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Behavioural Economics **– Melbourne - 8 October 2014**

Behavioural economics – the love child of economics and psychology – has advanced considerably in the past two decades. In this event Andrew Leigh, in discussion with John Daley, outlined the main lessons of behavioural economics, and discussed the ways that it has affected policymaking in Australia. Lessons from theory and other countries suggest some of the ways that behavioural economics might continue to help us craft better policies in the future.

Speakers: John Daley, CEO, Grattan Institute
Andrew Leigh MP

Introduction: Alex Bond, EY

JOHN DALEY: Thank you very much Alex, thank you everyone for coming today. First of all, I should start by thanking Ernst & Young for this venue, we're very grateful for the chance to be here. Secondly, to thank Ernst & Young, which as Alex mentioned, is one of the affiliates of Grattan Institute that supports us, along with a number of other organisations and foundations and corporates. I won't go through them all now, but we are very grateful for their support; without them we wouldn't be able to do all the things that the Grattan Institute does. I should also acknowledge the traditional owners of the land on which this event is taking place and acknowledge Elders past and present. And then, just to put this in context, behavioural approaches to policy are not exactly new and, indeed, we held a seminar back in August 2012 with Donald Low talking about the Singaporean experience of behavioural approaches to policy and, for those who are interested, you can find that on the Grattan website.

So this is an important topic, it's not one that's going to go away, and I'm very privileged to be joined this evening by Andrew Leigh. As already indicated, Andrew is now the Member for Fraser, which is the northern half of Canberra that I realised the other day is in fact the electorate I would be voting in if I still lived where my parents used to be. So Andrew's my sort of former member, I guess. He's also the Shadow Assistant Treasurer, he was the youngest Professor of Economics at ANU when he was there and is indeed a very distinguished economist. He has written on everything from whether or not having a foreign-sounding surname results in you being more or less likely to get a job interview – to which the answer is if it sounds Italian looking good, otherwise you're in trouble – to the economics of education and a huge range of topics in-between.

He's also an almost, I must say, relentless populariser of economic ideas and I mean that in the best of all possible senses of popularising. There is no point in being an academic and having brilliant ideas if nobody ever hears about them and with books like *Disconnect* and his most recent book which I have here, *The Economics of Just About Everything*, including sausages, Andrew has done a real power of trying to bring economic ideas to the popular attention. But tonight he wanted to talk about behavioural economics and actually this is one of those areas that overlaps between our respective backgrounds. Andrew did a doctorate in economics at Harvard. I did the complete opposite; I did a doctorate in legal philosophy at Oxford. And actually, this is an area where those two fields effectively collide and we'll talk about that as we get to it.

So for those who want something very prepared, Andrew has a beautifully prepared text which I understand will be available publically afterwards. But for today, because we thought it would be lots more entertaining, we're simply going to talk about some of the ideas that are in that text and, I suspect, a few that aren't. So Andrew, let's start off by thinking about behavioural approaches. As you've spent a wee bit more time at Harvard than most of us, how did your time there get you interested in this topic?

ANDREW LEIGH: Well John, thank you very much first of all to EY, to Alex, the host, and to you for putting on the conversation. It's incredibly heartening for me to see so many people being excited by behavioural economics and it slightly takes me back. I may not be a professor of economics any longer, but at least I get to play one at the Grattan Institute, so thank you very much for that opportunity.

I guess when I was attending the labour economic seminars at Harvard, behavioural economics was just starting to creep in. This was the early 2000s and two of my classmates, Stephan O'Denevinier and Ulrike Maliniay, wrote a paper which was deceptively simple. Essentially all they did was go to four Boston gyms and say, "We'd like all of your data on the plans on which people attend and how often they attend" and from that they could back out the price per visit that people were paying. And it turned out that on average these Boston gyms charged you $10 to go along for a casual visit and when you calculated the price per visit that was being paid by people who were locked in to six or four month contracts it was $17. So, the typical person who had signed up for a contract with a gym was losing $600 over the life of that contract relative to having just paid the casual visit each time. And over that period a whole host of behavioural-inspired papers were emerging in the economics literature.

One paper looked at the behaviour of New York taxi drivers and found that when it rained their hourly wage went up because the cab was always full; they could go from one ride to the next. But that, because they were aiming towards a target income each shift, the New York cab drivers were knocking off early on rainy nights. Other papers looked at consumer behaviour finding that houses with swimming pools sold for a higher price when sold in summer and convertibles went off the lot more readily during summer. Conversely, black cars are more likely to sell on cloudy days because you're more likely to forget that being inside a black car is actually a really hot experience, and students who attend a university open day on a cloudy day are more likely to enrol at that university because apparently, according to a spate of psychology research, cloudiness increases the appeal of academic activities.

So there's a host of ways in which behavioural economics has provided insights into human behaviour and that research is exploding right now.

JOHN DALEY: Andrew, one of the books we in fact had on the recommended summer reading list for the Prime Minister a couple of years ago was a very old book, it was Robert Cialdini's book from 1984 *The Psychology of Persuasion* in which he talked about a lot of these biases and how they might be applied to marketing. And this was back in 1984, so at least in the corporate world this stuff's not completely new. How do corporates actually use these insights?

ANDREW LEIGH: Well, one classic is credit cards, John. So credit cards will typically offer zero annual fee but make their money up in high interest rates, knowing that the initial hurdle is something that they need to ensure is very low. Mobile phone plans I think are needlessly complex and part of that complexity is so that mobile phone companies are able to market particular niche products, like being able to free-call somebody on the same network, and have customers forget that actually most of their friends are not on the same network as them. In Las Vegas, hotels are extraordinarily cheap and that wouldn't be possible if it weren't for the fact that they're exploiting the behavioural bias that gambling is addictive. And vacation timeshare is very frequently left empty because buyers forget how hard it is to schedule your holidays when you want them and so vacation timeshare, again, exploits an availability puristic and makes us more likely to buy in but then less likely to make good use of it.

JOHN DALEY: I think you can see these things all over the place. One of my past things I try and keep very quiet is I ran margin lending for ANZ which, I might add, continues to be quite a profitable business, but it did make me very aware of what were known as "protected equity products". So things that basically say, "If the market goes up, you will get your investment in the market and if the market falls you will nevertheless get your original capital back again. But, by the way, the fee for that product per year will be very, very high".

Now, you go through the maths of these things and you realise that, frankly, I wouldn't sell one to my mother or my grandmother. They're a very, very poor expected return for the investment and then you think well, why is it that investors are prepared to accept these returns? And the answer is because they put an enormous value on not going backwards in nominal terms. The loss aversion is a big deal and, I guess, also you look at pretty much every single episode of Gruen Transfer is about all of the ways that corporates take advantage of these kinds of biases.

So that's how people in corporate might use it, but how might we individually be able to subvert these biases? What kinds of things can we do that will make us, if you like, more rational?

ANDREW LEIGH: Well, I talk about this a little bit in *The Economics of Just About Everything*, which is decidedly not a book about what government should do. If you're one of those people that has difficulty sticking to a training routine, which is probably just about everyone in the room, then you can lock yourself into commitment by training with a friend. Various studies have shown that you can reduce overeating by choosing a smaller plate because it looks small where there's a puristic by which we judge when we're full according to whether our plate is empty, rather than according to what our stomachs say.

If you're keen on managing to quit smoking there's a terrific economic website called Stick.com in which you can make contact with your future self such that, say, you put $100 up and if you succeed in quitting smoking then you get your $100 back; if you fail you lose your $100. You can make it even sharper if you like by saying that the $100, if you fail will go to a political cause you dislike. It's a US website and, for example, a Democrat who failed might have the money go to the George W Bush Presidential Library if they fail to quit smoking. It doesn't at this stage exist in Australia, but I did want to make the offer out there to any Liberal-voting smokers who would like to enter into a similar contract with me and the Australia Labor Party; very happy to facilitate your path to quitting smoking.

JOHN DALEY: Andrew, we've talked about a lot of these biases and one of the questions that arises is, is there a coherent unifying feature to them or is it just a grab-bag of everything that doesn't happen to fit a perfect economic rational model?

ANDREW LEIGH: So, it is a collection of things more than a coherent model and this is I think the biggest critique of behavioural economics, John. It's often referred to as the love child of economics and psychology, but that reflects the fact that psychology is a less unified discipline than is economics.

Some of the principles that underpin it are the notion of asymmetry between gains and losses and the notion of hyperbolic discounting. And what we mean by hyperbolic discounting is that if I ask you to choose between getting $10 today and $11 tomorrow, many more people will choose $10 today than if I ask you to choose $10 in seven days' time and $11 in eight days' time. That is, there's something special about today and one of the great studies on this asks people to choose between fruit and junk food to be collected in a weeks' time: half choose fruit, half choose junk food. Then they come back in a weeks' time and they're asked, "Do you want to switch?" and the people who chose junk food at the outset all say, "No, I'll take the junk food".

Of the people who chose fruit a week beforehand, two-thirds now switch to junk food. And that is encapsulated, I guess, in the Biblical maxim "Make me pure and chaste, but not yet" and has been translated into public policy - which I think we were about to go there John - in the plan "Save more tomorrow" which is a plan under which employees can commit to putting their next pay rise into savings, reflecting the fact that they want to save more, but they don't want to go backwards immediately. But we're still getting there and the big breakthrough with behavioural economics really will be in bringing more of these, at the moment, disparate things together into a more coherent narrative.

JOHN DALEY: So at the moment we may be stuck with a bunch of particular themes that deviate from the sort of 30 rational economic actors. Given that we know that this is how people behave, given that we know that they don't always behave in their own economic rational self-interest, how can policy makers take these insights and use them in designing policy?

ANDREW LEIGH: Well, in some sense we're already doing some of that. So if you support, for example, measures to reduce teen pregnancy, if you support a school leaving age, if you support cooling off periods in contracts, then in some sense you're already a behavioural economist because somebody who thought that individuals were always perfectly rational and always made decisions in their lifetime self-interest wouldn't need a school leaving age, wouldn't need to prevent teen pregnancies, wouldn't need cooling off periods in contracts. But I think there are other ways in which behavioural economics flows into policy.

The introduction of universal superannuation I think is a great example of this. Universal superannuation reflects the fact that systematically in a host of laboratory and real life economic examples people tend to under-save for their retirement. So the introduction of universal super in 1992 starting at 3%, originally aspired to go to 15% but we stopped at 9%, and then the increases in universal super from 9% to 12% were grounded in behavioural economics, in the notion that people can be made better off over their lifetimes by encouraging them to put away more savings.

JOHN DALEY: And is that example illustrates, most papers talk about this in popular terms as "nudge", sometimes the way the government responds to this is not by nudging at all; they respond by compulsion. So we compel people to stay at school for a certain period of time, we compel people to effectively save a certain percentage of their salary.

ANDREW LEIGH: No, that's completely right and then there's other areas which are much more light touch. So, for example, if we're trying to encourage people to pay their fine notices, the UK Behavioural Insights Team has run a range of experiments looking at what works in getting people to pay back taxes. Does it work, for example, if you say that the money goes towards health and education? Well, a little bit, 1% to 2%. Does it work if you tell people that 90% pay their taxes on time? Again, 1% or 2%. What if you tell them that 90% pay their taxes on time and then point out that they're in the minority in not paying their taxes on time? Well, now you get an extra 5% boost in tax payments.

It's a randomised trial based on letters that had to go out anyway, so the marginal cost of the randomised trial was trivial and the UK government's getting tens of millions of pounds in additional taxes. They've also experimented with looking at how you ask people to pay their car registration fees and found that compared to the standard "If you don't pay your car registration fee then we will compound your car", a letter which includes a picture of the car which will be taken away is significantly more effective.

JOHN DALEY: Coming to things that affect us that we don't like talking about much which are often a lot larger than that, which is around financial affairs. So one of the big insights I had working for the ANZ was the dominant emotion around financial services is fear and people don't like talking about it and they don't like thinking about it. Given that, given that people's response often to financial services is not "Let me work through the deal and figure out which one's the perfect optimal choice for me" but actually "I just don't want to think about this", how do you think that plays out in, say, things like financial advice?

ANDREW LEIGH: Well, if people were fully rational and perfectly informed then we wouldn't have to worry terribly much about financial advice. Everyone would read every word in the fine print; when someone saw a trailing commission they would immediately look at that and convert that into net present value terms, so they would see that the advisor was getting 1% per year, they make some long run assumptions about the returns, multiply that backwards and get the net present value; when they saw that the advisor was getting particular commissions for recommending particular products, as a good Bayesian they would use that to update their priors as to the extent to which they ought to take that particular piece of advice.

That's not how the world works and that's why you need protections around financial advice. Because of hyperbolic discounting, people place an overly low value on future costs incurred from commission, and so encouraging financial advice based on flat fee upfront with a clarity on the fees and transparency on commissions is absolutely vital to ensure that people get a good deal. And none of this is about people being stupid. This about this stuff taking a really long time and in a world in which people have exciting kids, interesting movies to go and see, fun friends to spend time with, it just doesn't make sense to assume that everyone's going to devote hours and hours to financial advice.

So there is a role of government, we believed in putting the future of financial advice reforms through, in making things simple, transparent and clear for a customer who wasn't stupid, but who had a lot going on in their lives and wanted to get the best answer quickly.

JOHN DALEY: Ultimately, many of these things amount to a form of paternalism, they amount to us, or to government more accurately, saying that it believes it knows what's going to be in your best interests and it's going to either compel you or push you, nudge you in that direction. Is there a danger here that government doesn't always know best and it nudges us in the wrong direction? And how do you deal with that problem?

ANDREW LEIGH: There's completely that danger John, but that's not confined to behavioural economics.

So, for example, we've had a government which put in place a baby bonus, a policy that I don't think was a particularly effective policy. Initially, not means tested, had very little impact on fertility, which was one of the outcomes it was intended to improve, and that was a policy whose total cost is way more than we've spent on all of the behavioural economics interventions in Australia and I suspect will continue to be so, even if this field explodes in popularity over the next few years. So, governments make mistakes and that issue applies as much to behavioural economics as it does to policies grounded in rational choice, but we ought to be careful about that.

In the areas I've talked about, of encouraging people to pay their overdue income taxes and pay their car registration fees, I'm not sure there's a great concern there. I think there would be a general view in the community that people ought to pay taxes and that we ought to make sure we use the most efficient ways of collecting those taxes, and that might involve taking a few leaves out of the marketing playbook in order to maximise that tax payment.

JOHN DALEY: I think another of the worries that's being expressed here, and Jeremy Waldron wrote a terrific article recently in New York review of your book, talking about the way that there's a value to human dignity, there's a value in simply letting people make their own choices, and if we push them towards one choice rather than not we're not taking that idea of dignity seriously. And I guess that's at least one of the ideas that lies behind the way that we value autonomy more generally. Is there a reason for us to be nervous about nudging?

ANDREW LEIGH: I think the best example of this is the New York ban on Big Gulp cups, which were those "only in America" sized cups, not that much smaller, frankly, that the jug that is sitting on the table in front of us. And Cass Sunstein and Richard Thaler, two of the advocates of nudging, stepped back when Michael Bloomberg said that he wanted to ban those large Big Gulp caps, they said, "This is too paternalistic". My friend Justin Woolford said, "They haven't banned the Big Gulp cup. What happens now if you want a Big Gulp is you just buy two of the next largest size and you've got the same quantity you would have had beforehand. It is not a tough thing to do, just say, 'I'll have two of that next size down'". But that's I think a nice illustration of something that many in the behavioural economics community felt a little uncomfortable about, the setting upper limits on cup sizes, where I think many behavioural economists would have been comfortable with an earlier Michael Bloomberg intervention of banning trans fats, which is a serious health issue.

JOHN DALEY: So where does the limit lie? How do I, as a wise policy maker, you, as a wise politician, but, nevertheless, afflicted with the notion that maybe we'd be wrong here, at least occasionally in my case, how do you know where to stop?

ANDREW LEIGH: It's a judgement call. Here's another example. The Behavioural Insights Team in the UK found that if patients when they're in a doctors' surgery fill in their own appointment card they're one-third less likely to miss the next doctor's appointment. Now, asking people to fill in their own appointment card is slightly patronising. It's a little bit annoying, it's less convenient than having the person on duty simply hand you a filled in appointment card, but one-third is a lot of missed appointments and that's a huge cost to the public healthcare system. So if you told me that the effect we were getting was 1/100th then I'd say it's too paternalistic to justify that, but an effect size of a third less missed appointments I'm willing to inconvenience people slightly to put in place an intervention which looks a smidgeon more paternalistic in order to save the health system a significant cost, which of course then has to be paid by all of the taxpayers.

JOHN DALEY: Alright, then let's look at something where we make this very concrete in an area that's at least up for grabs at the moment. At the moment, Australians are required to contribute about 9.25% of their salaries into superannuation. It was previously legislated to go to 12%, I think that – correct me if I'm wrong – that it remains ALP policy that it should go to 12%, but at 9% most people will wind up retiring with a lump sum that'll provide an income in excess of the age pension today. So it's not inadequate in that sense. Obviously, if more people save 12% rather than 9% they'll wind up with a lot more money in retirement, but of course they will do that at the cost of having less money when they are younger and at least arguably people value that money in a sense rationally more when they're young, rather than when they're old. And, indeed, you can see that on the numbers that we've been looking at recently, most people over the age of 65 who retire in fact net savings. So they actually succeed in not even spending the money that they are getting in.

So given those kinds of limits, why is it that it's okay to nudge people or indeed compel them from 9% to 12%?

ANDREW LEIGH: So John, you've hit on what I think is one of these fascinating partisan issues around behavioural economics. In general, the Behavioural Insights Teams have been set up by conservative governments; the Cameron government in the UK set up a Behavioural Insights Team and the O'Farrell, now Baird, government in New South Wales has set up its own Nudge Unit. But on superannuation nudges, it has been the Labor Party in Australia that has pushed towards nudging and the Liberal Party that's been very sceptical of the compulsion.

JOHN DALEY: But is compulsion a nudge, because isn't the whole point that nudge is supposed to be something which is optional? I mean, today if I want to put in 12% I can, it's just that I'm only compelled to put in 9.25%.

ANDREW LEIGH: Good point. Okay, I should have said that it has been the Labor Party which has been more in favour of what I would regard as behavioural economics intervention. So you go back to the Liberal Party speeches of 1992, the introduction of compulsory superannuation, and there are some very clear philosophical statements about it being inappropriate for governments to mandate that individuals put anything away And implicit in it, although they don't kind of channel rational economists, the notion that people ought to be trusted to make exactly the right decisions for their long term well-being and we shouldn't compel anything to go away.

That view has largely disappeared, but I chat to a lot of superannuation people who have themselves just been chatting often, because we're in Parliament House, to Liberal and National Party people. And they do say that behind closed doors there's a lot of scepticism among my Liberal and National Party colleagues about the idea of compulsion at all, but on the floor of the parliament they drop that critique and what we're debating is the quantum of compulsion. This has always been a partisan issue. The Keating push was to go to 15%, Howard froze it at 9%; Labor was to have it go from 9% to 12%, the Abbott government is having that increase at a glacial pace and we appear to be stuck at 9.5%.

The typical OECD country is at 20%, so we're well below most of the developed world; they've got employee contributions of around 9% and employer contributions at around 11%. And while you're correct that somebody who maintains a long working life with no breaks can manage to get a half-decent retirement out of 9%, someone who has career breaks to raise kids, as is becoming much more common for men and has always been the case for women, will I think struggle to afford a decent retirement on less than 12%.

JOHN DALEY: I think it might be one of those things where, for perfectly good philosophical reasons, compelling people into avoiding their biases is something that makes them very nervous; encouraging them into overcoming their biases makes us inherently a little bit less nervous because at least if they truly want to be autonomous they can always go and choose something else. I mean, I guess this is where it plays into the work that Jim Minifie's been doing at Grattan Institute on superannuation. The reality is that in theory we are hoping that people choosing cheap superannuation funds will result in price competition and pushes the price down; the reality is that very, very few people do so choose and therefore running a wholesale competition in which essentially government chooses through a tender the low-cost default funds might be a better way to go and, of course, then still leaves people with a choice to opt out of that and do whatever they like instead.

Are there other examples do you think of areas where that kind of allowing people still to have the choice but changing the default or the frame is something that policy can do?

ANDREW LEIGH: Well, first let me answer your comment on superannuation choice and then go to the broader issue. One of the things that has changed in the period from the early '90s, when universal superannuation was increased, to now is the revolution in behavioural economics and the recognition that while choice might be useful, most Australians are in the default fund and they have the default investment option within that fund. So the My Super reforms that we put in place during the last government were aimed at making those default funds better, ensuring that they were low-fee and easily comparable, and Jim's work is really important in making us think about how policy can be even better on that front.

One of the other areas this comes up is organ donation. So if you force people to make a choice as to whether or not they would like to be an organ donor 79% say yes. If you then allow them to change a default, if you set the default on donor then it goes up to 82%; if you set the default on non-donor it does down to 42%. And we know that the true preference was 79%, so we know that basically four out of five people are wanting to donate their organs, but if you change the default to non-donor then only two out of five people end up as organ donors. Now, this is a very hard area of policy, but it does point to massive changes that can be introduced as a result of switching defaults.

JOHN DALEY: So that's defaults and I think one of the other interesting areas here is about losses and gains. Are there ways that we can exploit the way that people care a lot about losses and, in particular, care a lot about losses today?

ANDREW LEIGH: So, one of the great economic experiments people enjoy doing in first year classes is handing out chocolate bars and mugs. Every second person gets a chocolate bar, every second person gets a mug; sit there, have a look at it for a while. Now, hands up who wants to trade? In a purely rational world half the room should put their hands up because half of them should have preferred the mug and half of them should have preferred the chocolate bar, but actually the share who want to trade typically is much lower than that. People become attached to the mug or the chocolate bar they've been given and the loss of that product is weighted very highly. One study looks at how much Duke University students would pay to go to a great basketball game on their campus and the average amount is $170. And then those students are given a couple of tickets to the same game and are asked how much they would need to be paid to sell those tickets and now they won't sell them for less than $2,400.

So, loss aversion matters a lot. Losses are typically valued 2.6 times as highly as gains, and something like Save More Tomorrow I think is a really important principle there. You don't have to forego wages immediately, what you're foregoing is a future pay rise, so it deals with loss aversion I think quite cleverly.

JOHN DALEY: I wonder if we can apply this to politics. I mean, we've seen I think over the last couple of years in Australia a real shift towards introducing policies in a way that it doesn't take effect for a year or two, it's much easier to freeze the payment which, of course, means that it's falling in real terms but in nominal terms there's no loss. Do you think that that's a trend? Do you think it's something we should be thinking about as we're trying to design policy? How can we design it in such a way that it is more likely to be politically acceptable precisely because it doesn't have obvious losses today?

ANDREW LEIGH: I certainly think it's important and one of the areas this comes up is in social payments. Governments are very averse to policies which might end up with large overpayments because they have discovered, very painfully, that extracting $1,000 overpaid back from someone causes significantly more pain than the pleasure which that person receives in getting $1,000 in the first place. So it's shaped how people think about overpayments as well I think, as you talked about.

JOHN DALEY: And finally, I wonder if there are also applications for this in terms of how we present information to people? Does that matter and how would you see as ideal when government presents information to people?

ANDREW LEIGH: So, one of the ways this matters came up in the Global Financial Crisis. George Bush and Kevin Rudd both put in place stimulus packages within a few months of each other, but Australia's stimulus package had a spending rate twice as high as the American stimulus package. And in a paper I wrote on it I speculated that perhaps that was because the Australian payment was called a "bonus" and the American payment was called a "rebate" and framing something as a bonus I think causes people to be more inclined to spend it than a rebate, which suggests that's it's just putting you back in the position you were in beforehand.

We also can do a lot I think in terms of making information simple, so the notion behind My Child, My Schools, My Hospitals, My Universities was to provide simple comparison information for busy people. And I think we can probably also learn a little bit from marketing in terms of how we evaluate, for example, the effectiveness of letters, doing randomised trials, making sure that we have credible control groups. And a randomised trial is really just a pilot but with a credible control group and, whether it's behavioural economics or rational economics, I think a lot more randomised trials would improve the evidence base.

JOHN DALEY: Well, I think one of the most powerful reasons for randomised controlled trials is precisely that people do have all of these "irrational" ways of behaving. The standard economics model about "This is in your best interests and therefore you will do X" is a reasonable first approximation, but it's only a first approximation; life's a lot more complicated than that and therefore we should put pretty humble about our estimation that when we pull this lever we will therefore get that particular policy response. It's always struck me that one of the best reasons for really looking after controlled trials is precisely a humility about exactly what will be the impact of any particular intervention. People are a lot more complicated than the first approximation of economics.

ANDREW LEIGH: Absolutely and one of my great heroes, the late US Senator Daniel Patrick Moynihan, probably the most successful example of a professor-turned-politician, used to talk about Rossi's Law and Rossi's Law is the expectation that the measured effect of any social program will be zero. And that doesn't mean that you walk into dealing with social problems with your head hung down and kicking the ground; it means you're incredibly ambitious about what you want to achieve, but scientific and critical about the ability of any individual policy to make a difference.

You know, so much of what comes out of medical labs has looked great in the test tube and turns out to be hopeless when it's faced with a double-blind randomised trial in the human population. That doesn't mean we give up on medical research; it means we've learnt something useful and now we go on to evaluating the next thing that's come out of the lab. And, as you say, there's a real sense of modesty in that which needn't conflict with a sense of promise, ambition and hope for ultimately making the world a better place.

JOHN DALEY: Thank you. I think it's probably time that we opened it up to the floor. I'm hoping that there will be some questions and I assure you there'll be more questions at the end than the beginning, so if you're keen to ask a question I strongly recommend getting in first.

AUDIENCE: You spoke earlier about how it's a judgement call regarding paternalism in government, but the private sector has been using psychology, behavioural economics, nudging for years for far less noble ends than organ donation. So should we worry about paternalism there as well and limiting that appropriately?

ANDREW LEIGH: I think it's a great question and it does go to some of my concerns around financial advice and also the way in which complexity hurts people. I think complexity is a regressive tax and the burden of, say, an overly-complex mobile phone plan I think does disproportionately fall on those who are further down the income spectrum. But yes, you're the subject of a randomised trial every time you use Google, several randomised trials probably, they're randomising lots of things on the page. Every time you walk into a supermarket you're probably part of some experiments that they're running looking at the impact of promotions at the end of the aisle, looking at the impact of shelf height and how things sell according to shelf height. They're probably also experimenting with prices, playing round to see what impact certain promotions will have on the sales of that particular product and across elasticities for other products.

So this is going on all around us, much of it harmless but in areas like financial advice probably calling for some government intervention.

AUDIENCE: I'm wondering if you could share your views on lessons of behavioural economics for action on climate change. It obviously suffers the hyper-discounting, loss aversion versus not valuing gains and all the rest, and I'm just wondering your thoughts on that?

ANDREW LEIGH: Great question. So I think the problem of discounting the future becomes acute in the case of climate change where the costs fall upfront - a carbon price is borne now - and the benefits – keeping the Great Barrier Reef, being able to still go skiing, fewer deaths from excessively hot days, bushfires, extreme weather events – all seem abstract and in the future and we've dealt with problems like that in the past by trying to make those risks real.

So one of the contrasts for me is looking at the HIV campaigns in the early 1990s, remember those Grim Reaper ads? The Grim Reaper ads were partly about trying to change behaviour among high-risk groups but, frankly, if you'd mostly been concerned about switching behaviour among injecting drug users and sex workers it would have been more efficient to have ad campaigns targeted at those groups. Much of what Grim Reaper was about was persuading the community that it was important to take serious action in order to curb the spread of HIV. And so the Grim Reaper ads in some sense gave political permission to governments to engage in condom distribution programs, outreach programs with men who have sex with men, interventions that I think whilst most Australians would be comfortable with now, but far fewer would have been comfortable with in the early '90s absent the Grim Reaper ads.

JOHN DALEY: And I think, for all the reasons that you've averted to, people like Ross Garnaut have described climate change as a particularly difficult problem for government to tackle, precisely because it's about losses in the future, no-one cares too much about them relative to losses in the present. That's why it's such a difficult problem but, I guess, just makes it all the more important we work out a path.

AUDIENCE: The role that behavioural economics play in the Australian government seems to be significantly less than is played in the UK and US governments in particular, and partly I think that's because it has Presidential and Prime Ministerial support in those countries. Do you think that behavioural economics are going to play a larger role in Australia or it will always be a lesser influence?

ANDREW LEIGH: I think that implicitly behavioural economics has mattered, it's just that when we put in place My Child, My Schools, My Hiospitals, My Super, future financial advice and increasing superannuation contributions we didn't sell any of those initiatives through behavioural economics. When we put in place plain packaging of cigarettes or, frankly, when we talked about mandatory spending caps for gambling, again, we didn't talk about that in behavioural economics terms, but much of that could have been described under the behavioural economics rhetoric. So I think we're doing a surprising amount, but just not calling it behavioural economics.

AUDIENCE: So the UK has the Nudge Unit, which has now gone into the private sector as well, the US has that Presidential Order and their influence is structured differently. So the Presidential Order in some sense seems to play a particular role, but it's more distributed amongst the particular governments and I know that there's a small unit in PM&C but it doesn't seem to have that infrastructure around it?

ANDREW LEIGH: Yes, absolutely. And what the Nudge Units have done, I think, best is get a whole host of randomised trials going because there are natural breaks on running randomised trials, and this was true in medicine in the first half of the 20th century. Doctors would just say, "Why on earth would we randomise? We know these things work. We just need to get these drugs out as quickly as possible. We have a life-saving drug, how could you waste time not giving it to everyone?" Now of course you can't get government subsidies for a drug without putting it through a randomised trial. So the Nudge Units create a sort of political impetus for managing to run randomised trials and once that's going it's going to be pretty hard to stop. The US just ran a little conference in Number 10 on low budget randomised trials, so looking at RCTs that can be rolled out for under $20,000 and there's a whole host of ideas that can be done on that level as well.

AUDIENCE: Andrew, I'm just wondering if you could give your insights into the role of behavioural economics in education, whether there have been any applications in trying to get students to do the right thing regularly and anything that could be done in schools and by education departments to promote that?

ANDREW LEIGH: I think I mentioned before the compulsory school leaving age, but that's kind of a blunt instrument. There is a set of randomised trials going on in schools looking at, for example, interventions which can encourage kids to read more. Roland Fryer has done some work suggesting that if you want to improve educational performance and you're providing incentives to kids it's much more effective to attach those incentives to an input than to an output, so to reward reading of individual books rather than to reward a test score gain. But that work's I think in its infancy and I suppose the most honest answer to you is that behavioural economics hasn't done a great deal to transform our understanding of education.

JOHN DALEY: Although you could argue that a number of the things that we do in education are implicitly informed by it. So if you think about the fundamental design of the HECS scheme, of how we pay for university fees, it's fundamentally driven by the understanding that if you ask people to pay for their education upfront a large number of them will be deterred; if you say, "You can pay for your education sometime down the track" far fewer people are likely to be deterred. And, indeed Andrew Norton's done some lovely work for Grattan showing the way that for students of a given level of ATAR, socioeconomic background appears to have almost no impact on their decision to study because we've designed our education contribution scheme in that backwards way in that you only pay down the track.

ANDREW LEIGH: Yes, it's a good example. I think the traditional defence of HECS has been some kind of credit market constraints and that's certainly why Milton Friedman argued for it in the 1960s, but you can make behavioural economics argument around hyperbolic discounting too.

JOHN DALEY: The other application I've seen of this is currently in Ireland they discovered if you told people that if their children stayed at school all the way through to Year 12 they get an extra bonus essentially on their social welfare payments you only got a certain level of student participation. But if instead you told people that you were going to penalise their welfare payments by X if their children didn't stay at school then you got a much bigger effect. Essentially because you were playing on that loss aversion thing, people care about losses a lot more than they care about bonuses, and so by framing exactly the same social welfare payment but as a loss they wound up with much higher school participation rates.

ANDREW LEIGH: The cruellest example of this, Steve Levitt does an experiment in Chicago schools where they place a trophy on the tables of every child before the test and they say, "If you get a 10 point test score gain you get to keep the trophy on front of you, but if you don't you won't get the trophy". You get a massive uplift in test scores, it's just fantastic. Now, I just would have loved to be there in the ethics committee.

JOHN DALEY: I'm looking forward to seeing this introduced across Australian schools.

AUDIENCE: Andrew, in the Australian context in regards to the PM&C Unit in New South Wales, I've noticed there's already been some public criticism, media criticism, for example Ferretti criticised it in The Australian. How do you think behavioural economists for the future of behavioural economics in Australia could best avoid that kind of criticism or best frame deeper introduction of behavioural economics to avoid that sort of negative press?

ANDREW LEIGH: I haven't read the Ferretti piece. Can you encapsulate for me what his concern was?

AUDIENCE: Yes. So, despite the fact that Thaler and Sunstein speak about libertarian paternalism, he says that's really just a straw man and in fact what we're talking about is an Orwellian, sort of, governance creeping in, the invisible hand guiding us the right way, that kind of thing; a really 1984-eseque critique of behavioural economics.

ANDREW LEIGH: Some of the stuff the New South Wales Nudge Unit is doing is just testing the best way of getting people to pay their land tax. Letters that have to be sent out anyway, people that haven't paid their land tax bills and we're trying to work out the most effective way of increasing repayment rates. It's hard for me to see the Orwellian big hand of government in an intervention which sends out two different types of letters rather than one. Maybe some of the stuff – I wonder what he would think? The UK Nudge Unit has experimented with interventions to reduce car theft by putting skips on the street in which people can empty their junk out of their garages and so therefore are more likely to park their car in a garage, rather than on the street. Would Peretti dislike that?

I'm not sure how worried we ought to be by something like that. It seems classic libertarian paternalism. If it's your grandmother's silverware that is sitting in the garage no-one is compelling you to dump it in the skip, but if it's junk that you want to get rid of, well now there's a skip you can put it in and the taxpayer has been shown to recoup the benefits from lower policing costs in following-up car theft.

JOHN DALEY: But Andrew, does that illustrate that there are questions of degree here? So obviously one of those questions of degree is the extent to which I am simply reframing something all the way through to compelling you do to it, understanding that you won't act in your own interests. And then there's also a question of degree about how confident am I that it is in your own self-interest? Am I confident that it's in your self-interest to wear a safety belt? Yes, that's right up there; you don't have to spend a lot of time looking at the statistics. Am I really confident that it's in your self-interest to pay

12% super rather than 9%? Well, I would have thought that you'd be less confident about that judgement and that's maybe the way to come back at that argument is to say actually, outside some very, very pure political philosophers, it is tough to find any real life politician who believes in absolutely no paternalism at all.

On the other hand, people will tend to fall on a spectrum as to what they're comfortable with, both in terms of how compelled am I to do whatever it is that I'm being asked to do and what is it that I'm judging to be your best interest?

ANDREW LEIGH: I mean, John, if you're arguing that mostly we should use cost benefit analysis to make decisions then I'm pretty comfortable with that. There are certain things where I would use categorical moral reasoning, but to a first approximation a cost benefit analysis solves most problems that I'm interested in.

JOHN DALEY: Yes, I guess when you go further than that to argue that even from categorical analysis there are some things that we are more confident in than otherwise and nobody knows that that illustrates.

ANDREW LEIGH: Absolutely, so you should use expected values and cost benefit analysis.

JOHN DALEY: Yes. As you say, not everything we care about can be measured with cost benefit analysis.

AUDIENCE: The Coalition propose to nudge people into thinking very hard about whether or not they need to see a doctor with the $7 co-payment. As a behavioural economist, would you have any other advice about how they might achieve that objective or whether the objective has inherent problems?

ANDREW LEIGH: So the impact of a co-payment kind of goes to one of the interesting questions in behavioural economics which is we know there is a big power of something being free. One of the nice experiments on this puts out Lindt truffles for 15c and dodgy low-quality Hershey Kisses for 1c and when faced with that choice, three-quarters of the people choose the Lindt truffles. Now they drop both prices by 1c. The Lindt truffles go down to 14c and now the Hershey Kisses are free; now two-thirds of the people take the Hershey Kiss. And so free has a special status and one of the contexts in which this has mattered a lot is in distributing bed nets in Africa. There's been a big debate in the development economics community about whether or not bed nets should be at a co-payment. Some people, like William Easterly, are arguing people would be more likely to use something they've paid for and others, like Jeff Sachs, saying if it's free we'll get a whole lot more of them out and they'll get used. And that's essentially been resolved with an important randomised trial showing that freely distributed bed nets work better.

In terms of going to the doctor, you're going to have more visits if it is free than $7 and then the question is whether you want a lot of Australians to see the doctor. And when I look across the OECD statistics, one of the things that jumps out is we have a much higher than average share of Australians in hospital, which is a whole lot more expensive than primary healthcare. So yes, I shifted my view on that and behavioural economics has a lot to do with it because the issue of whether something is free or costs $7 has a powerful impact on behaviour.

JOHN DALEY: I wonder if you really need behavioural economics to get there. I mean, economics of any variety can tell you if you charge more for something fewer people are going to do it and, as I see it, the real issue with co-payments is yes, it's going to discourage people but it's going to discourage two classes of people. It's going to discourage some people who do not need to see a doctor and we're delighted to see them discouraged, but it's also going to discourage some people who did need to see the doctor and we're rather more concerned about seeing them discouraged, and then it's a question of what's the balance between those two groups?

ANDREW LEIGH: Yes, indeed. And I guess what behavioural economics adds is that a $1 co-payment would have a bigger impact on behaviour than a rational model would lead you to expect.

JOHN DALEY: Yes, that's right.

AUDIENCE: My question is in relation to health as well. I'm really interested in health prevention and I was shocked by Tony Abbott abolishing the health prevention initiative which is based on behaviour and it's based on economics and based on evidence, because he saw that as nanny state. But, at the same time, he's using nanny state policies, like cutting the dole for young people as a nudge to get them a job. So can you explain a little bit about the health prevention, how can we use language which appeals to the Tony Abbotts of the world who don't like a nanny state, even though there's evidence in economics which says it's a good investment?

ANDREW LEIGH: So I would regard much of preventative health as being to do with timing and consistency problems. We smoke now because it brings pleasure now, although in the future it increases the chance of death. We overeat now because it is really nice to eat a huge meal, despite the fact that it brings a risk of obesity in the future. We drive our cars too fast now, even though it increases the chance that we won't get to see the future. And we skip a visit to the gym because there's something terrific on TV, even though it has a cost in the future. So a lot of behavioural economics is about trying to bring those future benefits more in line with the current costs.

I have a little bit of skin in the game because I represented Tanya Plibersek in launching the first report of the National Preventative Health Agency and was really impressed by the thoughtfulness with which they went through all of the research and the rigour with which they looked at the evidence. Not every preventative health intervention has a bigger benefit cost payoff than intervening after someone's fallen sick, and so we need to be really rigorous in how we think through the interventions that work and those that don't and the Preventative Health Agency was accepting that and was looking for high quality preventative health interventions. So I was a big fan.

JOHN DALEY: Thank you. Well, on that note we might draw this evening to a close. I need to thank a few people. Obviously, Ernst & Young for hosting us here today, much appreciated. Thanks to all of the Grattan staff who make events like this feel very seamless. Thanks to you as an audience for coming along. As was mentioned, this event sold out – although it was free, which I guess goes a long way to increasing the number of people who come – within a matter of hours and I think that that goes to the quality that we come to expect from you, Andrew, both in your academic career and in your political career. You're always someone who has a lot of thoughtful things to say, always stimulating, and if I can ask everyone here to join me in thanking Andrew for a really fascinating discussion.

END OF RECORDING