

## Capital Ideas - Australia's Budget Woes

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A core promise of each of the last eight budgets was a return to near surplus within four years. These promises justified governments doing relatively little structural budget repair. But reality has repeatedly disappointed. And the projections methodology hasn't changed much – indeed projections for wage growth have increased, as actual wages have continued to fall. Why are we still doing the same thing when we keep getting the same outcome?

This *Capital Ideas* event explored the causes of repeated budget projection errors. It will describe how these are affecting policy choices. It asked whether anything fundamental has changed that might require a rethink of how budgets are prepared. And it explored the institutional barriers to better outcomes, and the opportunities for reform. Katharine Murphy, political editor at the Guardian, and 15-year veteran of the Canberra press gallery, discussed the issues with John Daley, CEO of the Grattan Institute, presenting new research from Grattan Institute's work on budget policy.

**Speakers:** John Daley, CEO, Grattan Institute  
Katharine Murphy, Political Editor, Guardian Australia

ALISON DELLIT: Good evening. Distinguished guests, ladies and gentlemen, welcome to the National Library of Australia. I'm Alison Dellit, the Acting Assistant Director-General of Corporate Services at the National Library. As we begin I'd like to acknowledge the traditional custodians of this land, the Ngunnawal people. I thank their elders past and present for caring for this land that we are now privileged to call home and acknowledge that stewardship and custodianship of knowledge has been occurring here for tens of thousands of years. Tonight is our second event with the Grattan Institute. Since its launch in 2008, the Grattan Institute has established a profile as a leader of independent analysis of Australian domestic policy, aiming to influence both public discussion and senior decision makers. Its focus is on the important rather than the urgent, on the things that could make a difference to the wellbeing of Australians over the long run, not distracted by three year electoral cycles. In a way, it is very like the National Library of Australia. We too try to take a long view. We're also very grateful that the Grattan Institute is one of the first organisations to have deposited all of their electronic publications with the National Library and to have done so under a generous rights agreement that enables us to preserve and make those accessible to people across the country through the Trove system.

With three days remaining of the financial year, budgets, forecasts and financial statements have been at the front, the back, and the sides of my mind. It's very fitting that tonight's discussion is all about budgets and the challenges they create and it will be refreshing to take a broader view on that impact. Our speakers tonight are John Daley and Katharine Murphy. John is the CEO of the Grattan Institute. He is one of Australia's leading public policy thinkers. He has more than 25 years'

experience in the public, private and university sectors. He's worked for ANZ and McKinsey in a career that also includes expertise in law, finance, education and workers' compensation, and we have John to thank for making this event partnership possible. Katharine is Guardian Australia's Political Editor. She's worked in Canberra's parliamentary gallery for 15 years. In 2008 she won the Paul Lyneham Award for Excellence in Press Gallery Journalism and in 2012 she was a Walkley Award finalist in the Best Digital Journalism category. Please join me in welcoming both of our speakers to the stage.

KATHARINE MURPHY: Thank you so much for that lovely introduction, which also cuts off me having to introduce John quite so extensively as I was going to, which is great. It's lovely to see so many people out on such a chilly evening at the National Library, which is one of my favourite places in town, so it's lovely that we're here with you guys to have this conversation tonight. I'd like to reiterate my respect to the traditional owners as well and just run through where we're going to go with the conversation this evening.

Tonight we've come together to talk about budget forecasting, which I think it's fair to say is one of the vibrant niche manufacturing industries of Canberra. John is more than adequately qualified to speak on this subject. I hope we'll have a very stimulating conversation and I do hope that there'll be some questions at the end. People in this audience will be very well aware of what I call the "annual budget dance". Basically, as we get closer to a budget the degree of intensity and panic starts to play out in the news cycle about when precisely we're going to return to surplus. We go through this period before every budget day, all the hand-wringing and so on and so forth, and we all go into the budget lockup if we're journalists, like me, and presumably the expert lockup if you're John, and hey presto, magic happens! At the end of every four year cycle there's either budget back to balance or budget in surplus and it happens every single year; we keep pushing it out further and further and further. The consequence of pushing the surplus or the balance projection out further and further is that we avoid having a whole lot of difficult conversations about what we might need to do in order to bring the budget actually back to balance or surplus. I think we can all recognise this dance, so we want to unpack this dance a little bit this evening. I reckon we've been playing this game at least since the global financial crisis (GFC)?

JOHN DALEY: Yes.

KATHARINE MURPHY: Same old game and I think John will explain that over the next half an hour or so. John, why don't you kick off: where does the budget dance story start?

JOHN DALEY: The story starts with this, as you say, reality of a budget deficit of 2% to 3% of GDP, that's more or less where we've been for the last few years, and then this happy Treasury projection that we will be in surplus or close enough at the end of the forward estimates. The conclusion therefore is no need to do anything too difficult because what's the point? We're going to be in surplus anyway, so why would you through all of the political pain of either raising taxes or reducing expenditure if you're going to be in surplus anyhow? Then at some stage over the next 12 months we put out either a MYEFO (Mid-Year Economic & Fiscal Outlook) in November or we bury it in the budget documents to say it's not quite showed out as well as we'd hoped and the surplus is in fact not going to happen in now three years' time, it's only going to be in four years' time and pretty much all of the forecasts will be downgraded in-between. So that's roughly speaking what's been going on. We've been doing this work at Grattan Institute to try and understand why is this happening?

The conspiracy theory is it's because successive Treasurers have told Treasury to do terrible things and pretend that there is a surplus or a return to surplus, even though there isn't one. I think the story is actually a bit more complicated than that and we'll get to how it is that we got there, but the first thing we've got to do is actually explain and pull apart what's going on. If we start here with the basic chart which is what the budget looks like. This is thought about as a percentage of GDP and the black line is where we actually are and have been. As you can see, it's kind of bounced around between 2% and 3% of GDP for most of the last six or seven years. Don't get too excited about the bounces, particularly this one here, because a lot of that was about governments essentially pulling things between different years and it's pretty clear that we've been here for now quite a long time. Then we have the successive forecasts, the one made in 2010 was supposed to be in surplus by 2014, and then the one in 2011 said that we'd be in surplus in 2015, and then in 2012 we'd be in surplus by 2016. You kind of get the picture. After you've done this once or twice you could maybe just explain it away as bad luck, but after you've been doing it for one, two, three, four, five years in a row, because there is absolutely no way that that one's going to happen, and probably more like eight years in a row, it is starting to look very, very, very unlucky and maybe we should start reacting to this.

KATHARINE MURPHY: Just let me pick you up, because I know we're going to burrow down into the intricacies of this. You said a minute ago that there's a conspiracy theory about political interference, in essence that Treasury is under pressure to produce the budget the government of the day wants to be able to sell. Do you think that political calculations don't enter the mind of Treasury officials?

JOHN DALEY: Treasury officials are human. I know there are rumours to the contrary, but all the people I have met in Treasury are indeed human and if they are human, chances are they would be at least susceptible to that kind of pressure at the margins. But that said, I think the people involved are honestly doing the best they can. They are very skilled people and I'm sure there's pressure at the margins, but to get it badly wrong by 2% of GDP, let's put that in context. That's about \$35 billion. That's quite a lot to be wrong by in a single year; it's about 10% of the Commonwealth Government's revenue. If I was a corporate and I had this kind of hockey stick - in fact, these ones are swan dives, these ones are hockey sticks - if I had those kinds of things I would've been fired by now. But institutionally it's not changing. There may or may not be some political interference, but I don't think that explains an error of that magnitude and I think that's what I want to get to.

KATHARINE MURPHY: It's not so much interference that I mean, but you're cognisant of what's required, you're cognisant of the story that the budget needs to tell. It's not so much Wayne Swan or Scott Morrison or Joe Hockey rings someone and starts making threats, but you know the budget dance, you know it.

JOHN DALEY: Yes. I'm sure there's some of that going on and this is a problem that's not unique to Australia, it's happened in a lot of OECD countries over the last 15/20 years. It happened worse in EU countries that were trying to make sure they got into the Euro where there were rules around all of this stuff and the countries that seem to have done least of it are those where the process of developing a budget forecast is as far removed from the government as possible. So I'm sure there is something to that fact and that Treasury knows, in a sense, what number the government would like, but I think it might be worth pulling apart what's been driving it.

KATHARINE MURPHY: Yes, let's do that. Why have the forecasts missed?

JOHN DALEY: If we ask what have they missed on? So what we do here is we pull them apart. The orange and yellow bits, those are the actual policy decisions that governments make on budget night and what we're looking at here is the difference between what the government said would be the budget deficit or surplus four years in advance, that's the end of the forward estimates period, and what actually happened. Of course, that means for the last three years here, the ones in grey, those haven't actually finished happening yet and chances are, as we'll see, they will in fact get downgraded and these bars will get bigger as we get closer to 2021, but these are the years we've actually had. As you can see, we're about 3% of GDP worse than the balance originally forecast. Some of that is because governments make policy decisions and they have generally, well, certainly the spending changes have cost the government money. There have been a few revenue decisions that have helped them, but just bear in mind the magnitude of these things. We're talking in general about 1% of GDP and, as you can see, often they've cancelled each other out. The really big bars on this chart are the brown bits which are the revenue parameter changes, which is Treasury speak for the world turned out to be less rosy than we expected and consequently we collected less tax. That's what has done most of the damage. As you can see from this chart, the big part of the variations has essentially been about those revenue accidents, it's just, as you can also see, there have been a lot of accidents in a row.

KATHARINE MURPHY: Yes. Well, a car crash followed by a car crash.

JOHN DALEY: Yes and when you ask why did those revenue accidents happen, partly it's about the way that we have guessed at what GDP growth would be, so obviously that's a big factor that plays into how much income tax you collect. The red dots here are the expected growth in GDP and the orange bars are what actually happened a year later. As you can see, before the GFC if anything Treasury tended to lowball the forecast in general, they tended to pick on about 5%, 5.5% of GDP and it typically turned out at around 5% and 7% before the GFC. Since the GFC it's turned out the other way around, Treasury has tended to guess at anywhere between 5% and 6% of GDP and the reality of course has been materially lower than that, partly because iron ore prices have been lower than we expected, partly because wages growth has been worth than we expected.

KATHARINE MURPHY: But just pulling back a little bit, how are you a pessimist before the GFC and then an optimist afterwards?

JOHN DALEY: That's a great question because it goes to the core of how all of this works. The way that Treasury does it and, interestingly, it's the way that most people who are trained in macroeconomics do it is that you take a really long time series of whatever variable it is that you are looking at, whether it's wages growth or GDP growth or whatever it might be, and you ask what's the long run average? Then you say I'm going to assume that over the economic cycle I'm going to get back more or less to the long run average. Then that begs the question of how long is the cycle, and typically the models assume it's only five years long, bearing in mind that since the GFC it's now eight years and counting and we still don't appear to be back to whatever normal was before the crisis. Then there's a special twist to this in terms of the way that Treasury thinks about it, which is that they assume because the economy has been running slower than "normal" trend there is an output gap and that over the cycle, i.e. over that five year period, that output gap will get closed. In other words, the economy will run faster than normal to use up the spare resources.

So what that means is that the slower the economy goes, the faster they assume it will be going by the end of the cycle. So what that does is push up the estimates and so in general, in response to your question, why is it that you get these estimates when things are slow, the answer is in a funny way the slower that things are going, the faster that you assume they'll be going in the outyears of the projection.

KATHARINE MURPHY: I know we'll get into the reviews that have been done of the modelling system Treasury uses, but does it indicate that basically Treasury or the models have not come to terms with sustained low growth? Because a phenomenon that we're witnessing around the world is that all of a sudden you're applying the same models to the same set of circumstances, but your models don't work anymore.

JOHN DALEY: Yes, so reality is wrong.

KATHARINE MURPHY: Well, no my dear, reality isn't wrong, that's the point. So is that it? Is it that economic policy officials - and we shouldn't personalise this to Treasury, because I'm sure they're not the only offenders - did not see the sustained period of low growth that we've been in? Is it basically that?

JOHN DALEY: That's certainly a large part of what is going on and, to be fair, if you just saw low growth for two or three years you'd say, "Oh well, that's ups and downs" and after six or seven years you'd say, "Oh well, there are theories that say after the kind of financial crisis we had in 2008/9 you'd expect it to be slower for longer". But now we're still in the same world - it's going up a little bit, but not all that much - it is getting harder and harder to explain away and, in particular, we have seen a period of low productivity growth. People have been trying to explain that away as measurement error and all the rest of it, it is, again, getting harder and harder to explain it away, but the school that so many of these people are being trained is in one that says do not assume that there's been a structural break until the evidence is completely overwhelming.

KATHARINE MURPHY: And when do you hit that tipping point?

JOHN DALEY: I don't know. It seems to be a long time. We haven't hit it yet. The most that's happened is that Treasury has effectively pulled back the long run growth rate by about 0.25%. Well, that's kind of helpful, but it does look as though the long term reduction has been materially more than that. The place that I think you really see this illustrated the most - and someone in senior politics the other day described this as the chart that has probably broken the entire model.

KATHARINE MURPHY: Show us that chart!

JOHN DALEY: So we'll show you this chart. This is nominal wages growth. How much does your salary go up year to year, assuming that you're doing exactly the same job? If you're a politician, of course, as we know, it's just gone up by 2%.

KATHARINE MURPHY: Yes and the tax cut.

JOHN DALEY: And the tax cut, but to be slightly fair to the politicians and the Remuneration Tribunal, 2% is almost exactly what the rest of the country has got on average over the last 12 months. So what Treasury does here, the black line, again, is what's actually happened. Wages growth back in

2011/12 at the height of the mining boom was a happy 3.5%, 4%, happy days, real wages growth. Since then it's been falling, falling, falling and, as you can see, we're now down at about 2%. Then these are the forecasts. They were, well, we'll stay in the happy days of 3.5%, 4%. That didn't happen. Then, well, maybe they were lucky happy days and in fact we'll go back to 2.75%, 3%. It's kept falling and here's the really interesting thing, as it's kept falling the forecasts have kept increasing. Indeed, the outyear of the forecast has gone up as the reality went down. What that is being generated by is this phenomenon that I talked about earlier, the way that these models are constructed are the slower that things are going now, the more the model will tell you it goes up by the end of the period.

The problem is most of these economic things, if I asked you what's nominal GDP growth you probably have no idea, but nominal wages growth is something that people touch and feel, it's how much of a wage rise did I get at the end of the year? So if I tell you it's going to be 2% at the end of this year or the end of last year you go, "Yes, that's probably about right". If I tell you it's going to be 3.75%, 4% close enough in four years you'd be saying, "That'd be good". The problem with this is that we should be picking the midpoint of a range of uncertainties. The reality is none of us know what these things are going to be, but we've got to make a best guess. The problem with this is that it just cannot be a best guess. If I say to you, "Wages growth is pretty sluggish around the developed world and it's now 2% in Australia. I think there's a good chance it might just stay at 2% for the next four years" then you'd say, "John, that's a bit gloomy, but you may well be right". If that's my bad case and I'm going to say that my central case is call it 4%, to make the maths easy, then that must mean that my happy case is 6%. So it should be as likely as just bumping along at 2% for the next four years that we'll be at 6% by the end of four years, and at this point you'll probably tell me I'm dreaming.

KATHARINE MURPHY: Not so much.

JOHN DALEY: That is why I think this is the chart that has broken the system, because it is very hard to say with a straight face my central case estimate is that wages growth will do 3.75% in four years' time.

KATHARINE MURPHY: But riddle me this, because I'm not an economist and I obviously don't conduct a little economic model in my office every day, if in my line of work a conclusion is brought to you that does not seem rational or does not seem consistent with the evidence before, well then it's easy for me to say that's got to be crap, it's got to be wrong. Standing around the computer in Treasury, does the chart come out and someone picks it up and says, "Um, really?" or is the point the model some sort of slavish adherence to the model that disconnects you from the actual consequences of your forecast? I'm genuinely seeking to understand this as a phenomenon.

JOHN DALEY: I think there's an awful lot of that going on because the short answer is this is forecasts about the future, no-one's got any idea. We've got to have a methodology and we've got a methodology, we've been using it for however long, so let's just turn the handle one more time. As we'll come to in a while, the reviews that Treasury has conducted of this have all said more or less politely you might want to sense-check some of the answers a bit more, but clearly that's not happening that much because I just don't see how you could sense-check this one and not say, "Wait a minute, that doesn't look right". The problem is this is not some kind of minor detail buried in the budget papers somewhere. This is wages growth. This is what drives bracket creep. This is what drives the single biggest revenue line in the budget. You get this one wrong and it is very hard to get

everything else right. Clearly that sense-check is not getting done and you can see how big a deal it is. If we simply bump along at 2%, and that's got to be possible, it's about \$13 billion a year on the budget's bottom line by the fourth year, so that is big enough to care.

If we look at how things have actually gone, this is what's happened in terms of personal income tax receipts over the last couple of years, the usual story, the actual line in black, the forecast in succession in dotted lines. If you look at how badly things have been going recently, in 2016, so this is 2015/16, we're about \$16 billion behind the original estimate in terms of money in the door in Treasury. If we look at 2017, this number here is almost certain to happen because it comes out of the May 2017 budget, so by that stage you more or less know what your income tax receipts are going to be, and on that basis they're about \$26 billion behind the original budget projection. So these problems that they've had with income tax projections are a really big deal. The income tax one is the one that makes the biggest difference, but there's been a whole series of other things where the problem seems to be not so much the macro forecast, which is where a lot of this has been coming from, but how do you translate those economic forecasts into how much revenue will I actually collect? So personal income tax I've just shown you, but if we look at company tax, superannuation tax and capital gains tax - by the way, capital gains tax is essentially an overlap between superannuation and the income tax lines, it's just another way of cutting the numbers - as you can see, on all of these the reality has fallen a long way south of the budget projections time and time and time again. We probably don't have time today to delve into the detail of why those specific revenue lines haven't matched reality, but it does seem to be a bit of a generic problem and that problem probably takes us to what's really going on here.

KATHARINE MURPHY: Quite. What is really going on here, John?

JOHN DALEY: What's going on? The short answer - and I think you were talking about it earlier - is that the world may well have fundamentally changed, but the model hasn't. Bob Gregory drew the economic world's attention to this recently by looking at what's known as the Phillips Curve. It's very important amongst people who worry about unemployment. The theory is that as unemployment goes up then wage growth will go down. So the theory is that if you wind up here with high unemployment then wages growth will go down and of course the converse is also true, the theory is that if unemployment goes down, so I've got fewer people unemployed, then I'll see faster wage growth. Here's the catch: if we look at this historically this is, roughly speaking, how that relationship worked in the pre-1990s. We appear to have a different curve from 1990 to 2008 and then we appear to have a different curve again after the GFC. So even though unemployment has been by historic standards quite low, we're not seeing the kind of wages growth that we saw before the GFC. Indeed, if you think about where we are at the moment, we are about here. As you can see, the budget assumes that very happily we go back to the old curve.

KATHARINE MURPHY: It's nice that the old curve showed up, that's nice.

JOHN DALEY: Yes. It's a lovely way of illustrating that we appear to have structural changes, but we're not building those into the model; we're just assuming that we go back to what used to be normal. I think the fundamental challenge in this area is figuring out when is it that we in fact have had a structural change?

KATHARINE MURPHY: When are we in a new normal?

JOHN DALEY: Yes, exactly. Our argument is in fact growth was already quite a lot slower in the four or five years before the GFC. We've now had eight years since the GFC. After 12 years of this you kind of have to start worrying that we might be in a new world.

KATHARINE MURPHY: What are the key drivers of the new world in terms of this? Why are workers' wages bearing the brunt of the new world, for want of a better formulation?

JOHN DALEY: I think one of the reasons we have been reluctant to change the models to acknowledge this structural shift is we don't really know. There are lots of theories. One theory is that productivity growth is lower than it used to be and there are lots of theories why that might be. Some people say that in effect the rate of technological progress is slower than it used to be. Another theory is around the population ageing and that leading to lower rates of innovation, which I guess is a related theory. There's a claim that it's all about mismeasurement. I think the best evidence from Brookings and others is that the mismeasurement might explain a little bit but not very much; there's always been measurement problems with productivity growth. In terms of why wages growth is so low there's an increasing theory that this is because, one way or another, corporate rents are going up so large corporates are getting better at manipulating markets - in totally legal ways, I'm not suggesting it's illegal - and essentially playing in markets in such a way that they extract higher profit margins. There's a theory that aligns to that which is that in that world in fact they innovate less, because if you can make more money by getting government to make rules in your favour then you spend your time innovating on how to get government to do things in your favour, rather than figuring out ways you're going to keep your customers happier.

So there are lots of theories about why we might be in a different world. I think the reality is we're too close to it to really have hard evidence on any of those theories. The only thing we've got hard evidence for is that the numbers have been pretty gloomy now for quite a long time.

KATHARINE MURPHY: I find that we've hit the end of the technological change curve slightly terrifying in terms of the future outlook.

JOHN DALEY: Well, I think one of the problems here is that people forget the difference between change and rates of change.

KATHARINE MURPHY: Yes.

JOHN DALEY: So I wouldn't be suggesting that technology's stopped. Clearly it hasn't, clearly there are technology things today that were not here two years ago, but that doesn't mean that productivity growth has increased; that just means that there is some. The question, if you're going to keep seeing productivity growth at the same rate as we have historically, is we have to have the same rate of change. So however fast we were inventing things 10 years ago, 20 years ago, we have to keep inventing them that fast and there are a whole series of theories as to why that may not be happening. One of them is we've found most of the big things. We had this enormous increase in the number of people who are scientists who are busy finding things. They found most of the low-hanging fruit and, although there are more scientists than ever, it's just getting harder and harder to find things that will make a big difference.

KATHARINE MURPHY: Yes, find the big breakthrough.

JOHN DALEY: Yes. There's another theory which is that however cool smartphones are, relative to electricity they are small beer and I think there's some truth to that. My favourite way of illustrating this is if you go the Melbourne Museum it's got these rooms that are basically domestic rooms from different eras. You go to the one from the 1980s or maybe '70s and you look at it and go, "Oh yes, the tele wasn't as good, but it looks pretty familiar". You go to the 1950s one and you think, "Oh, that is a whole different world". I think it's because that was the period at which really electricity was starting to affect every single thing that we did and the reality is it's a pretty amazingly cool technology. We've worked through most of the ways that you can use electricity. We'll doubtless keep finding marginal applications, like cars, but most of the game is played out.

KATHARINE MURPHY: Yes. Anyway, sorry, I just became momentarily depressed. Back on message, where are we going next? We've got multiple Phillips Curves and a new reality. Are we into the common affliction of forecast-led denial yet?

JOHN DALEY: Yes, I think we are. So what does this do?

KATHARINE MURPHY: I quite like this one.

JOHN DALEY: The short answer is because they've got forecasts that all look happy, Treasurers basically stand up and say there's nothing to worry about. It is interesting, "We're on track for a surplus in 2012/13 and this provides the solid foundations for the targeted investments we make tonight". In other words, I'm going to spend some money because I know I'm going to be in surplus in four years' time. As we know, it didn't turn out like that. Question: what would the world have been like if instead Wayne Swan had been forecasting a deficit of 2% or 3% of GDP as far as the eye could see? The answer is he probably would not have been announcing targeted investments tonight. He would've been announcing, "I'm really sorry, but we're going to have to tighten our belts a lot harder". Then we have Joe Hockey, "I can report tonight that, despite the headwinds, our timetable back to a budget surplus is unchanged". That didn't work out so well.

KATHARINE MURPHY: Shame about the headwinds that came back.

JOHN DALEY: Shame about the headwind. Then Scott Morrison last year, "This budget keeps us on a sustainable path to bring the budget back to balance", a sustainable path that 12 months later we are in fact not on and we're now on a different path, apparently still back to surplus but.

KATHARINE MURPHY: Well, it's a related path, but it's a different path for sure.

JOHN DALEY: Yes. You can see this in terms of what governments are actually doing, so if we look at how it is that we are supposed to get back to surplus in four years' time. This is the budget deficit in 2016/17, the year we are about to finish in two days' time. We're at about \$38 billion, or at least that's where we were as of the budget. Let's just imagine a world in which everything grew at GDP, so our expenses grew at GDP, our revenue grew at GDP, and everything else grew at GDP. In that case we would expect that the budget deficit would grow at GDP and over four years that would be \$7 billion. What is in fact happening is that by the end of the forward estimates we're supposed to be in surplus by \$7 billion, so how does that happen? The answer is we expect that income tax will go up by \$37 billion a year. More than GDP, happy days. Well, it might happen. We also expect that some other revenue lines will grow a little bit faster than GDP, these ones here. We expect that spending

restraint will happen and we'll spend about \$5 billion less than the normal increase in GDP. All of those numbers you'd look at and go, "Oh yes, I'll probably believe it. That's plausible". Then the only work that we really do in the budget in terms of actual budget measures that either increase taxes explicitly or reduce spending explicitly are worth about \$7 billion in 2021. So in terms of getting this swing from what's effectively a budget deficit of \$45 billion all the way up to \$7 billion, as you can see, pretty much all of the work is being done by fiscal drag.

KATHARINE MURPHY: Do people know what fiscal drag is? No, you need to explain.

JOHN DALEY: So that's if I pay you \$100,000 this year and inflation goes up by let's call it 3%, so next year I'm paying you \$103,000 but I don't change the income tax scales, that means that although you're being paid the same amount in real terms, you're going to pay more tax. So the percentage of your income that you pay in tax is going to be higher. In effect, you will have less money in your pocket. Commonwealth Governments love this because it's a tax increase that they don't have to legislate and, as you can see, it's a really, really big deal.

KATHARINE MURPHY: And most people are not even that aware of it because it happens so incrementally in terms of how people move up into the next tax bracket.

JOHN DALEY: Well, it's not just moving up into the next tax bracket. Even if you're not moving up into the next tax bracket, the marginal \$3,000 you've earned is above the threshold of \$80,000 and so that means that \$3,000 is not being taxed at your average tax rate of, I don't know, probably about 20%, but at your marginal tax rate of, what's that, 37 cents. So that's why you wind up seeing your average tax rate go up, even though your real income hasn't moved at all. That's what does so much of the budget repair work and, as I said, Commonwealth Treasurers love this because it's not really like hard work.

KATHARINE MURPHY: Poor old Scott Morrison said that he didn't love bracket creep and that he wanted to give it back, until such time as the GST debate crashed and then all of a sudden we don't hear much about bracket creep anymore. So Treasurers can not love it for a period of time, but they also have to have a solution for how they get the revenue if you're not, in essence, applying a silent secret tax on the entire country.

JOHN DALEY: Correct. One of the big dangers for next year's budget, it'll be a pre-election budget probably, is that the Treasurer announces a whole bunch of tax cuts off the back of happy Treasury forecasts that in reality we can't afford. That's a real concern. If you look at what have Treasurers done the short answer is not very much explicitly. If we look at it over a longer term, so this is looking at what Treasurers have actually done in each budget that will affect the fourth year, and we worry about the fourth year because that's the one that washes out all of the ins and outs and the little bits and pieces. That's, if you like, the closest estimate we get to what a budget has done in terms of really changing the underlying structural position of the budget.

As you can see, in 2007, that was the last Costello budget, the decisions made in that year hit the budget bottom line by about \$20 billion, which would be kind of handy today if we had it but we don't. So that's the substantial tax cuts and spending increases that went through in 2007. Then we roll through a whole series of things. The financial crisis budget in 2007/8 didn't have much impact on the fourth year, it's actually quite well-designed. We can roll through all of these. The black line is the

actual change for the fourth year of the budget and it's typically been around about \$3, \$4, \$5 billion in most budget years, and when you remember our budget deficit is \$38 billion and has been around about there for the last however many years, six years or so, \$3 or \$4 billion a year is really not going to change much. The only exceptions to this are Wayne Swan's last budget, which improved the budget balance by about \$12 billion, and Tony Abbott's first budget, which was supposed to improve the budget balance by about \$16 or \$17 billion in the last year and, of course, much of that budget did not in fact happen. It's also I think helpful to put the budget we've just had in context, at least in theory it does about an \$8 billion budget repair job, will be a little bit less than that given what's now happened with Gonski, but it actually did more in the way of real budget repair, hard decisions, than most of its predecessors.

KATHARINE MURPHY: Well, we can thank the banks can't we for a proportion of that?

JOHN DALEY: We can thank the banks for about \$1 billion of it, there's some higher education money that's in there, and then the big numbers are the disability levy and whether that gets through.

KATHARINE MURPHY: Whether that gets through the parliament is anyone's guess at this point in time.

JOHN DALEY: Yes. So what should we do?

KATHARINE MURPHY: You tell me John, what should we do?

JOHN DALEY: Treasury has reviewed this, it's had reviews in 2012, 2015 and 2017, and they basically all said there's too rigid adherence to models and there needs to be more judgement, they all recommended that there be a new economy-wide model that would run over the essential four years of the estimates period and, as you can see, we've now had three reviews that have all more or less recommended the same thing.

KATHARINE MURPHY: So what's the blockage? What stops it from happening?

JOHN DALEY: Partly building a "you beaut" economy-wide model that covers the entire economy and projects things four years into the future is not a trivial exercise. Partly I can see why people are just much more comfortable saying, "The model says X so we're just going to do what the model says" rather than intervening and saying, "I just don't reckon that's right" and at a more subtle level intervening and saying, "I just don't think that can be right" or to say that the trend has changed is a very difficult intervention. I think there's another thing going on which is if we look at where all of the people outside of Treasury are coming from, so this is the consensus of all of the professional economic forecasters, the banks and so on, Chief Economist and so on, they only provide two year estimates not four year estimates. This is looking at wages growth and they've all been very happily optimistic too and if we overlay that with Treasury's projections, which as you remember goes out for four years, if anything Treasury has been a little bit more pessimistic than the professional forecasters.

KATHARINE MURPHY: So do modellers need to see other people?

JOHN DALEY: Yes, I think they do. This actually got presented a couple of weeks ago at the Melbourne Economic Forum and the way it was presented was, "Look, Treasury is not doing any

worse than the professional forecasters so that's alright then". I stood up and said, "Well, I'm probably about the only person in the Melbourne Economic Forum who's not an economist, so I'm not going to think about this like an economist. I'm going to think about this like an anthropologist and what I see is herd behaviour. Basically, you've all been trained in the same school. You're all thinking about this problem the same way. It certainly looks like the world has changed around you and we're all the same, you get trained in a discipline, it's really hard to turn around to everybody else in your field and say all of those things we've just accepted as verities for a long time, they're not working so well".

KATHARINE MURPHY: It's difficult though too in the sense that with Treasury forecasting obviously we're back to that political dimension to your work, that it's not just something that's happening in a polite little think tank with everybody chatting amongst themselves and there are no consequences. If you do something that's out there with your model, if you produce something that could be, God forbid, open to criticism or critique from good people like you, there's, I don't know, perhaps a barrier to breaking through the issue?

JOHN DALEY: If you think about this as an anthropology problem I think you're exactly right. To come out and say, "All the professional forecasters, they're all wrong too. The way my colleagues have been thinking about this problem for the last five years, none of that's working". That would take serious courage, really big time courage. It's going to be hard to do that. So I think one of the tough questions is how do we break this? The most interesting question in some ways about all of this is one that Bob Gregory asked in his Freebairn Lecture in Melbourne a couple of months ago in which he said, "How can we get this wrong for so long and yet institutionally there's no change?" I think the answer is the very human anthropological things we've been talking about, plus the institutional things around if you just imagine what the conversation would look like if John Fraser walks into Scott Morrison's office and says, "Well Scott, the boffins have been thinking about the model and you know that surplus we forecast in May? It's not our best guess anymore. In fact, our best guess is now about \$30 billion less". It's not going to be an easy conversation.

KATHARINE MURPHY: Yes, exactly. I think that was broadly where I landed. Some questions now, I think.

AUDIENCE: Thanks for a really interesting talk; that was fascinating. One question I have is to the extent that over the long term it might not actually be that the model is wrong or the assumption about a return to a long term trend is itself wrong, all the evidence previously may well have suggested that that in fact is correct. If part of the big problem here is about being able to tell when we've had a structural change and then correcting the assumptions for that, my question then is how do we tell? What do you think would be the evidence that would suggest in a timely fashion that something like a structural change has occurred to enable the assumption to be downgraded or even upgraded over the long term?

JOHN DALEY: You've got to understand what you can and can't do here. I think the reality is you are never going to pick the turning point. That's an exceptionally hard thing to forecast. What you can do though is say my best guess about the next couple of years is essentially what I've seen for the last couple of years. If we'd been doing 5% wages growth two years ago and we'd done 2% this year then I'd say 4% next year is actually not a bad guess. But when I see a slow, steady decline not only in Australian but across a lot of the developed world, then I think my better guess is that the next two or three years is probably going to look much like the last two or three years.

KATHARINE MURPHY: Or when the Reserve Bank Governor stands up in a public forum and says workers need to chase pay increases.

JOHN DALEY: Yes, well actually, I didn't put up the RBA's wages forecast, but they're just as bad as the professional forecasters.

KATHARINE MURPHY: Sure, but that's a sign. In my experience, that's a sign that something's shifted.

JOHN DALEY: Yes, I think that's right. The Reserve Bank Governor does that knowing that it's complicated. Him just telling workers to do that is not actually going to change the world, or at least it's unlikely to do so very much, so the reality is we may well be in a different world.

So in answer to your question, I think more humility that there might well have been a structural change and essentially that means a better technique, so rather than simply taking the long run average of the last 30 years, to take averages over much shorter time periods and say that's probably a better guess about the world that we're in. In particular, it deals with a lot of the political economy that has been lying behind what we've been talking about, which is if I project a happy return to surplus despite what's been going on for the last couple of years I essentially let my politicians off the hook. If I say the world is pretty tough and it's probably going to stay tough then the worst that happens is that the world gets better than we expected and governments are going to have a larger surplus than they expected, which is usually not a problem that they have for long. Whereas the political economy the other way doesn't work so well, which is I project a happy return to surplus, consequently I don't make any tough decisions and consequently we never return to surplus. What we've been doing is running very large budget deficits unintentionally and the implication of that is the younger people of Australia are going to pay more tax, a lot more tax over the next 20 or 30 years to pay for the deficits we have run over the last eight.

KATHARINE MURPHY: Not only tax, but more for their education, more for their health services.

JOHN DALEY: They're going to pay more one way or another and the government's going to be able to afford less in the way of services because someone's got to pay for it.

KATHARINE MURPHY: Exactly.

AUDIENCE: John, we've seen five years before the GFC and eight years after of a new world. Is this the dreaded secular stagnation that we've been hearing about?

JOHN DALEY: Well, it certainly looks like it. It's kind of consistent with the theory. If you're running a theory contest between Robert Gordon and everyone else at the moment and applying it to the Australian numbers and, for that matter, a lot of the numbers around the developed world you'd be saying Robert's kind of looking right at the moment. We do appear to be in a world in which economic growth in general and productivity growth in particular is a bit slower than it used to be. I think one of the problems that people have with this is they say, "Secular stagnation, Robert Gordon, they're saying that there's going to be no growth and clearly there is growth" to which the answer is that's just not his theory. His theory is that growth will be slower and that appears to be precisely the world that we are in. I guess it's the fact that the theory may not be perfect, but at least there's a halfway plausible theory for what's going on here. It does appear to fit the facts. The facts have been going on

now for quite a long time. This is not just a bad year, this is a bad extended patch that makes me think the prudent thing to do would be to assume that that's the world we are now in. If it turns out that we're in a better world, well, that's not going to be a difficult problem to deal with, but assuming that we in fact are in a better world and then it turning out to be much the same as it's been for the last eight years creates a whole series of problems that are just compounding themselves as we speak.

KATHARINE MURPHY: There's also with that what I was saying about we've come to the end of the technological curve. It's kind of terrifying to wrap your mind around. It's not as terrifying as climate change, it's not that terrifying, but it is kind of paralysing in the sense that if politicians stand up and acknowledge that publically and affirm that reality then you're talking about ripping up the whole social compact that governments have had with their people, which is an implied contract that we're in this period of growth and linear prosperity that lifts the fortunes of everybody in the country. If you've got to stand up as a politician and say, "Oh well, it was good while it lasted, but it's probably over now" that's quite a tough call.

JOHN DALEY: Yes. I think the way that you've jumped to that is actually the precise problem that they've got in communication, which is I don't think they should be, because I don't think they would be, standing up and saying growth has come to an end. What they're trying to communicate is that growth is slower than it used to be. The boats are still rising, they're just not rising nearly as fast, and the reality is when the boats are rising pretty slowly then there's going to be a lot more boats that are in fact sinking. So that does make life tougher for everyone and, in particular, for politicians because losers always yell louder than everybody else. So you can see why they're not very enthusiastic about having to communicate that.

KATHARINE MURPHY: It's not just a matter of losers screaming loudest. Politicians are standing in the middle of their own massive disruption at this point of time. We see that all around the world and it's no small thing what's happening in politics at the present time, so I think it is genuinely difficult and I know what you're saying about nuance, God forbid. Imagine nuance in politics, imagine. But we're not shrieking from the rooftops saying, "Growth is at an end". We're not saying that, but acknowledging that what's happened over the last 50 years, say, is not going to happen for the next 50 years. That's a pretty big thing for politicians to say in the current environment, I reckon. Which is not letting them off the hook, it's just a comment.

AUDIENCE: I guess this follows onto that. We've focused very much on the forward estimates in year four. Success in year four is success and yet we've had a succession of intergenerational reports which point out very, very clearly that the headwinds get stronger and stronger for government spending because of changes in population and the sorts of programs that more older people need, the cost of technology etc. Shouldn't we be shifting the paradigm from the forward estimates to actually what lies beyond?

KATHARINE MURPHY: Good Lord, who let this man in?

JOHN DALEY: I think we should be doing both. If we can't get it right inside four years, we've got no chance inside ten. I didn't bring this chart, but there's a way of analysing the intergenerational reports which shows that as the actual budget deficit has got worse, the intergenerational reports have projected the long term surplus to get better. So even in the intergenerational reports we've seen elements of this creeping in I think. I agree that we should be really worried about the long term,

although I think we should be worried about the right things. The conventional wisdom is we've got to be worried about the age pension exploding and the ageing of the population. In fact, what the intergenerational reports themselves have done is illustrated really well that the big things we should be worried about are increased spending per person of a given age and aged care spending. Those are the two things that really hurt in the long run and figuring out how to deal with them. There is something of an increase in the age pension, as you'd expect with an ageing population, but it's not the big thing that really hurts. So I think that at least amongst the people that really study them carefully they've been quite helpful in explaining where the real problems are. I don't think they've permeated the public consciousness and I'm not hopeful that we're really going to deal with those problems now for 10 or 20 years out when clearly we are not dealing now with the problems that are only four years away.

AUDIENCE: I just wanted to take your anthropology approach a little bit further and ask about other populations for comparison. So thinking historically, say, around the recession we had to have and the oil shocks, what happened to the group of forecasters? Was there a change in the way in which those people thought about the way they were doing the equivalent of the modelling? I realise the technology was different and the projections were different. Also, the users of projections now and economic analysis, it's not just governments, it's also large corporates. Do they believe everything that Treasury and the other forecasters are providing or are they being more sceptical and taking a more low growth approach?

JOHN DALEY: Lot of questions in there, so let me answer the last one because I think it's the easiest one - not that it's easy - which is what are corporates doing? I think the short answer is they're probably doing different things. Some are probably doing what their forecasters tell them because you've got to plug something into the model and some are rather less happy about that. One of the things that corporates do is they tend not to build a lot of their profit projections off macro fundamentals the way that Treasury does and, to be fair to Treasury, it is sensible to build their forecasts off macro forecasts because that is what drives so much of the income tax revenue. But for a lot of corporates, they build their profit growth off what they can see for the last year or two and they go straight to what kind of direct drivers do we see happening to our revenue and expenses and we project those forwards, plus a bit of stretch target and, hey presto, there's your forecast. So I think because they use that ironically much cruder method, most corporates are probably less aggressive than this. So that's on the corporate.

You asked a really great question, which is we have seen shifts in the macro fundamentals. We've seen a long term reduction in interest rates, we saw a significant shift around the oil crisis, how have modellers dealt with those? To be really honest, I don't know. It's a great question. It's a really good question and I think a good way of thinking about this problem is when we have had structural shifts in the past, how have they been factored in and how quickly did we factor them in? All I would suggest is it's been, in effect, seven or eight years now on most of this stuff and as you can see, particularly on the wages forecast, it's been very clearly not factored in. I guess what we're trying to do is wave a few flags and say you've really got to do a wee bit more than just drop the long run growth forecast by 0.25% here, because that just doesn't seem to be big enough relative to the new world we appear to be in. As I said, the costs of being wrong about that are not that high, whereas the costs of continuing to be wrong, as we are, are clearly very high. But I think you asked a great question and if I had world enough and time, I'd definitely get someone to have a look at it.

AUDIENCE: Both sides of politics when speaking of balancing the budget focus on reducing expenditure, although the Coalition has greater emphasis on reduction of expenditure than the Labor Party. My understanding is by Western standards, if you leave aside the UK and US, that Australian taxation and expenditure are relatively low. The highest levels of taxation and expenditure are probably the Scandinavian countries and I understand their growth rates and their productivity are in fact much better. So my question is to what extent do you think part of the answer for Australia lies in higher taxation and higher expenditure on services that lead to growth in productivity and so on?

JOHN DALEY: If you've got a budget deficit you really only have two choices, you can either reduce expenditure or you can increase taxes. You're absolutely right to say that the correlation between size of government and growth rates is pretty weak and the correlation between size of government and budget deficit or surplus is particularly weak, so the claim that we're in deficit because government is too large is just plain wrong. That said, I think the reality is when you face a substantial budget deficit - and a long term structural deficit of 2%, 3% of GDP, which appears to be where we are, is a pretty large budget deficit in the overall scheme of things. As I said, that's about 10% of the Commonwealth Government's revenue. In that world I don't think realistically you are going to solve the problem unless you both reduce expenditure and increase taxes. Now why do I say that? If you look at the history of governments that have really succeeded in tackling big budget deficits, and Alan Stockdale from Victorian Government, the Kennett era, is particularly articulate on this, he talks about the way that when confronted with a really big budget deficit in Victoria the first thing they did was explain they have a problem. We're not doing that at the moment. We're saying there is no problem. So step one, admit that you have a problem. A bit like Alcoholics Anonymous, that usually is the place to start. Then he pointed out that the political economy of how this plays is you actually want to both increase taxes and reduce expenditure, because when you try and repair budgets someone is losing: either someone's paying more tax or someone's getting less services or both and, by definition, they are going to yell and scream when that happens. If you can say to them, "Everybody is sharing the pain here. Literally everyone is either paying more tax or getting fewer services or both. Yes, your particular group - however you want to define it - is also paying more tax or getting less in the way of services and that's unfortunate and we wish the world were different, but if you're going to repair a budget everyone's got to share some of the pain".

You can see why politically that's actually very powerful because it gives you a way of pushing back against the special interest groups. If you try and do your budget repair only on the expenditure side, as Tony Abbott figured out eventually, you can't run that argument because what happens is that half the people say, "We're getting way less services" and the other half, they're not being affected by any of this. How is that fair? The answer is good question. At least as a matter of politics, I mean, forget about the policy, as a matter of politics it's almost impossible to win that argument, whereas if you have much more substantial revenue increases across the board it's much easier to say, "Everyone's sharing the pain here, so yes, you're getting less in the way of health services or whatever it might be, but that's the world we're in". The most recent budget we've had, if anything, went too far the other way, it was all revenue increases and very little in the way of expenditure reductions, so I'm not sure that's going to go so well either. I think what we do need are budgets that very explicitly do both. When Alan Stockdale took this to its logical extreme they introduced a poll tax on Victoria, a dollar amount per household on every single household in Victoria. Of course, Margaret Thatcher did that and it didn't go down so well. Alan Stockdale did it and he did it expressly so he could say that every household in Victoria is contributing to budget repair and the day that the budget is actually in surplus, as opposed to projected to be in surplus, the poll tax will go. Certainly the way he describes it is that

was a very important part of their success was that it made it much easier politically to sell the message.

So in answer to your question, I think, given the size of budget deficit we have, net increases in expenditure at least as a percentage of GDP are probably not where I would start from here. I would be trying to reduce expenditure relative to GDP and I would be trying to increase taxes relative to GDP. The reason for that is I have a \$38 billion budget deficit hole. That's 2% of GDP. It's a very large hole. I am not going to cover \$38 billion without pulling both sides of the ledger. To put this in context, the disability insurance levy that's being introduced is worth, from memory, about \$4 billion a year. That's a material chunk. The largest single tax concession that we've been talking about, essentially shifting the capital gains tax and negative gearing rules, if you did the full-blown thing that we've advocated, which is not a mile away from where the ALP has got, by the time you get to full implementation, and it'll take you a while to get there, it's about \$5 billion. Remember, our hole is \$38 billion. So it gives you an idea that the sorts of things you are going to have to do to fix this kind of budget deficit are very large and very substantial, and that's why I don't think it's going to be a world in which you can net increase expenditure any time soon. You're going to need to both reduce expenditure and increase taxes to fill a hole that kind of size.

AUDIENCE: John, I have a question about your disciplinary background. If you're not an economist, and I don't think you're really an anthropologist, then what exactly are you?

KATHARINE MURPHY: Ooh, existential questions.

JOHN DALEY: I studied a science law degree at the University of Melbourne majoring in music and theatre, which is the kind of thing you could do before they invented HECS, and then I went to Oxford and I did a doctorate which was supposedly in law but in fact was in political philosophy. Then I went to McKinsey and the twig was well and truly bent economically for three years, then I went to ANZ and the twig was even more seriously bent for six years economically. The major thing you can judge from all of this is that from a disciplinary background I have a very, very short attention span.

KATHARINE MURPHY: Or that you're adaptable.

JOHN DALEY: I think what it does illustrate is that for many of these policy problems a whole range of backgrounds is very helpful. If I look at Grattan Institute, not surprisingly, we employ more people with economics backgrounds than any other single background, but we employ people who are lawyers or lapsed lawyers, like myself; we employ people who are scientists; and we employ people who've done arts degrees. All of those backgrounds are helpful to the problems that we attack. I think living in that environment in which there are people with lots of different disciplines, it kind of keeps you honest on problems like this because there's bound to be someone who comes from the back and says, "Look, I just don't quite understand why is that a sensible assumption?" and then you sit there and think, "Yes, it's a very difficult assumption to justify as soon as I have to do it outside of my discipline". So you're absolutely right, I'm not an anthropologist at all, that's certainly something I know very little about, but I think trying to bring lots of different ways of looking at these problems is the only way we've got a really good chance.

AUDIENCE: Thanks for the discussion, Katharine and John. This is a question for Katharine, actually. Considering the fallacy of projections of surpluses, how do you break through the budget narrative to tell the real story?

KATHARINE MURPHY: I'm glad John didn't get the only existential question of the night. How do I break through the budget narrative? Well, by trying to tell the truth. I think that's all I can do. Try and ascertain what the facts are and try and tell the truth, and avoid being drawn into the spin cycles that occur prior to the budget and after the budget, for that matter. Do I do that perfectly? Probably not, but I do make a concerted effort to do that. I have little budget rituals like, for example, in the budget lockup it's a bit of a tradition for the Treasurer to wander about and hold court, have all sorts of little side bars about what the budget might be about. I tend to avoid those and always have. I don't do what Laurie Oakes does. Laurie Oakes has a tradition where Treasurers approach him in sort of magisterial fashion waiting to give the benefits of the wisdom. It's a funny little ritual which you can watch if you're in the right place in the budget lockup every year because it's almost like Treasurers have to learn the lesson every year. Laurie doesn't even turn around; he just sticks his hand up like that, "Don't even talk to me".

I don't do that because I'm not Laurie Oakes, but I do tend to avoid the huddles and try and assess the document on its merits. At Guardian Australia in the 2014 budget, and this was mainly Lenore Taylor's judgement not mine, but it was a judgement we workshopped together, because of that habit that we have of trying to stay outside the huddles I think we called that budget right and not every outlet did, because there's a sort of tradition in reporting about tough budgets that governments get marked up for tough budgets per se regardless of the merit of whether or not there are broken promises or whether or not it's distributionally unfair or all of those sorts of things. We took one look at that budget and thought, "Oh my God!" Really, "Oh my God!" and that was reflected in our coverage, and not everybody went that route.

JOHN DALEY: Immediately.

KATHARINE MURPHY: Not immediately. So, again, I'll end by saying that I'm by no means perfect. I can make lots of mistakes and do every day, often in front of a large journalistic audience, and that's life, but trying to tell the truth I think is a significant motivation. I think that's it.

JOHN DALEY: We should finish there. Can I thank you very much on behalf of Grattan Institute?

KATHARINE MURPHY: Can I thank you more?

JOHN DALEY: It's been great. Thank you all.

KATHARINE MURPHY: Thank you too, what a fantastic audience you were. Thank you.

JOHN DALEY: Thanks too to the National Library, this is part of what we hope will be an ongoing series with Grattan Institute and the National Library. Thank you all very much for coming and we look forward to seeing you at the next Grattan event in Canberra, if not downloading our next report from the website. Thank you.

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