Howard and Mr Costello thought it was a low level issue and of course they had the benefit of a very strong economy and so this didn't seem to be a matter of great importance to them; and of course, well not an awful lot that was productive happened in the years under the Rudd and Gillard governments.

So I actually think the fact that the Prime Minister has nailed his colours to the mast is of more than symbolic importance because it really does put it on the table as an issue of pretty transformational potential as far as Australia is concerned. I think the conclusion – as agreed by almost everyone in the CEDA book and outside of its reaches – is that you need a *grand bargain*; you can't just do this as a normal political issue and the normal areas of Federal

Government with public service putting up papers and the Cabinet considering them. You need a grand bargain because ultimately this is political – and I don't mean Liberal/Labor political, although it's certainly that – but this is ultimately about the people of Australia and how they are governed. So it needs to be seen not as a theoretical exercise, not an exercise in some sort of academic or even straight pure public policy sense. It actually needs to be seen as something that people need to own and where the chances of success are fundamentally dependent on solving the political issue or difficulty that is involved.

I think one of the interesting things in the CEDA papers is the suggestion of both the Federation Reform Council and, more particularly perhaps, Federation conventions. Because there is already an issues paper that came out of the white paper process in Canberra. I think it is a good issues paper in terms of outlining some principles. If you could get support across a wide group in the community, a wide range of organisations on the principles that you are trying to achieve and some of them are reflected in Terry's (Terry Moran AC) paper, which he will probably talk about. If you get some agreement on the principles and you get it across a broader group through some sort of Federation convention-type process, then I think you are starting to get a bit of a better opportunity of doing something.

It does need to be owned by all the governments. I don't know that it got off six months' ago to the best start by being seen as so clearly a paper being produced in the Prime Minister's Department, not because of the quality of the people or the exercise, but in an ownership sense. The Prime Minister has now created an advisory group, which is across politics and across backgrounds, and I think that's a substantial step forwards. But ultimately, as someone said to me this morning, you can't give the states something that they have to reject. You actually need to be putting something forward *by* the governments and *for* the governments, and preferably frankly, including local government.

So I do think that the ownership question is important and I think especially from Saturday on, hopefully the debate is moving in the direction of either producing something which has very wide ownership across government, involving the unions, involving other interest groups, academia and particularly involving the Australian Council of Social Service (ACOSS) and the welfare lobby, because part of this will always be seen, and rightly so, in terms of whether it has a negative impact on the poorest section of the community.

So where do you start? I think there is starting to be an understanding that you should start with the 'who does what to whom and why'. There is a bit of a tendency, as I have discovered in three or four, or five interviews today, to default immediately to GST and should we increase the GST and all of that. I really don't think that's the logical priority, or the logical starting point. The logical starting point is to determine who does what. Both the *who* and the *what* are important. And if you get that, you determine what you are trying to fund.

I think we overdo the federal/state thing, frankly. I can understand why, as a former treasurer of New South Wales. But there is one lot of taxpayers, there is one tax base at the end of the day. There isn't a federal tax base and a state base, that's how it works out. But in reality, all of the people in the room are obviously the taxpayers, and the basis on which income, consumption, land, whatever it might be are clearly spread across everyone.

So I do think you start off with the 'who does what to whom and why', both by function and by role. I do think if you come at this from having had a senior public service career, as Terry has, as (Nous Group Principal) Tanya Smith has, who wrote the piece in here (the report), you do tend to think, "oh is this too hard? Is a grand bargain, a big picture reform too hard?" I think that comes from years of being in the trenches and having scars of all sorts. But the article by Tanya Smith does deal with it by saying, "let's divide this by policy, by regulation, by service delivery", in other words by role rather than, for example, by where universities should fall in the overall picture.

I would rather hope that – and the Prime Minister seemed to be going there – we try to start with the bigger picture, we try to start with the clarity of separation. It won't be perfect, there will be sharing, it's inevitable. But I think the starting point ought to be that you can do much better in terms of clarifying who does what to whom and why.

So I think that's where the starting point is. If and when you have managed to achieve most of that, you come to funding. And I want to say some of this particularly because I have noticed the response – and I don't want to make this partisan but – from both (Opposition Leader) Mr (Bill) Shorten and Mr (Jay) Weatherill as the only Labor Premier. Their response was, "oh look, we don't really want to go there, what we have got to do is we need our $80 billion back that was ripped away from the states in the Budget." That's essentially what I heard Jay Weatherill say this morning.

The $80 billion, just to be clear, is the extra funding levels in years five, six, seven and eight, so beyond the forward estimates. I think we really need to nail this one; the $80 billion is mythical. The $80 billion never existed. The $80 billion doesn't exist. It only exists in the sense you might say, "well the Government could always borrow, the Federal Government could go further into deficit and it could borrow." But that money does not exist and anyone who knew anything about it at the time of the agreements with the, I think it was the Gillard Government, would know that it simply doesn't exist.

So we have got to have a conversation with the community which says, if you really want increases in health, education, disability, if you want those very significant increases, and continuing rates of growth – and there are good arguments to be made, in my view, more so in health and disability perhaps than in education, but there are good arguments to be made for growth beyond the inflation rate – if the community wants that to happen then something has got to give. Something has got to give. It would really be tragic if the traditional sort of government opposition Liberal/Labor view led to this process being short-circuited. And there is some debate about, well if we don't get our $80 billion back, which we never had, but somehow that's a threshold before you can have a sensible discussion. That is simply treating the Australian people as fools. And I do think it's about time that they were told the truth about some of those realities.

Let me say a few words about the GST. When the next review of tax comes up, you can be quite confident that along with the Henry Review, which wasn't allowed to talk about GST, so it came up with some surrogate for GST, but essentially it was the same idea, it was a tax effectively on consumption. The review is inevitably going to say that we should be taxing consumption more. It is inevitably going to say that the states haven't made a sufficient effort to broaden their tax base to push it down and broaden it rather than keep it narrow and at a high level. It will inevitably say that. It will inevitably say that income taxes and company taxes are too high in Australia and that they're a major competitive disadvantage. So I think you can work out and say a lot more profound and useful things no doubt than that potted summary but essentially you know what the tax review is going to say. They have been done by the Organisation for Economic Co-operation and Development (OECD); they had been done by the International Monetary Fund (IMF); they have been done by (Dr) Ken Henry's group, which was a high-quality, cross sectional group; and by innumerable other players.

I just want to talk briefly about the argument that says you can't even consider GST or consumption tax because it's regressive. I really only want to make two related points:

1. Firstly, what you ought to be interested in is the overall tax base. Is the overall tax system regressive or not? Are you increasing the regressive element in the overall system? If you simply pick individual taxes, you are going to have no chance, no chance of getting the correct answer in terms of the impact on the average person.
2. The second thing that ought to be said is where governments are at the moment, if all this fails over the next few years they're really going to use bracket creep. I mean that is what both governments are doing; they're simply allowing more and more of us to go up into higher income tax brackets that seem to be relatively politically painless. It is also far and away more regressive, because what it means, next year, a person on average earnings in Australia will be in the second highest tax bracket, will be paying the 37 per cent. I mean that's staggeringly ineffective and an unfortunate result. So it will also incidentally have a huge impact on participation over time and female participation in particular.

So I think you need to have a sensible objective argument about the impact, regressive or progressive of the tax system as a whole rather than just homing in on the GST as a bit of a cajole to play Liberal/Labor games.

Just a couple of other things in terms of how you might advance the debate. I think you actually do need more hypothecation. All the evidence is it is really hard to get this stuff done; it is easier to get it if you actually say, "I am going to change this tax to that tax, and I am going to hypothecate the extra revenue". You will have noticed that when the National Disability Insurance Scheme (NDIS) came in and part of it was funded by the increase in the income tax rate, absolutely no one said boo because the objective, a disability scheme, was so attractive or considered attractive.

I do think you have got to use hypothecation in an intelligent way. I do think the states, as part of their ownership of any reform, need to look at the state tax base. I do think land tax is probably the obvious one; it is not particularly politically easy. It has been done in Canberra but that's a very different situation. But I think the states need to own up to the fact that they need to play their part in this notion that there is one overall tax base, one lot of people, and one lot of things you can tax and the states do need to look at their own efforts in this regard. I also think incidentally, that the Commonwealth decision to index fuel excise was a remarkably good piece of policy and I would have thought politics, and I am bemused that it seems to be hung up.

There are also some papers in there and some words on horizontal fiscal equalisation, and this is my second last point. Apart from the fact that we have all these horrible expressions, 'vertical fiscal imbalance', which I have tried not to use, 'horizontal fiscal equalisation', and I notice Terry is heavily into 'subsidiarity'. The trouble with all those words is that they mean something to the policy group, they mean very little to the people who ultimately need to understand and at least be accepting of the need for a change in the federal compact.

For what it's worth, I don't believe that horizontal fiscal equalisation is a first order issue. John Brumby and I, and a business man from South Australia, did spend a year or more of our lives on this and all the evidence was that frankly it's a low order issue that as the Prime Minister sort of indicated on Saturday, doing it on an equal per capita basis and having the Commonwealth subsidise or 'fix' the territories and Tasmania and South Australia is likely to be the best way of addressing this. The notion that forever you are going to have the Grants Commission and what goes with it, which really is a 19th or 20th century concept, and that that's a useful use of anyone's time, we thought was bizarre. You have got to get there of course, you can't do it instantly, it depends a bit on the Commonwealth's revenue capacity, which is under pressure. But I certainly think Mr (Colin) Barnett, the Western Australian Premier, got this precisely wrong, he said, "you've got to fix the distribution before you do anything else". Well I think that's 180 degrees from the logical outcome. The logical outcome is: you can solve the distributional aspects if you can solve both the governance for who does what and the funding aspects. I think the distribution between the states is a low order issue even though I, like other treasurers, used to be put ads in the paper about it 25 years ago. It is frankly, not where you should start this debate in my view.

And finally, can I just say this. I think one of the good things about at least some of the papers is that they try to demystify, demythologise some of the academic concepts and public policy concepts. If this is going to be a public debate, or I think CEDA calls it a 'national conversation', then you have got to do it in words and arguments that the average person can understand. And I think we are not good at that in Australia. Probably politicians are not good at it generally. It does need to be a broader, if you like, national discussion and it does need to be demystified and it needs to be in terms, in language that the public as a whole can understand. Otherwise it'll remain sort of mumbo jumbo and if it remains mumbo jumbo, it'll never happen.

So that's as much as I wanted to say by way of commentary. I think it's (*A Federation for the 21st Century*) an excellent paper, it's got a wide range of views. They are not all meant to be entirely consistent – it would be unlikely given the number of contributors – but it basically starts from the right assumptions. This is important, its time is now and we need to find a way to have a sensible, mature conversation.

> ANNUAL DINNER

> 18 NOVEMBER 2014

> MELBOURNE

Economic possibilities

Glenn Stevens

Governor, Reserve Bank of Australia

In November, Reserve Bank of Australia Governor, Glenn Stevens, gave his fifth biennial address on the state of the Australian economy at CEDA's Annual Dinner.

In his speech, Mr Stevens outlined the changes in the Australian economy since his first Annual Dinner address in 2006. He explained the importance of the resource and exports sectors, and the need for other sources of domestic demand to play a stronger role in the economy.

Thank you again for inviting me to address CEDA's Annual Dinner. This is the fifth time I have had this pleasure, and it continues a long tradition. Given that it is the fifth time, I'm going to be updating some of the presentation material that I have shown you on past occasions in the hope that you might find that of interest.

The first time I addressed this gathering was in 2006, and we talked about the role of finance in promoting economic development. An important part of the story was that, through history, financial development and innovation went hand in hand with the extraordinary growth in living standards that was experienced as a result of the industrial revolution. Another part of that story was that financial development did not come without its risks, which on various occasions in history those risks materialised in damaging, or even devastating, fashion.

In 2006 we were talking, among other things, about the rise in debt of Australian households and the various risks that might accompany that. We had a so-called 'stress test' on the banking system as part of the International Monetary Fund's annual visit to us. The results had been pretty good. We were not sure how reassured we should be by them. And we talked about an increase in risk-taking in certain parts of the corporate sector that was starting to grow – very active in private equity and so on at that time – and we wondered how that would all turn out.

We didn't have to wait long for answers to those questions. The next time I came to CEDA two years later in 2008, the Global Financial Crisis (GFC) had erupted and the global economy and financial system globally were facing their darkest moments since the 1930s. The G20 leaders in 2008 had just met for the first time in Washington and taken the first steps towards putting the global financial system back onto an even keel.

By that stage, growth in Australia had already begun to moderate, but we feared that a much more significant slowing could be in prospect. Confidence was shaken and, understandably, households and businesses became much more cautious about spending, taking on more debt, or investing in a new process or idea. The deteriorating global outlook also led to large declines in asset prices globally and the prices of commodities relevant to Australia. The feeling at the time was that our terms of trade, which had risen quite a bit in the preceding few years, had probably peaked. The terms of trade we expected to see were thought likely to subtract quite markedly from growth in national income over the years ahead.

It's a matter of record that, due to a combination of factors, our economy and its financial system came through that real-life 'stress test' remarkably well, all things considered. And, as it turned out, our terms of trade had further – a lot further – to rise.

When I came in 2010, two years after the GFC hit, the terms of trade had just broken through the peak of two years earlier and, on a five-year moving average basis, were at their highest level since Federation. Our assumption was that the terms of trade would probably peak that year, in 2010, and would decline steadily over the next few years.

That assumption proved to be somewhat pessimistic. The terms of trade in fact peaked a year later than we thought and about 12 per cent higher than we thought in September of 2011. By that stage the terms of trade peaked and then started to come down. It was an assumption on our part that the terms of trade would keep falling. And so they have. The terms of trade have fallen by about 13 per cent since two years ago and by 22 per cent since their peak. Though they remain a long way above the long-run historical average.

As additional supply of commodities comes onto the global market – a lot of that from our own country – and as demand is now growing and presumably will keep growing more slowly than it was hitherto, our best guess is that the terms of trade will probably fall some more over the period ahead. Even if they do fall quite a bit, that 10 or 11-year moving average will still have been quite high for some time. So it has been a very big episode. As this history amply demonstrates, such forecasts – all economic forecasts – have a wide range of uncertainty. This is something the Reserve Bank has emphasised a lot in the past couple of years.

The increase in the terms of trade prompted a surge in investment to supply these commodities that now commanded higher prices. This surge in capital spending by the resource sector has been a pretty big deal. Typically, resource investments are around two per cent of gross domestic product (GDP), or three per cent in a big year. Two years ago we forecast that it was going to peak at about eight per cent. In fact it has peaked at just a little less than that and it's now on the way down. Resource capital expenditure has fallen to about seven per cent of GDP. And there are substantial falls ahead. Even with those falls there are still some large projects ongoing in the gas sector that will hold overall resource sector investment at levels that are still quite high by the standards of any history up until the past few years.

As the expansionary effect of that surge tails off and indeed is reversed, even if partly, other sources of demand in the economy need to play a stronger role in driving growth. It's very clear that one of those sources of growth is growth in resource exports, which is using the capacity that this investment has in fact put in place. If you take iron ore, roughly speaking, we have nearly finished the process of increasing capacity from a million tonnes a day to two million. Indeed, the contribution of 'net exports' to growth in real GDP growth has, over the past year or two, been the largest for more than a decade.

Even so, we need stronger growth outside the resources sector. After several years of quite subdued growth, we estimate that non-mining activity has picked up some speed over the past year.[1] But it would be good to see more strength here in the future, as the decline in mining sector capital spending continues. There are sufficient spare labour resources such that we could probably enjoy a couple of years of non-mining sector growth somewhat above its trend pace before we need to worry too much about serious inflation pressure. The non-resource sector in the traded part of the economy – the external-facing part of the economy – could contribute to that, and I think should contribute to it. The decline in the exchange rate we've had will help contribute to that, but the currency does remain above most estimates of its long-run fundamental value, particularly given the further declines in commodity prices that we've seen this year. An exchange rate more in line with fundamentals would be a helpful contributor to achieving the sorts of balanced growth outcomes that we need.

Turning now to domestic sources of demand and away from the resource sector and the export sector, an obvious contributor is the set of forces at work in the housing sector. Investment in new dwellings is rising quite strongly. Now I think it ought to be possible, if we are sensible with demand management and sensible on the supply side, for this to go further yet and, more importantly, for this higher level of activity to stay high for longer than we've typically seen in the past. A high level of construction in housing, maintained for a longer period of time, I think is vastly preferable to a very sharp boom and then bust. That alternative outcome, the boom and bust, would probably give us a higher peak in the near term, but most likely then a slump in this form of activity while mining investment was still falling. So I don't think that would be helpful. A sustained period of strong construction on the other hand would be more helpful from the point of view of encouraging growth in non-mining activity and surely also from the wider perspective of housing our growing population in an affordable way.

Considerations such as these are among the reasons we ought to take an interest in developments in dwelling prices, the flow of credit towards for that purpose for housing purchases, and the prudence with which such funds are advanced.[2] Given that this has been topical lately, it is perhaps opportune to offer a few observations on this topic.

Having fallen in late 2010 and early 2011, dwelling prices have since risen. Nationally the median price across the country is up by about $100,000 – about 18 per cent – since the low point. Prices have risen in all capital cities, though with a fair degree of variation. The smallest increase has been in Canberra, at about six per cent, and the largest in Sydney, at 28 per cent.

Credit outstanding to households – something that we look at very carefully – is rising at about six to seven per cent per year. I personally don't think that this is a matter of concern. When we turn to the rate of growth of credit to investors – and I don't mean here property developers, I mean individuals who are buying for the purpose of investing in a housing asset – we see that it has picked up to about 10 per cent a year over the past six months. And investors now account for nearly half of the flow of new housing credit.

It is not clear whether this acceleration will continue or abate. It is not clear whether the pace of price increases for dwellings will continue or abate. And it is not to be assumed that investor activity *per se* is problematic. Indeed, a fair proportion of the investor transactions are involved in putting new housing stock onto the market. And that's good, we need that. It can also be observed that a bit more of the 'animal spirits' evident in the housing market would be welcome in some other sectors of the economy.

Nor, let me be clear, have we seen these dynamics, so far at least, as an imminent threat to financial stability. And indeed that should be clear from our recent publication on that.

So we don't just assume this is a terrible problem. By the same token, given everything we have seen around the world over the past seven or eight years in housing, it is surely imprudent not to question the comfortable assumption that this is all entirely benign. A situation where prices have already risen considerably in our two largest cities, Sydney and Melbourne, where about a third of our population live; prices are rising, at present, considerably faster than incomes; and an important area of credit growth has picked up to double-digit rates, ought to prompt the reasonable observer to ask the question whether some people might be starting to get just a little overexcited. Such an observer might want to satisfy themselves that lending standards are being maintained.

And they might contemplate whether perhaps some suitably calibrated and focused action to help ensure sound standards – and that might lean into the price dynamic to some extent – might be appropriate. That is the background to the very much publicised single sentence in our recent financial stability review to the effect the Bank was working with other agencies to see what more might be done to reinforce sound lending standards.

Let's be clear what this is not about. It is not an attempt to restrain construction activity. On the contrary, this is an attempt to be assured that we can elongate the upswing in housing construction. Nor is it a return to widespread attempts to restrict lending via direct controls. I'm old enough to remember that era very well, and that was one in which the price of credit overall was simply too low and credit growth to just about everybody was too fast and we were trying and failing to restrain that credit growth by the resort to regulatory chores instead of raising its price. That didn't make sense.

But that isn't the problem we have today. We don't have the problem that interest rates are too low across the board. And the fact that credit growth is generally fairly moderate testifies to that fact. The reserve interest rate is very low, but that is well warranted on macroeconomic grounds. The economy has spare capacity. Inflation is well under control and that looks quite likely to be the case over the next couple of years. In such circumstances, monetary policy ought to be accommodative – and it is – and on present indications, it is likely to be that way for some time yet. But for accommodative monetary policy to do the best thing for the whole economy, it's helpful if pockets of potential over-exuberance don't get too carried away in the process.

Let me turn then from housing investment to investment more generally – that is, by businesses – and here a more robust picture for capital spending outside of mining would certainly be part of a further strengthening of growth over time. Some of the key ingredients for that are in place. To date, there are some promising signs here of stronger intentions, but not so much yet in the way of actual commitments by business. That's often the way it is at this point of the cycle. Firms wait for a time when they feel more confident. They wait to see whether there's more evidence of stronger demand. And of course, part of the stronger demand when it comes is going to come from them. It's somewhat circular but that is actually how the economy works. So that's an area where we need to watch this space.

With respect to consumer demand, not a lot has changed. The ratio of debt to income remains close to where it has been for some time. It's rising a little at present because income growth is a bit below trend. Household consumption growth has picked up to a moderate pace and has actually run ahead of income over the past two years. Given that household wealth has risen strongly over that period, and interest rates are low, a modest decline in the saving rate is perhaps not surprising and indeed we think it could decline a little further in the period ahead.[3] We shouldn't expect a period where household consumption persistently grows considerably faster than incomes year after year and the saving rate behaves the way it did from the mid-80s through to about 2005. I very much doubt that that will happen again, I don't think it should happen again and the reason for that is that the debt load is already quite high and it's probably not prudent for that to go up a long way from where we are.

So, that's what I have to say about sources of demand and none of that is terribly new.

Productivity and competency

When last I was here there was some evidence – very, very tentative evidence – that productivity was starting to improve after a number of years of much slower growth. The most recent data, as measured, confirm that labour productivity has now grown faster over the past three years than it did on average over most of the 2000s. This is observable across a wide range of industries outside of the utilities and mining sectors where some unusual forces have been at work. The standard caveats apply of course; it's hard to measure productivity. Nonetheless, at least there's some evidence consistent with the hypothesis that things are getting onto a better track. We shouldn't find that surprising.

Business models right around the country have been challenged by the substantial change occurring in the economy. That change itself is a response to changes in relative prices, in technology, in the exchange rates and so on. The good news is that businesses can respond to that, and they have been doing so. That's the good side of that story.

That process will need to continue. There'll be no let-up. And, you will recall, there is the so-called 'to do list' that we've referenced on other occasions as set out by the Productivity Commission.[4] So this is good news. And those remaining challenges remain for us in the periods ahead.

What I'd like to do in the remaining time is pose a slightly related, but different, set of questions. I think these questions are increasingly being asked. It's about whether our overall business environment is conducive enough to risk-taking and innovation, and whether we are doing enough to develop the relevant competencies and capabilities for the modern world.

The questions might include ones like:

- How easy is it to start a business?
- If the business fails – as many do, particularly small ones – is it easy enough to try again?
- How easy is it to hire employees?
- And I know I'll get in trouble for saying this but also, how easy is it to let the employees go if things don't work out? Because, if it's too hard to let them go, then it's too hard to hire them to begin with.
- Are the rewards of a scientific and research career sufficient to attract a share of our best and brightest? Or are they all going into designing financial products?
- What is the role of private sector support for research and development (R&D) – as distinct from our rather heavy reliance historically on government support? Is business itself doing enough here? Does industry want to get more involved in R&D? Does academia want to let it?
- Can private finance – be it banks, venture capital, 'angel investors', private equity, whoever – get more involved in supporting innovation? Are the entrepreneurs who would like to receive that support prepared to accept the discipline that comes with it?

These and other questions are part of a much broader discussion than the competitiveness conversations we typically have, as important as they are. We are really coming at the question of whether we have the competencies, across multiple dimensions, to be effective in the modern global economy. I don't know the answer to that because these questions, frankly, are beyond my competence to answer. I would note that others more qualified than I am have given opinions on these things, and indeed, CEDA itself has done some interesting work that's relevant to a number of these questions.[5] So I'd refer you to those documents.

What I'd like to do though is give a positive commentary about Australian competence in one thing that I have observed fairly closely over the past year. You might have noticed, we have just hosted the G20. This was quite a big deal. Here was something global, complex and requiring careful leadership. We last hosted G20 in 2006 in Melbourne, and I was at that meeting. In fact, I'm one of the few governors still around who was at that ministers and governors meeting. Since then, the scale and complexity of the G20 have grown almost beyond recognition. In those days the leaders didn't meet, now they meet every year. There are a host of ministerial and other meetings at various levels – something like 60 formal meetings a year under the auspices of the G20. There is the B20, C20, L20, Think 20, Youth 20 and various other groups. All of these have their own legitimate reason for being, they all have their own agenda, and somehow we have to make those agendas fit with the main G20 agenda. And that main G20 agenda itself seriously needed refining, focusing and streamlining this year. The G20 needed to show that it could effectively meet the challenges of securing better economic performance, or to use the language that the G20 has been using, to foster "strong, sustainable and balanced growth".

Australia meanwhile is one of the smaller members of this group by GDP and certainly by population. We cannot match the scale of human resources available to the larger countries on every single work stream that's in the G20. We are geographically remote – it's costly in time and money for people to come here. We are not powerful enough simply to demand that they follow our lead or to command their attention. It was our job to manage this rather unwieldy body effectively in 2014.

I wasn't at the meetings in Brisbane, but the feedback I have received from my counterparts is uniformly and universally positive and strongly so. They judge that the Australian presidency has, by the metrics that count, been very successful. Prodigious efforts by exceptionally dedicated people in the public and private sectors have ensured improvements to the agenda, process, logistics and conduct of meetings, and to the outcomes of the G20. Substantive things have been achieved in the form of pro-growth commitments that, if carried through by the various jurisdictions around the world, will make a material difference to the wellbeing of citizens in G20 countries.

Achieving all that was costly in human and financial resources. It required coordination between multiple organisations. It was not on the scale of running the Olympics – something that Australia also did well – but it was nonetheless a big deal and it was done well. It wasn't achieved by effortless superiority;

it owed to careful preparation, astute use of some of our natural advantages and continuous effort over a long period. But that's where success always comes from, really. The only question is: How badly do we want it?

Responsibility for the G20 now passes to Turkey. We can bask in the glow of success for a couple of weeks and then get on to other matters. The point simply is that this has gone well as a result of the determined efforts of a range of people who were clear about what they wanted to achieve and who mobilised the necessary resources and effort to get there.

I might note in passing, one other result of Australia's leadership of the G20 – and this is very much our Treasurer's doing – is that the whole issue of infrastructure is well and truly on the table. No one doubts the need for infrastructure provision, not just in our country but in many, and it has clear economic advantages. It supports demand while you're building it, but it also enhances the economy's supply capability for the future. So it has a short run and a long run payoff.

It is also clear from the various discussions over this year that the problem isn't a shortage of capital to fund infrastructure investment. The issues to be overcome don't include finding the money. What they do include is appropriate project selection, long-term planning, governance around that whole process, appropriate contract design, appropriate risk sharing between the public and private sectors – both of whom have some risks that they're better at bearing than the other – pricing the use of the infrastructure once it's built, and so on.

There is an opportunity here, including for Australia, to do something of value over the years ahead. Of course, we will need to be serious and to put in the effort over an extended period in all these areas. If we don't put in that effort, not much actual infrastructure will be delivered. But if we are serious, a lot could be achieved. I imagine that the Committee for Economic Development of Australia would be keen to be involved in that process.

Conclusion

I have reached the limits of our time this evening, so let me conclude. Australia's economy is continuing to grow, moderately. It has been responding in ways you would expect to the rather extraordinary set of circumstances it has faced over the past decade. I would argue that we've met them with some success; of course, the game is not yet over. There is continuing adjustment ahead and doubtless no shortage of challenges.

But beyond the challenges of the next couple of years, maximising our economic possibilities in the modern world requires sustained efforts at adaptation and innovation, at doing things better and better every day, perhaps most of all, a willingness occasionally to take the odd risk. I would be confident that we have, or we can develop where needed, the relevant capabilities. The only question is whether we are sufficiently determined to succeed in deploying them.

Endnotes

1 Estimating non-mining activity requires an estimate of imports used in mining activity. This is a rather imprecise exercise and so the estimates for non-mining activity should be considered as very approximate.

2 The Reserve Bank does not take a doctrinaire view of the 'correct' level of house prices. The endless discussion about whether or not the level of prices constitutes, at any one time, a 'bubble' is not very productive. We can observe that, for more than a decade, the level of prices relative to disposable income has been noticeably higher than it used to be, and not just in Australia. If that is a bubble, it is a remarkably long-lived and widespread one. But even if we lose no time arguing over that question, it is still the fact that prices go up AND down, and that these trends matter for the economy. If we are interested in strong and steady growth, we have an interest in dwelling prices and indeed all asset prices.

3 See Kent, C (2014), 'The Business Cycle in Australia', Address to the Australian Business Economists, Sydney, 13 November. Available at <www.rba.gov.au/speeches/2014/sp-ag-131114.html>.

4 See Banks G (2012), 'Productivity Policies: The "To Do" List', Speech at the Economic and Social Outlook Conference, 'Securing the Future', Melbourne, 1 November. Available at <www.pc.gov.au/__data/assets/pdf_file/0009/120312/productivity-policies.pdf>.

5 See Chief Scientist for Australia (2014), 'Senate Inquiry Submission – Australia's Innovation System', Submission to Senate Inquiry into the Australian Innovation System, 23 July. Available at <www.chiefscientist.gov.au/wp-content/uploads/Chief-Scientist-submission-to-Senate-inquiry-into-Australias-Innovation-System1.pdf>; and CEDA (2013), 'Australia Adjusting: Optimising National Prosperity', November. Available at <www.ceda.com.au/media/338287/cedaaustadjusting_web.pdf>.

> RELEASE OF THE FINAL REPORT OF THE FINANCIAL SYSTEM INQUIRY

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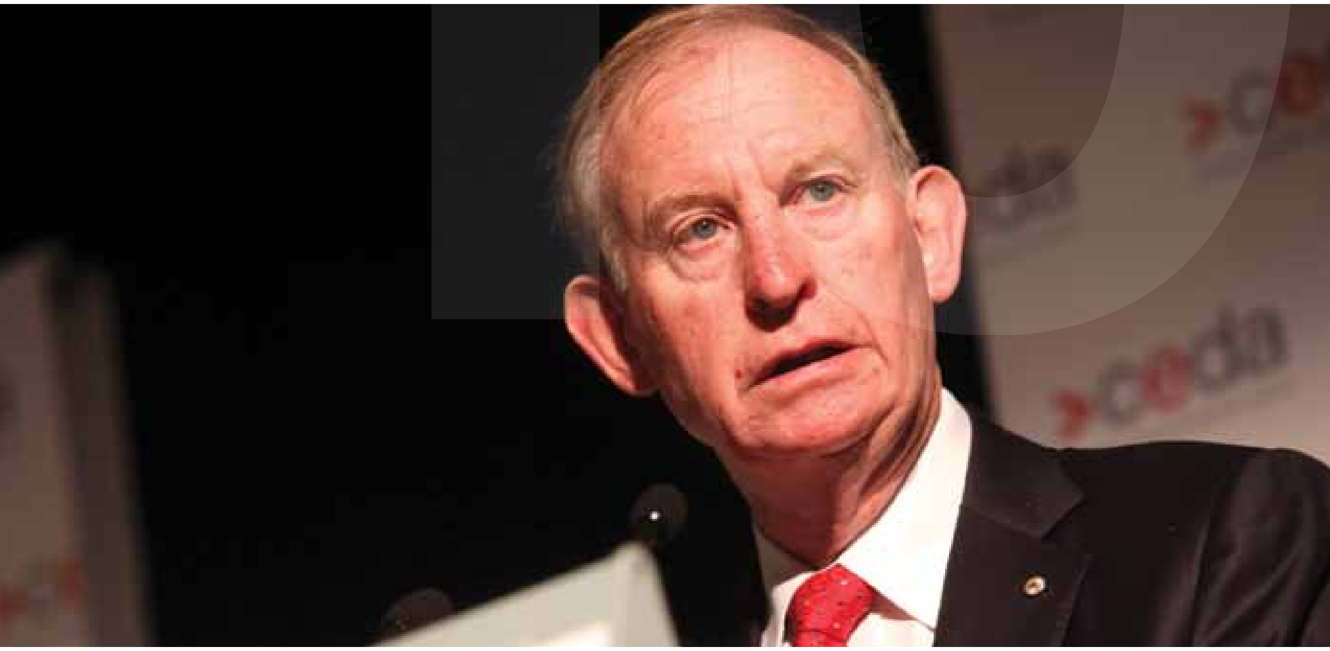

Financial System Inquiry: Supporting Australia's economic growth – Part 2

David Murray AO

Chair, Financial System Inquiry

In December, Mr Murray presented the Financial System Inquiry's recommendations at a CEDA event in Sydney. These included recommendations to address the issue of resilience of the financial system, competition and superannuation.

The Inquiry has been conducted in an open manner. We have consulted extensively with industry participants and end users.

The first round of consultation yielded more than 280 submissions and the second, more than 6500. Our interim report provided a comprehensive review of Australia's financial system.

The final report is a shorter and more focused document. It makes 44 recommendations to improve the efficiency, resilience and fairness of Australia's financial system. It also sets out a blueprint to guide policymaking over the next 10 to 20 years, and makes 13 observations on taxation for reference to the Government's *Tax White Paper.*

Around 30 per cent of all recommendations cover – in one way or another – competition.

The Inquiry's terms of reference required us to examine how Australia's financial system can be positioned to support economic growth and meet the needs of end users. We were also asked to consider how the system has changed since the Wallis Inquiry, including the effects of the GFC.

This has not been an Inquiry established to deliver or prevent a particular outcome. Rather it has been conducted as a genuine exercise to assess the strengths and weaknesses of the Australian financial system.

We have considered the financial system in the context of Australia's economy, particularly our status as a smaller, wealthy, open commodity exporter, and described the features of a good financial system from Australia's perspective.

In formulating our recommendations, we have focused on the national interest and the needs of end users. Our report is evidence-based and wherever possible presents cost/benefit trade-offs in support of our findings.

My purpose today is to explain how our recommendations will adapt the financial system to meet Australia's special circumstances in the interests of its users and the nation as a whole.

I will first address recommendations that flow from two paradigm shifts since the Wallis Inquiry, namely those relating to resilience and consumer outcomes. Then I will deal with our unique and rapidly growing superannuation system. Lastly, I will talk about competition, efficiency, innovation and regulatory improvement.

While many of the Wallis Inquiry recommendations have stood the test of time, there are two areas where this Inquiry has formed a different view.

First, we believe external shocks can and will occur. As a result of the crisis, governments are now assumed to be the backstop of the financial system. In contrast to Wallis, we cannot simply rule out the possibility that the Government will be required to backstop the banks in the event of a crisis. However, we believe the system should be managed such that taxpayers are highly unlikely to lose money. We have to take practical steps to reduce moral hazard.

Second, we believe that effective disclosure and financial literacy are necessary but incomplete approaches for delivering satisfactory consumer outcomes. For this reason, we have highlighted the need for improved firm culture along with stronger obligations in some areas, especially in product manufacture and distribution.

The Inquiry makes six recommendations that directly address the issue of resilience, and two relating to competition and superannuation, which also have consequences for system resilience.

I will discuss competition in the residential mortgage market later.

In relation to capital, the Inquiry believes the capital ratios of Australian banks should be 'unquestionably strong'. Specifically, they should be ranked in the top 25 per cent of global banks. The major banks are currently somewhere between the global median and the 75th percentile. This means that they are not 'unquestionably strong'. Accordingly, they should be required to increase their capital ratios so that they are in the top 25 per cent of global peers, and a process for more transparent reporting of comparative capital ratios should be developed.

Also in relation to capital, we recommend the Government should proceed to introduce a leverage ratio as a backstop to authorised deposit-taking institution's risk-weighted capital positions – in line with the unfinished Basel III agenda.

Proposals for the issuance of 'bail-in' debt securities should, however, not move ahead of developing international standards. If issued, this form of debt should conform to the principles relating to legal certainty outlined in our report. We do not propose that depositors should be bailed-in. The report also endorses existing processes to improve pre-positioning, crisis management and resolution powers for regulators.

The Financial Claims Scheme should continue to be funded on an ex-post basis, partly because our recommendations on resilience reduce the need for an ex-ante levy.

To limit systemic risk and in the interests of fund members, we have recommended a general prohibition on direct borrowing for superannuation funds.

Generally, higher capital ratios and loss absorbency represent a form of insurance. They reduce both the likelihood and cost of failure. The Inquiry believes that the cost of this insurance is low and is significantly outweighed by the benefits of a more resilient system.

The Inquiry has been conducted against the backdrop of:

- Ongoing concerns about the quality of financial advice;
- A parliamentary inquiry into Australian Securities and Investments Commission's (ASIC's) performance; and
- Debate over amendments to the regulatory framework governing advice.

However, it would be a mistake to look at our recommendations in this area only through the narrow lens of the recent debate on the Future of Financial Advice (FOFA) reforms.

Our six recommendations are based on a much broader assessment of the current framework of which FOFA is only a small component.

We have identified three problems with the current arrangements:

1. Firms do not take enough responsibility themselves for treating consumers fairly. This places pressure on the regulatory framework and the regulator.
2. The current framework places too much reliance on disclosure and financial literacy. While these are important, they are not sufficient to deliver appropriate consumer outcomes.
3. We need a more pro-active regulator but, to be clear, regulation cannot be expected to prevent all consumer losses.

Our recommendations are not meant to absolve consumers of responsibility for their choices or insulate them from market risk. Rather, they are intended to reduce the risk of consumers being sold poor quality or unsuitable products.

Consistent with the approach in other industries where information imbalances can cause significant consumer detriment, product manufacturers should be required to consider the suitability of their products for different types of consumers as part of the design process.

Hence we have recommended the introduction of a targeted and principles-based product design and distribution obligation.

We also believe there needs to be a change in the approach of the regulator. ASIC should be a stronger and more proactive regulator that undertakes more intense industry surveillance and responds more strongly to misconduct once identified. Numerous submissions claimed it is under-resourced. We have recommended an industry funding model for ASIC.

We are putting the individual at the centre of the superannuation system and strengthening its focus on retirement incomes, because we believe the provision of income in retirement should be enshrined as the system's primary objective.

The Inquiry has identified two major issues with the superannuation system:

1. Fees are too high in the accumulation stage given the substantial growth we have seen in fund size and member balances; and
2. Superannuation assets are not being converted into retirement incomes as efficiently as they could be.

The absence of strong consumer-driven competition remains a significant problem in the accumulation phase. MySuper aims to improve efficiency and competition by mandating simple low-cost default products and by encouraging funds to become larger. It has only been in place for around 18 months. However, we are not confident it will drive the efficiency improvements required. We have therefore laid down a challenge to the superannuation industry.

We have recommended a review of MySuper by 2020 to assess whether or not it has delivered sufficient improvements in competition and efficiency. If it has not been effective, we recommend the Government introduce a competitive mechanism under which only the best performing funds would be selected to receive default superannuation contributions. This would allow all default members to benefit from the type of purchasing power that currently delivers lower fees to employees of large firms that have negotiated bulk discounts for their employees.

The retirement phase of Australia's superannuation system is under-developed. Members need more efficient retirement products that better meet their needs and increase their capacity to manage longevity risk.

We therefore recommend that all fund members should be offered what we have called a Comprehensive Income Product for Retirement when they switch from accumulation to retirement. This would combine an account-based pension with a pooled longevity risk product.

Retirees would benefit from these products because they would have higher incomes and would not be exposed to the risk of outliving their savings.

The trade-off would be that less money saved through superannuation would be available for bequests, reflecting our view that the system should be about retirement incomes.

Collectively, the Inquiry's superannuation recommendations have the potential to increase retirement incomes for an average male wage earner by around 25 to 40 per cent, excluding the Age Pension.

Competition is the cornerstone of a well-functioning financial system, driving efficient outcomes for price, quality and innovation. Some parts of the system have experienced increased market concentration, especially in the wake of the financial crisis. Our aim has been to ensure there will be an adequate focus on competition in the future.

In the residential mortgage market we have recommended narrowing the gap between internal ratings-based (IRB) and standardised model risk weights for housing loans by increasing the former to between 25 and 30 per cent. This corresponds with a small funding cost increase for the major banks. However, competition will limit the extent to which these costs are passed onto consumers.

In some industries, competition has not resulted in reasonable prices for card transactions. The largest number of submissions we received related to customer surcharging for credit card transactions. We have recommended the Reserve Bank should ban surcharging for low-cost cards and cap surcharges in relation to credit cards. This should address concerns about excessive surcharging in some industries.

More than a quarter of our recommendations are designed to enhance competition. For example, we have recommended:

- Giving ASIC a competition mandate;
- Three-yearly external reviews of competition in the financial sector; and
- Regulation that is more technologically neutral to facilitate full online service delivery.

To facilitate continued innovation in the financial system, we have emphasised the need for regulatory frameworks to be more flexible and adaptable. Graduated frameworks are important to ensure that new entrants are not overregulated and to provide scope for innovation.

We have made several recommendations to reduce structural impediments to small and medium-sized enterprises (SME) access to credit and facilitate innovation in this area. Our focus has been on boosting competition, for example by encouraging the emergence of rival lenders and new techniques such as crowdfunding and peer-to-peer lending. Some of these recommendations will also assist development of the venture capital market. We have also identified issues with the fairness of SME loan contracts in relation to non-monetary default clauses.

Our emphasis on competition is designed to create a more efficient system. In considering allocative and dynamic efficiency, we have identified several aspects of Australia's tax settings that distort the flow of funds, especially differential treatment of savings vehicles and barriers to cross-border capital flows. Because our terms of reference do not allow us to make recommendations on tax, these observations will flow into the Government's *Tax White Paper*. The report also addresses issues relating to the corporate bond market.

The regulatory architecture developed after the Wallis Inquiry is reasonably effective. Our recommendations aim to build on the current arrangements. We want regulators that are strong, independent and accountable. Our recommendation for a Financial Regulation Accountability Board will ensure our financial regulators are subject to regular systematic scrutiny and instil a culture of continuous improvement.

In approaching our task, the Committee has emphasised Australia's need for a high-quality financial system, setting out the roles and responsibilities of its participants.

The unique characteristics of Australia's economy demand high quality in the eyes of the world because we want to continue to be successful at augmenting our own savings with foreigners' savings to develop the economy.

We have a good track record at this and a generally reliable system of law and public administration. However, as a commodity-driven economy, we experience higher cyclical volatility in national income and we have very high net foreign liabilities at more than half our GDP. These factors cause the rest of the world to monitor closely the quality of our settings.

The report assesses the potential costs of serious disruption to the financial system. The Basel Committee has estimated the average total cost of a financial crisis at around 63 per cent of a country's annual GDP. For Australia, this is $950 billion, with 900,000 additional Australians out of work. The economic cost of a severe crisis is much higher at around 158 per cent of annual GDP. For Australia, this is around $2.4 trillion. And this is just the annual cost.

Our experience during the GFC makes it very difficult for Australians to empathise with the depth of the economic and social loss in other countries. Yet the circumstances that shielded Australia from the crisis will not recur.

We had very high terms of trade, negligible net government debt, a Budget surplus, a triple A credit rating, a record mining investment boom, and a major trading partner growing in real terms at an annual rate of around 10 per cent and able to throw immense resources at a stimulus program that favoured our exports.

For all these reasons we need to maintain credibility among foreign investors and have an unquestionably strong banking system. The marginal cost of achieving this is small relative to the economic and social cost to the country and to taxpayers when a crisis occurs in less favourable circumstances than the last one.

We also need to ensure that one of the critical participants in the system, the Government, maintains a very strong fiscal position. The crisis demonstrated how quickly government finances can deteriorate and how damaging this can be for the relevant country – generally to the extent of about a 50 per cent blowout in net national debt in a very short time frame. Deterioration in the Government's credit rating would have a direct effect on the cost of credit in the system.

We have designed our report and its recommendations to put Australia's financial system in the very highest quality position. My colleagues and I simply ask that you embrace our recommendations in the national interest.

DAVID MURRAY

Acknowledgements

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