



Journalist 1: Just on the non-tariff barriers. Which is the kind of biggest one you can see in this kind of White Paper drag on the Irish economy? [See Box A of Quarterly Bulletin p.13]

Mark Cassidy, Central Bank Director of Economics and Statistics: Of the types of trade frictions? I'm not sure we'd compare them quantitatively. If Stephen is there – he has done some work on this. Or Thomas. Yes?

Journalist 1: Is it just delays at customs checks?

John Flynn, Head of Irish Economic Analysis, Central Bank: It would vary, but the main issue is time.

Thomas Conefrey, Senior Economist, Central Bank: For some of our exports like food, the non-tariff barriers will be very, very significant. What we look at is the decline in trade for the UK. So, in this White Paper scenario, analysis in the UK shows that UK trade would be reduced by about 40%. That's a combination of tariff and non-tariff barriers. Now, in some sectors here, the weighting on each of those would be different. As was mentioned for time sensitive exports like food, the non-tariff barriers would be especially important. And for others, that would be much less the case. But agri-food comes out as particularly exposed because, in a WTO (World Trade Organisation) scenario, it would attract by far the highest tariffs. So, it would be for example the tariff on beef is about 70%. That would have a similar increase in the price of Irish beef to the UK. Then you'd see a dramatic effect on demand for that product. So, we see both tariff and non-tariff barriers in agri-food. A combination of both.

Journalist 1: Okay. And then just one more. Wage growth as the economy approaches what might be called full employment. What's happening in wage growth? You've mentioned a pattern – are we seeing a pick-up in wage growth or is it...?

Mark Cassidy: Yes, so wage growth has been relatively contained in recent years. We have seen some pick up during the first part of this year already. So, we're expecting – I think we're expecting wage growth in the order of 2.8% this year. But we are then expecting this to pick up. The unemployment rate. It's come down from around 16% to currently just under 6%. If you look at the vacancy rates, the vacancy rates are now close to historic highs. So, these are the indicators that you would expect to start putting upward pressure on wages. What we're expecting then is from a 2.8 to around 3.3% over each of the next two years. Maybe 3.3, 3.4 in 2020.

Journalist 1: What was it last year?

John Flynn: The figure, the compensation in the National Accounts was 0.8, but it was probably closer to somewhere in the low '2s'.

Mark Cassidy: There were some statistical issues possibly with the figures last year, but it was probably closer to 2% on an underlying basis. So, wage growth of 3.25% is not out of line with



what you would expect at the rate at which the economy is growing. And put this in the context of the economy after the crisis, you had wage cuts, wage moderation for a sustained period of time. But what we're warning about, experience shows that in Ireland, when unemployment gets closer to 5%, you can suddenly see a pick-up in wages. We saw this the last time, prior to the last crisis when you had a sustained period of wage moderation and then it was only when unemployment got to 5% that suddenly it picked up quite quickly. So, I suppose, that's what we will be warning about.

Journalist 2: What's your estimate of full employment – do you have an estimate?

Mark Cassidy: I wouldn't have an estimate of full employment. So, 2007 unemployment fell slightly below 4% and we're seeing some particularly low unemployment rates in some countries. Particularly the United States at the moment. Now, that partly reflects the fact that after the crisis maybe people in various countries withdrew from the labour market. So, maybe you have additional spare capacity so the gap between the unemployment rate, maybe, and the inactive rate can be particularly large. And we've done research, published a non-employment index, showing that this – the potential labour force is still reasonably high. So, I wouldn't put a number on full employment. Certainly, we would – well, we obviously, because we're predicting it to fall to an average of 4.7% in 2019. So, we see it falling below 5% consistent with being still above full employment. I wouldn't want to put a number on it. But somewhere over 4%.

John Flynn: The other issue here is the openness of the economy because we have significant inward migration as well. Say for example one of the things we saw on the latest migration statistics was a pick-up in net inward migration. That then is a factor. But with that then come other things.

Journalist 3: Before I ask my own question, that's a point that has occurred to me a few times in passing. When it's possible to easily bring in foreign labour, when things get tight, what are the medium term implications of the economy through that – does that prevent overheating, or does it make the final overheating more dangerous?

Mark Cassidy: It's a complex one because we do have this agile economy which works in both directions. Of course, it's a safety valve for employment numbers when the crisis hits, and we saw very significant net outward migration. So, on the one hand, other things equal, it would ease overheating pressures. It supplies a pool of labour when vacancies begin to exist which should moderate pay pressures in the economy. Okay? Other things not being equal, we have a housing market and a property market that is experiencing pressures with an excess of demand oversupply. So, you would expect the net effect being to ease pressures because there's more of a contribution in terms of the employment – and this includes in the construction sector – than the pressure that might be imposed on the housing market. But there is certainly an offsetting influence there. And I think – so, at the moment we're not seeing – growth at the moment, as John alluded to, it is not being driven in any way by unsustainable trends in domestic credit. It is not being driven by inflows of foreign funding. So, if you're



looking at the channels – the transmission channels for overheating in the economy. The property market, the housing market, is one potential one. The extent of which you could – and we’re doing some research in this – the extent of which inward migration or economic growth pushes property prices up and that needs to be reflected then in higher wages. Particularly around the Dublin area.

Journalist 3: Because one would interpret what you said a moment ago is that we may not be in the danger area yet, but it must be getting close.

Mark Cassidy: Exactly. Exactly, and we have in our minds from the last experience and from other evidence this getting closer to 5% and it becomes – the trends pick up at that stage. That’s exactly what we would say.

Journalist 3: But my question was which Brexit is in the 2020 forecasts?

Mark Cassidy: So, our central assumption is that a deal can be agreed. What that means is that there is actually no Brexit, because that would imply that the transition period between March 2019 until end 2020. So, there is actually no Brexit. So, if the worst case scenario was to evolve, then you would expect significant downward revision to the 2019 and the 2020 figure.

Journalist 3: Just before we finish that point then, going back to what you said earlier. Assuming, being optimistic, and there’s a transition period, we then eventually come to the soft Brexit that you mentioned. And that’s kind of a bit downward compared with if it had never happened at all. That’s the position, yeah?

Mark Cassidy: Yes. But by those numbers, maybe over five years, maybe about 20,000 fewer jobs. And that’s compared to if it had not happened at all.

Journalist 3: And the transition period is going to be a minimum of two years or three years – two or three years, nothing happens except for everybody’s going to be worried about what’s going to happen.

Mark Cassidy: People will be worried but at least there is a period for people to adjust. Many of the effects – so, our models, and our model is the WTO scenario - are what happens given the tariffs and the non-tariff barriers and the like. What the models find very difficult to predict is the disruption. The sudden stop to trade that would happen in March 2019. And that’s why we would emphasise – and one example of that might be through the exchange rate, for example. If our forecasts assume that if the hard Brexit happens, yes, sterling will fall further. We fully expect that to happen. That would be in our hard Brexit estimates. But exchange rates can overshoot. Financial markets can overreact. So, you may get an overshooting of the sterling exchange rate on the downside. So, if anything, our estimates of WTO probably would be erring on the low side because of the disruptive nature of Brexit.



Journalist 2: I was going to ask about your exchange rate forecast. I mean, it's remarkably brave of you to make it against Sterling but – for the next three years?

John Flynn: No, we don't, it's just a technical assumption, so we take that. It's not a forecast.

Mark Cassidy: So, I think – our view would be that anything we know is priced into the market. So, if a deal is agreed, you may expect some strengthening of sterling. If there's no deal, you'd probably expect quite a substantial weakening. Because the market is probably pricing in, there probably will be a deal but not certainly.

Journalist 4: Just on the 5% - if you like, the trigger or the danger area of unemployment level. You're predicting, what, 4.9 average next year?

Mark Cassidy: 4.7 average in – yes.

Journalist 4: And obviously, 5% is an average figure. Obviously, 5% is reached earlier in the year or mid-year. So, what are you saying? Are you saying that actually next year is entering into the dangerous period?

Mark Cassidy: Yes. We're certainly already in a period now, given the way that growth in the economy and the speed at which unemployment is coming down. We're at a period now where we would need to be monitoring the key indicators or potential indicators of overheating. And these include credit growth, they include prices, wages, property prices and we monitor all these. And of course, they're particularly relevant in the context of our overall new macro-prudential framework. So, we have this new framework to enhance or protect financial stability. Particularly preventing against the type of credit and overheating risks that we saw in the past. And we have, as you are probably aware, we have introduced policy measures. We have increased our Countercyclical Capital Buffer which is an indication that we foresee looser financial credit conditions going forward.

Reamonn Lydon, Senior Advisor, Research & Analysis, Central Bank: You need to be a little bit careful about comparing us to history because the working population is a lot older now than it was at the kind of peak last time. So, older people are less likely to be unemployed than younger people. So, you have fewer younger people in the working population, the natural rate of unemployment or equilibrium could be significantly lower than 5. So, you need to be a little bit careful about comparing history. The population is very different to what it was back then. 300,000 people under 35 left. So, it's an important fact.

Journalist 5: And what's the impact of housing on this? Presumably, fewer immigrants are going to come if they see the costs of rent. And for your broader projections, does the high cost of housing have an impact?

Mark Cassidy: Yes, well, so first of all there's a couple of elements to that question. First of all, in terms of what we expect with housing output. So, we serve certainly the consensus that



there is a significant shortage of housing and that this is causing problems within the overall housing market and within, separately, the purchase and the rental market. We expect housing output this year of around 19,000 units. Our forecast is for this to increase by around 50% over the next two years. So, we think housing output will increase to just over 28,000 in 2020. By itself, that is unlikely to make up for the deficits between supply and demand. So, while price pressures have eased somewhat during this year, particularly in Dublin, they are still quite high. We are still seeing house price inflation of around 8.5% – around 6% in Dublin. And we would expect – we certainly think it will take a couple of years before house prices stabilise. But in terms of the impact on growth, that contribution when you're talking about housing output increasing by 25% a year, obviously that does have a positive impact on growth. John referred to the forecast there for building and construction which are particularly strong. And the housing element of that is particularly strong. So, it's having a positive impact on growth. But in terms of competitiveness as we've discussed in a previous question, obviously it is one of the pressures in the market in terms of the impact on potential net inward migration. But net inward migration increased – it went up – I think net inward migration this year is estimated to be around 35,000. Whereas the previous year, it was only 19,000. So, it is still increasing at a significant rate and almost all of that net inward migration is going into employment.

Journalist 1: Sorry, last comment or question. What is stability when it comes to house prices? When was the last time we had it?

Mark Cassidy: Over the long term, you would probably expect house prices to increase broadly in line with nominal income growth in the economy. So, we've had very volatile house prices for a long period of time, as you know. Up and down. And one of the two objectives of the mortgage rules introduced by the [Central] Bank is to try to introduce more stability in the market, to try to reduce unstable house price credit dynamics, which we have seen in both directions over the last 15 years. Both on the upside and the downside when the lack of availability of credit contributed to the extent of the crash in the market. So, you wouldn't expect to see a number – certainly, nominal income growth, you know, over the medium term, 4 or 5%, may not be out of line with what you would expect in an economy like Ireland. At the moment, it's quite a bit higher than that. But that would be a very medium term figure. You wouldn't want to say that over the next two years, 4 or 5% is stable. We still probably see house prices a little higher than that maybe in the very short term. Simply because supply is still catching up with demand.

Journalist 3: I did a little sum of why – a very simple sum – which seemed to show that the average price in Dublin already, the famous Gard or nurse, would be right on the limit of Central Bank permissions. Now, the amount of people with cash from their parents or whatever must be running out. So, if your restrictions are working, surely prices must level off? Because you won't give them the money to buy them?

Mark Cassidy: Well, certainly it prevents prices from getting out of hand because of excessive lending in the economy. This is one of the intentions. This is what we saw 10 or 12 years ago, that income was not a constraint on people purchasing houses. They could get the 100%



mortgage, the 110% mortgage. They could borrow multiples of 5 or 6 times their income. And when that is happening across the market as the whole, it is pushing prices absolutely out of line with incomes. The solution to that is not to allow people to continue to borrow those excessive amounts. The solution to put a lid on this unfavourable dynamic is to have some checks there on these ratios. And if prices are absolutely out of line with incomes, you would hope to look for prices to come to more central levels.

Journalist 3: Well, exactly. We're already at, I think – somebody tell me? - 350,000 in Dublin average – is that about right? So, my little sum showed that, whatever it is, 90,000 couple. That's about 33% of disposable income which is quite rightly on your limit, because that's the historical limit. So, either your restrictions – if prices still keep going up in Dublin, 6%, 7%, 8% a year, I think your restrictions aren't working or – that's the only explanation.

Mark Cassidy: Well, I don't – I think, like we were saying, if house prices in normal times are going up by as much as nominal income, and hopefully the doctor or the Garda and the nurses, their income is going up by as much. Then that is not reducing affordability.

Journalist 3: No. 3% we're talking, yeah?

Mark Cassidy: Well, yes. Over nominal income. So, if you've – I don't know what that – maybe that might be 5% over time. That's what you might expect. And of course, in a capital city, in any capital city, it's going to be, affordability is going to be more difficult.

Journalist 3: Before I get to tangential, to what extent might foreign money be coming in and inflating these figures? It's foreign buyers who obviously aren't limited by those restrictions?

Mark Cassidy: Yes. So, we published some analysis on this a few weeks ago and the CSO [Central Statistics Office] has interesting analysis now, which allows you to break down a lot more the composition of the housing market. So, cash buyers – a cash buyer is a non-mortgage buyer. Most of the cash buyers now are institutional investors purchasing large premises for renting out. Cash buyers on the market are still close to 50% of purchases. It was 60% a few years ago. It's come down a little. But it's still around 50% of purchasers. Now of course, this is very important in the context of the rental market. We have – prices have increased a lot. Rents have increased much more over the last 10 – 15 years, so this is helping the supply of rental accommodation and it also provides a security of tenure for people who want to rent for a long time. So, there's a lot of advantages in this. Another interesting statistic is the prices for cash buyers have increased significantly more than prices for people buying through a mortgage. Quite significantly more. Now, we think the reason for that is the price pressures have been most acute at the lower end of the market. And the average price of these units that investors are buying, which tend to be smaller and for renting out, tend to be lower. So, it's probably a compositional effect like that. But in fact, while the aggregate rate of price increases is 8% nationally, 6% in Dublin, you could take a couple of percentage points off that for people buying through mortgages. So, it's quite interesting.



Journalist 5: Did you have a target number in mind for price-to-income or – yeah price-to-income? That would be stable, that would be sustainable.

Mark Cassidy: Well, for the economy as a whole, we don't have a target level. What we tend to do is we would compare current price-to-incomes both to long-term historical averages and to price-to-income ratios in other countries. If you look at - compared to historical averages and we have data I think going back to around 1980 in this respect - the price-to-income ratio is now reasonably above its long-term average. I think if you were to look at international – the international comparisons are complicated, so I don't want to be too definitive on this because they tend to be based on indices rather than actual money amounts - but we're also quite high in terms of price-to-income. So, price-to-income ratios are quite high by historical and international standards.

Journalist 5: So, you see them as overvalued?

Mark Cassidy: It's not necessarily an indication of overvalued. When we look at valuation, what is appropriate valuation, we look at statistical indicators like that. And the two we look at are price-to-income and price-to-rent. Price-to-income is high by historical standards. Price-to-rent is actually quite a bit lower than historical standards because rents are so high. We also look at economic models. The economic models – and we have a number of them - and in November, we'll be publishing our annual review of the mortgage market measures and we'll be publishing a number of analytical studies regarding valuation. The econometric models suggest prices probably close to or slightly above where you would expect them to be.

Journalist 2: In terms of the wage dynamics, it's fascinating. I've just come from the States and you have a lot of economic recovery there. You've got unemployment rates down at levels not seen since 1969. And you've got, until recently, very little wage growth. I mean, it's only just started ticking up since this summer. Here, you've got wage rises that seem sustained and seem to be down for a long time. But you've got a very, very open labour market so you've got endless supply. So, what's the dynamic that's driving Irish wages higher, that we don't see elsewhere? I mean, certainly in the US or the UK? What's going on here that makes Ireland different in terms of people getting wage rises? It would seem to me, that endless labour supply, that's going to depress wages and also have low inflation.

Mark Cassidy: Well, first of all, until recently, we had the same dynamic. So, wage pressures – the economy has been recovering since 2012 - 2014, and that rate of recovery picked up quite noticeably in the last two or three years. And yet, wage dynamics until this year did actually remain low. And that might reflect common factors such as, after a crisis, sometimes people can value their jobs more. We saw an increase in the composition of labour, part-time to full-time. There was a spare capacity in the economy. So, I think we shared – and then of course, you have all the various global factors relating to technology. So, we served that trend until recently. We're seeing a modest pick-up now. I wouldn't want to overstate the extent of that pick-up. We're still 2.8% this year for an economy growing, you know, underlying growth at the moment maybe 5.5%. But I think it was in our last Bulletin, we did compare what sectors are



growing, and they are growing in the sectors where the vacancy rates are highest. So, they are growing a bit higher in financial services, business services, modern services in the economy. So, that's quite a traditional relationship that you would expect. We're actually seeing now that the higher vacancies are spreading out across a few more sectors. So, this is one reason why we think the earnings growth maybe will pick up a bit because they'll become a bit more broad based as well. Which is what you expect. You expect that to pass from some sectors to others. So, it's maybe not so unusual.

Journalist 2: Which are the sectors that are seeing the ripple effect now?

Mark Cassidy: Yes. Those sectors that I mentioned are still the ones where wages are growing fast. It's not uniform across all sectors. Some are still quite subdued. But there is quite a good correlation between the sectors where you have the highest employment growth and the highest vacancies and those where you're seeing the wage pressures.

Reammon Lydon: The other thing about wages is productivity, right? So, let's say we say 3% in our forecast roughly with inflation running at 1, productivity's running about 2. So, it's not a million miles off. Plus, all the arguments Mark's making.

Journalist 2: There's no big difference.

Reammon Lydon: No.

Journalist 3: I'm just coming in because it's a very general question. I mean, it's been quite striking here - in mind my thinking Britain - the speed with which unemployment has fallen compared with past recoveries. Are there any kind of explanations for that?

Mark Cassidy: Well, it fell very quickly the last time too if I recollect. It hit - our unemployment was 18% in the late 80s. And it fell pretty quickly then too. We do have an economy which, on both directions, it falls quite quickly.

Journalist 3: I'd have to look back, but as you say, your recovery only really got going in 2013, 2014, and it's still only 2018. It's been very fast.

Mark Cassidy: It has been very fast. So, it's fallen from just under 16% 6 years ago which was-

Journalist 3: Fantastic

Mark Cassidy: Yes, and that's 370,000 net new jobs in that period. We have a flexible labour market. It is an economy to do business in, in terms of creating work. It is quite a good economy in that way. The pace of turnaround of the economy has exceeded all expectations. If we went back 5 or 6 years ago, you would have expected a modest recovery. But usually, when you've had a financial crisis, the pace of recovery and employment growth lags and is more stagnant. So, the pace of recovery, including unemployment, has exceeded expectations and I think, as is



usually the case, it's a combination of favourable dynamics including – of course, we depend so much on exports - so, including the strength of the recovery and the external environment. That's another factor.

John Flynn: I think the other thing was the initial downturn in employment in the labour market was quite sharp. So, when things turned down in 2008, 2009, employment went down very sharply. So, lots of sectors would have seen job falls. Now, construction obviously being one, but it was much broader than that. So, part of the initial stage of the recovery, kind of, that would have been a factor as well.

Journalist 3: Like a lot of us around the table would say fairly grimly that the labour market's a lot more flexible than it was in the 1980s. That's a common observation. It's much easier to fire, that's for sure. Because I remember it. And probably easier to hire as well compared to some countries.

Reammon Lydon: New hires' wages fell by a fifth in the recession, so that's another flexibility that wasn't there before. So, if you think about any uptick in labour demand. If you had to pay 40 to get whatever college graduate in engineering and now you're paying 30, you're going to – the pace of that recovery is going to be very different to anything we saw. That is truly astonishing. The composition as well – we've said it at other Bulletins – is important.

Journalist 1: I remember in the 1990s, one of dominating, kind of, discourses was about long-term unemployed. It's hardly written about now because it's gone down so fast.

Mark Cassidy: It's 2% now.

Journalist 1: But there should have been a big group the labour force, mainly construction workers, couldn't find jobs. What's gone on there?

Mark Cassidy: Well, our expert has left – we had an article about this in a Quarterly Bulletin maybe two or three quarters ago, '[Where are Ireland's construction workers?](#)' Essentially, they left the country. Essentially, most of them, both Irish and non-Irish, left. What the research found is we do not have this pool of unemployed workers from the construction sector. People who left the construction sector lost work and are out there with no work - we don't have that pool of workers.

Journalist 1: Was that the single biggest reason why we don't have a long-term unemployment problem this time round?

Mark Cassidy: I think that's a reason. I think having the net outward migration is an element. I think the fact that things recovered so quickly. So, this concept of history whereby you get short-term unemployment but over time, people are out of employment longer. It creates a rut and people stay in long-term. Things turned around so quickly that we didn't have too much of that. So, long-term unemployment is only 2%. That's so low. We did have a big decline in the



participation rate. So, it is absolutely the case that people did withdraw from the labour market. Many of whom did not and will not come back, partly because of age reasons. So, you do have people who withdrew from the labour market. They're not really part of the potential labour supply. Because of age reasons, they probably will not come back into the labour market. But because of the nature of the recovery, the speed of the recovery, these things. Yes, we did not experience this problem that we had in the 1980s. And of course, it was exacerbated in the 1980s by problems relating to the public finances getting worse during that period, the need for high taxes which discouraged people getting into the labour force, encouraged people to stay out of the labour force because of the tax wedge and things. So, we've avoided those problems generally.

Journalist 4: Has this week's budget brought closer the time of overheating or it doesn't make much difference at all?

Mark Cassidy: Well, it's a balanced budget. A balanced budget, by definition, you're not injecting money into or withdrawing money from the economy. This is a balanced budget for 2019. It comes in the context of the rates of growth for the economy that we are talking about. So, of course the advice of the Central Bank would have been for something different. It would have been for a surplus during 2019. It would have been for more ambitious fiscal targets for 2019 and after 2019. One of the reasons for that relates to overheating and relates for the desirability to be alleviating demand pressures at a time when growth is so strong. And that's not just about avoiding overheating, but it is particularly to enable the economy to build up financial buffers when the money is available to enable the economy then to cope with the economic shocks. And this is relevant at the moment because of course there are such significant potential economic shocks.

Journalist 4: So, to summarise, it didn't do too much harm, but it didn't do a great deal of good either. Is that-?

Mark Cassidy: Well, your question was specifically in the context of overheating. And we would say that it doesn't contribute to demand pressures next year. But given economic circumstances, I think we would have preferred to see an alleviation of the demand pressures.

Journalist 2: But surely in the context of monetary policy in Europe and the Irish economy, you have incredibly accommodative monetary policy here that - and you have - therefore the budget is not leaning against that at all, so you have, expansionary, so, the budget should be more aggressively-

Mark Cassidy: Yes, so when we don't have monetary policy and exchange rate policy it puts more pressure on fiscal policy. Fiscal policy is undoubtedly the main policy lever for Ireland in order to stabilise the broader economy. And when an economy is growing at the rate that we are, when we're getting this close towards a position of full employment, then clearly, you're looking to moderate demand pressures. So, the budget did not add to demand pressures, but counter-cyclical policy would have suggested a surplus for 2019.



Journalist 2: ECB [European Central Bank] policy is adding to the pressure on, it's overheating the Irish economy.

Mark Cassidy: I'm not going to speak much about ECB policy because we'll let the ECB do that. But of course, index rates for the ECB are set for the euro area as a whole. They reflect the inflation rate and the inflation outlook for the euro area as a whole. It is well known that it is not necessarily appropriate for every individual country and therefore, that underlines the importance not just of fiscal policy but of macro-prudential policy if you're going to stabilise your individual economy.

Journalist 4: Just to follow on from that. On corporation tax receipts, what do you take from the spending of those corporation tax receipts which haven't actually been paid over yet? And the 700 million from one company? What I'm trying to get at is you've got a warning here. I mean, cliché, barn door stuff, isn't it? Have your previous warnings just been ignored by the finance minister?

Mark Cassidy: Well, there's two questions there. In terms of corporation tax, so it's well known we've seen a very significant surge in corporation tax since 2015. This has been driven entirely by the payments of the foreign multinational sector. We have a Box in the Bulletin [Box C, p.33] and the authors are here, which shows that corporation tax is over 11% of overall tax revenues, are now extremely high by historical and international standards. We certainly expect the multinational sector to remain very strong in this country, but we cannot be certain that the current high levels of corporation tax – certainly the amounts recorded last year – we cannot be certain that they are permanent or will be sustainable over the longer term. And it makes absolute sense, first of all, that permanent increases in expenditure are not financed through sources of revenue that may turn out not to be permanent.

Journalist 4: You've said the same thing and everyone else has said the same thing, to be fair, repeatedly for the last three years now. You know finance minister Noonan did exactly the same thing and are you not just being taken as fools?

Mark Cassidy: The responsibility for fiscal policy of course rests with government. Our responsibility is simply to provide advice on the overall fiscal stance. We clearly and we publicly articulated our advice. I certainly remember doing so at this Bulletin launch back in July. Our advice was for a surplus. So, we think that there would have been certainly scope – we think there would have been scope for it. We think it would have been preferable for more ambitious targets for next year and for the following year.

Journalist 3: Just on the Brexit, the hard Brexit thing. Does the forecast have a pattern? Is it front loaded? Is the worst effect early on, or is it spread out evenly over the five years?

Mark Cassidy: Does anybody have the diagram, if we had the chart there we could put it up rather quickly? So, if you look at the output of the lighter line there. So, it's a reasonably steady



decline for the first four years. I would emphasise one point that I alluded to earlier. This is what comes out of the model. It's a normal hard Brexit, as if such a thing could ever exist. But it doesn't take account of the disruption that might happen immediately in March of next year. My guess would be if you were to layer some judgement on top of this, you would have more of an effect because of the circumstances of this Brexit in the earlier period of time.

Journalist 2: Can I just be clear about the forecast. So, this is the first time you've made this forecast, you've used the WTO, the UK White Paper, and you've pushed it through your own models and you've come out with your answer. Is that correct?

Mark Cassidy: Exactly. And it's compared to a no Brexit scenario.

END.