DÁIL ÉIREANN

AN ROGHCHOISTE UM FHORMHAOIRSIÚ BUISÉID

COMMITTEE ON BUDGETARY OVERSIGHT

Dé Céadaoin, 23 Márta 2022

Wednesday, 23 March 2022

Tháinig an Roghchoiste le chéile ag 5.30 p.m.

The Select Committee met at 5.30 p.m.

Comhaltaí a bhí i láthair / Members present:

Teachtaí Dála / Deputies	
Richard Boyd Barrett,	
Seán Canney,	
Pearse Doherty,	
Bernard J. Durkan,	
Mairéad Farrell,	
John Lahart,	
Aindrias Moynihan,	
Ged Nash,	
Patricia Ryan.	

Teachta / Deputy Neasa Hourigan sa Chathaoir / in the Chair.

Pre-Stability Programme Update Scrutiny (Resumed): Central Bank of Ireland

Chairman: Apologies have been received from Deputies Michael Healy-Rae and Cannon. Members and all those who are in attendance are asked to exercise personal responsibility in protecting themselves and others from the risk of contracting Covid-19. They are strongly advised to practice good hand hygiene and to leave at least one vacant seat between themselves and others attending. They should always maintain an appropriate level of social distance during and after the meeting. Masks, preferably of a medical grade, should be worn at all times during the meeting, except when speaking. I ask for full co-operation in this.

Before we begin, I wish to explain some limitations to parliamentary privilege and the practice of the Houses as regards references witnesses may make to other persons in their evidence. The evidence by witnesses who are physically present or by those who give evidence from within the parliamentary precincts is protected pursuant to both the Constitution and statute by absolute privilege. Witnesses are reminded of the long-standing parliamentary practice to the effect that they should not criticise or make charges against any person or entity by name or in such a way as to make him, her or it identifiable or otherwise engage in speech that might be regarded as damaging to the good name of the person or entity. Therefore, if their statements are potentially defamatory in relation to an identifiable person or entity, they will be directed to discontinue their remarks. It is imperative they comply with any such direction.

Members are reminded of the long-standing parliamentary practice to the effect that they should not comment on, criticise or make charges against a person outside the Houses or an official, either by name or in such a way as to make him, her or it identifiable. I remind members of the constitutional requirements that members must be physically present within the confines of the place which Parliament has chosen to sit, namely, Leinster House, in order to participate in public meetings. I will not permit a member to participate where he or she is not adhering to this constitutional requirement. Therefore, any member who attempts to participate from outside the precincts will be asked to leave the meeting.

Today we are continuing our work on the stability programme update, SPU. The report is due to be published in mid-April by the Department of Finance. It will set out Ireland's medium-term economic outlook and fiscal plans. Its publication will indicate the beginning of the budgetary preparation for budget 2023. The committee is undertaking *ex ante* scrutiny of the SPU in order to understand the current fiscal context, difficult though that is at the moment, to engage with stakeholders on these issues and to allow for greater parliamentary engagement and transparency to the budget process. This is the committee's second engagement on this topic.

Today the committee will meet with representatives of the Central Bank of Ireland to discuss topics that include, but are not limited to, the following subjects: medium-term fiscal and economic outlooks, Exchequer and general Government developments and outlook, general Government debt, risks facing the economy and long-term sustainability of the public finances.

On behalf of the committee, I welcome Dr. Mark Cassidy, director of economics and statistics, and Dr. Martin O'Brien, head of division, Irish economic analysis. I thank them for being here with us today. I will hand over to Dr. Cassidy for his opening statement.

Dr. Mark Cassidy: We very much welcome the opportunity to discuss with the committee the economic and fiscal outlook. In my opening remarks, I will refer to our latest assessment,

which was published in the Central Bank bulletin at the end of January. I will also reflect on the implications of more recent events. The Russian invasion of Ukraine is shaping current and prospective developments in the European economy, as well as adding risks and uncertainty to the outlook. During the first week of April, we will be publishing our next quarterly bulletin, which will include an updated forecast that will incorporate available information.

The economy overall has proven resilient through Covid-19 and, prior to the war in Ukraine, robust growth was expected over the coming years. Modified domestic demand, MDD, is estimated to have grown by 6.5% in 2021, bringing the domestic economy broadly back to pre-pandemic levels. Our latest forecast is for domestic demand growth of 7.1%, 5.2% and 4.8% in 2022, 2023 and 2024, respectively. If these growth rates were to emerge, by 2024 the domestic economy would be back to where it would have been expected to have been, had the pandemic not taken place.

The economy is expected to be operating at its potential level of activity over the course of our forecast horizon. The extent of the labour market recovery has been encouraging. The standard International Labour Organization, ILO, rate of unemployment is now approximately 5%, with the Covid-adjusted rate at approximately 7%. Employment and labour force participation has increased relative to 2019, especially for females and younger workers. We expect the labour market to tighten further, with employment growth continuing, but at a slower pace than last year, and the unemployment rate remaining relatively low out to 2024.

While the official earnings data are not straightforward to interpret at the moment and come with a lag, it is reasonably clear that sectors that have experienced consistently high demand for labour have also witnessed strong wage growth. As the labour market tightens, it can be expected that wage growth would become more broad-based. According to the latest available data, consumer price inflation in Ireland as measured by the harmonised index of consumer prices, HICP, rose to 5.7% in February 2022. This is the highest rate since late 2000. It is in stark contrast to the experience over the decade preceding the onset of the pandemic, when inflation averaged 0.5%.

The experience in Ireland reflects common global drivers of inflation being witnessed to a similar extent in the euro area as a whole. Specifically, the current rates of inflation are driven by higher global energy prices and supply bottlenecks, with some knock-on implications of the energy price rise for the prices of other consumer goods and services. The energy component of the HICP rose by 30% over the year to February, with the most significant increases recorded in home heating oil, whose price is up by 53.8%. Relatedly, the cost of motor fuels rose by 31.3%. Excluding energy, HICP inflation in February was 3.7%. More domestically determined inflation is most evident in rents, which increased by 8.5% over the year to February.

These increases in official consumer prices for energy and fuel, which are for February, are yet to reflect in full the developments of recent weeks and the implications of the conflict in Ukraine. Both the spot and future wholesale price of oil and gas have risen substantially since the Russian invasion began and have also been volatile on a day-to-day basis. In addition, wholesale prices have increased for products where Russia and Ukraine are prominent suppliers, such as coal, wheat and other cereals, fertilisers and certain metals. The impact has already been seen in reported consumer fuel prices across Ireland, and will eventually also be reflected in higher than previously anticipated consumer prices for gas, electricity and food. Our January forecast envisaged HICP inflation averaging 4.5% in 2022 and 2.4% in 2023. While there is substantial uncertainty as to the actual outturn, inflation will likely be significantly higher than this in 2022 and could remain elevated for longer than previously expected as a result of

the war.

The economic effect of the Russian invasion of Ukraine can be primarily characterised as a supply-side shock, leading to higher prices and lower availability of energy and other commodities generally. Direct trade between Ireland and Russia, as well as that between Ireland and Ukraine, is very low overall but exposure on the import side is relatively important for coal, fertiliser and some cereals. However, the two countries are important in the supply of energy, metals and food commodities to the European market generally. This will lead to higher inflation and slower growth in many of Ireland's main trading partners and affect economic conditions here. Higher inflation, likely driven by energy and food components, will place increased pressure on household's real incomes and operating costs for businesses in Ireland. Alongside a general increase in uncertainty, this can be expected to dampen domestic consumption and investment growth to a degree.

Regarding the public finances, the pace of recovery given the extent of the Covid shock has been remarkable. We estimate that the 2021 general Government deficit to have been €8.7 billion, which is equivalent to -2.7% of GNI*. The better than expected outturn for 2021 reflected the following: higher than anticipated domestic activity leading to better income tax and VAT receipts; lower than expected Covid-related expenditure; and positive surprises in terms of corporation tax receipts. With the economy performing strongly as the effect of the pandemic eases, our January forecast was for a deficit of €3.8 billion to be recorded this year, and a surplus of €3.4 billion to emerge in 2023, which will be the equivalent to 1.3% of GNI*.

The re-emergence of a general Government surplus will contribute to an easing of the debt position. However, almost all of the improvement in the public finances is expected to be achieved through growth in nominal GNI*. Our January forecast envisaged the general Government debt to be below 90% of GNI* in 2023, and fall further to 84.9% in 2024, having been 102.2% in 2021. In euro terms, debt was only forecast to be 0.4% lower in 2024 relative to 2021, at €231.2 billion.

The war in Ukraine raises many issues for the outlook and conduct of fiscal policy, spanning the immediate humanitarian response for those displaced by the war, mitigating the economic impact on the most vulnerable Irish households, and addressing medium-to-longer term implications. I will briefly discuss some of these in a moment.

Before doing so I will mention some of the main risks to the current economic and fiscal outlook. These can be summarised under three inter-related headings. First, the escalation or prolongation of the war could worsen global supply conditions and dampen foreign demand. Second, the scope for, and implications of, second-round or cost-push drivers of inflation emerging more forcefully. Third, structural challenges for the public finances in light of already existing and emerging priorities that raise demands on Government resources. Already existing priorities include the need to address infrastructure deficits in housing, climate action and the long-term costs of an ageing population.

This brings me to the overall budgetary stance in light of current circumstances. The experience of the currently high rates of inflation is not uniform across the country. Cost of living increases from higher food and energy prices tend to be larger for lower income, older and rural households. This is because food and energy spending is a larger share of the weekly spending for these households. It is appropriate for fiscal policy to reduce the impact of higher inflation on those households that are less able to cope with current circumstances. Measures introduced in budget 2022 and afterwards will help to alleviate some of the cost of living increases. The

better than expected performance of the public finances last year has provided the Government with some additional space to fund this expenditure. Nevertheless, with the public finances in a deficit position following Covid-19, this additional expenditure will be funded by borrowing. If, for any reason, these measures became quasi-permanent then appropriate funding through current resources would have to be considered to avoid introducing a structural vulnerability in the public finances.

At the same time, pre-existing priorities in housing and climate action need to be addressed over the medium-term and at a time of inflationary pressures that are mostly externally driven. While uncertainty over the outlook is particularly high, the nature of the economic shock arising from the war means that it remains likely that the economy will be reaching capacity constraints. To ensure that the economy and public finances remain on a sustainable path over the medium term, the composition of fiscal policy may have to be adjusted to avoid excessive inflationary pressures domestically while simultaneously addressing these priorities for the community as a whole. Tax and expenditure measures, which more explicitly support supply-side conditions, build resilience to future shocks across the economy and over the longer-term enhance the structural budgetary position, becoming a more immediate priority the longer energy and other commodity prices are expected to remain high.

In conclusion, the economy and the public finances have proven resilient through the pandemic. As a result, both are overall relatively well positioned to address many of the challenges that may lie ahead. However, the degree of uncertainty around the outlook is particularly high. Careful management of the public finances in light of known and emerging priorities and challenges remains necessary.

Chairman: I thank Dr. Cassidy for his opening statement. I will open the floor to members and the first speaker is Deputy Doherty.

Deputy Pearse Doherty: Cuirim fáilte roimh an toscaireacht. I welcome Dr. Cassidy and Dr. O'Brien. I thank them for the presentation in terms of the Central Bank's quarterly bulletin. It is really timely. Committees have discussed these matters for many years but this is obviously an issue that is being discussed in every village and town across the State. The first thing on people's lips now is the impact inflation will have on the cost of food, home heating oil and energy, and how people are going to make ends meet. The outline Dr. Cassidy gave is an important contribution to raising awareness about where we are going. However, for many families, it will be very concerning because, just like we have pointed out, the impact of the war in Ukraine has not really been felt yet in terms of prices. Gas prices have been announced by Bord Gáis, for example, and some people think they are the result of the war in the Ukraine but they were not. They are the result of the increase in the price of gas that happened last year and we are going to see significantly further increases. I ask the delegation to elaborate on that matter. The die has already been set for the wholesale price of gas where these operators buy a large proportion, or the majority, of their gas well in advance of consumer use.

The Central Bank mentioned in its quarter 1 bulletin that inflation was projected to be 4.5%. Obviously, those numbers are out of date now even though they are only a couple of weeks old. Where does the Central Bank see inflation for the year 2022?

The Central Bank has done a very important piece of work by breaking down inflation as best as it can for different types of households and different types of income quintiles. I have engaged with the director general of the Central Statistics Office, CSO, to have a better breakdown of inflation because, as we know from the work the Central Bank has done, inflation on

the poorest households is about 1% higher than inflation on the most well-off households in the State. Some of that is down to the fact that poorer income households use three times as much of their disposable income on energy than those in the top. I am glad to see the CSO is about to prepare some technical work on this matter, which will be helpful. Can the Central Bank estimate where it sees inflation for different income groups? I ask because we are now looking at not just energy but some of the other staples such as bread as well as fuel, heating and electricity, which are increasing. Given that social welfare rates were increased in the budget by less than 2.5%, what is the real impact on those who depend on a fixed income as a result of the levels of inflation?

My final question on this part is about the second-round effects that could spill into wider inflation in respect of goods and services later in the year. Will Dr. Cassidy go into detail about the interconnectedness with Europe, Russia and Ukraine, as well as the impact second-round effects could have on the State?

Dr. Mark Cassidy: I will try to address those issues in turn. I fully agree with the Deputy's analysis that we saw evidence of significantly higher inflation during the second half of 2021, which related more so to the legacy of Covid and other global factors affecting energy markets. Now we have a second wave exacerbating matters. The official data that I quoted relates to February 2022 and, therefore, we will see a further uptick in inflation, particularly in the context of energy in light of the developments that we already know have happened. A point I would note about energy inflation is the extreme volatility of wholesale gas prices in particular but also oil prices. That can create additional problems and feed through to retail prices.

A third general point I wish to raise before I get into the answers more specifically, what we have not fully seen yet is a pass-through to food prices. We have seen in recent months a modest uptick in overall food prices and a bit more of an uptick in elements of food prices relating to cereals, grains and oils. There has been quite a sharp rate of increase in the past month or two. There is no doubt that this has not yet fully passed through. We will also see further pressures on food prices in the coming months.

The Deputy will understand that we are still working on these forecasts, but our current estimates suggest, in terms of the annual average, that it will be up between 1% and 2% over the year as a whole. Whereas we were forecasting an average rate of 4.5% in our previous bulletin, this will likely be in the order of 5.5% to 6% on average. We will have a more definite figure in two weeks' time. As to the profile during the year, we expect to see the rate, which is currently 5.7%, increase and peak around the summer months. Again, I apologise for presenting a range, but our estimates suggest that the inflation rate will peak in the summer in the range of 7.5% to 9%. There is an expectation of a gradual decline during the second half of the year. Importantly, we also expect the rate to remain higher than we previously expected throughout 2023. Short-term effects in these markets will pass through on a more delayed basis to broader elements of the consumer price basket - this will lead on to the second part of the Deputy's question relating to second-round effects - and, therefore, we expect inflation to be somewhat higher during 2023.

In terms of the differential inflation rates, while the average inflation rate is 5.7%, we produced estimates of differential inflation rates for different parts of society that range from 5.1% to the highest of approximately 6.2%. People who are experiencing the higher rates include lower income groups, older households and rural households. If the rate averages at 5.5% to 6%, one can expect the average rate would be about 0.5% higher for the more affected groups, which in some respects may not seem like a lot. If one looks at the corresponding incomes,

however, it is a lot. We believe the bill for the average household could be €1,200 to €1,300 higher than it would have been two years ago, which may be the best comparison. Of course, for lower income households, that is a significant amount. Estimates indicate that bills for food may be €500 to €600 higher if food price increases materialise as we expect.

When economists talk about second-round effects they often relate to the dynamic between prices and wages; high inflation leads to higher wages which in turn passes through to higher prices. We are not yet seeing evidence of that. We are not yet seeing any broad-based evidence of higher wages across the economy. Where we expect this to show up is in gas and oil prices. They are a key component of production and output across the economy. That leads to higher production cost for most goods and services. For some sectors in particular, that will pass through to higher prices for broader consumer goods and services.

I also mentioned developments in food prices. Whether one considers that a second-round effect depends on what way one looks at it. An important reason why food costs will increase is because of higher gas prices affecting fertiliser which affect food. Therefore, to some extent it is also a higher second-round effect.

Deputy Pearse Doherty: I appreciate that. My time is limited so I will just make a couple of points. One of the most worrying impacts regarding this year is that it is not a blip. It is not short term. The ESRI is projecting 5% inflation for 2023. Dr. Cassidy has said that he expects a higher rate of inflation. That means what is happening now will be baked in and will get worse next year, which is problematic for low- and middle-income households in particular.

On the positive side, the Exchequer and the economy are going stronger. The ESRI has projected an increase and that we will be in surplus by the end of the year. In its quarterly bulletin, the Central Bank has projected an improvement in excess of €4 billion since the budget last year. I am not sure if the Central Bank is still in the same space as the ESRI. Does Dr. Cassidy believe there is scope for further targeted interventions to support those who will be hardest hit as a result of the high levels of inflation?

Where does Dr. Cassidy see the European Central Bank, ECB, response going in regard to this? Does he see the ECB looking at interest rate increases in the short to medium term? Does he see the ECB shifting monetary policy, perhaps as a result of the invasion of Ukraine, or are we still looking at supply-side problems, the mismatch between supply and demand, and that it is more likely to result in no change in policy from the ECB in the short term?

Dr. Mark Cassidy: The Deputy is absolutely right about the improvement in the public finances. We have estimated slightly different figures from the ESRI, which we will publish in a couple of weeks. We probably see the economy remaining in deficit this year. Previously, we expected a return to surplus next year. We will probably still be looking at that but there is much uncertainty about how it will materialise.

In terms of what more could or should be done, all I can say is that given how things have developed, more measures may well be warranted or necessary. That is a matter for the Government, however. When one gets down to that type of decision, it is matter for elected representatives generally to debate. The public finances were in a healthier position. There were many improvements in recent years and there was a positive momentum coming into 2022, which leaves us better placed to address these shocks, which is a welcome development.

As to the ECB, I will restrict my comments to what it would say which is that while its focus

is to achieve its price stability target, inflation of 2% over the medium term, it will not ignore current inflation developments. While the Deputy is correct that it represents a supply-side shock, and the ECB can do nothing about global supply no more than about domestic policy, but because of the risk of second-round effects, the higher inflation is, the more likely it could pass through to underlying inflationary developments in the medium term.

The ECB published new forecasts two or three weeks ago that expect inflation to return to around target levels by 2024. It is not forecasting excessive inflationary pressures in the coming years. It also announced a moderation in asset purchases and the rate at which it will continue asset purchases until the summer of 2022. It will announce at its next meeting in June what it will do in the third quarter. It is emphasising optionality in the current circumstances given the high degree of uncertainty. The ECB will undoubtedly remain absolutely committed its primary mandate that is price stability. If there are signs that the medium-term outlook is for inflation above 2%, it will not hesitate to act. However, on the other hand, if things go in the other direction from an inflation perspective, it will act in the other way. The ECB is not committed. It is maintaining its options open. They will know a lot more in June.

Deputy Pearse Doherty: Professor Philip Lane, the chief economist for the ECB, made the point that because it is a supply-side shock, increasing interest rates at this point in time would cause two problems. It would reduce demand and cause a problem as a result of that and there would still be supply-side pressures. Does Dr. Cassidy believe that analysis still stands today, or is that now changing because of the war in Ukraine and the impacts that will bring about?

Dr. Mark Cassidy: I do not think the two points are inconsistent. What Professor Lane said, and what I am saying, is that moving monetary policy now will do nothing to the current rate of inflation. It will not do it in the current timeframe. It is a supply-side problem and monetary policy is a demand problem. It will do nothing. The higher inflation is now, the more likely it is that the medium-term forecast for the ECB will be even higher. The current rate of inflation is relevant and is one of the factors the ECB looks at in making its decision. If the current rate remains high, however, and the ECB does not expect this to pass through to the longer term, then that higher rate would not by itself be enough to change. In addition to the current rate, the ECB will look at the headline rate over the medium term. It also looks at the core underlying rate over the medium term, in other words, the rate that excludes energy prices. It has set explicit conditions for all three of those. What Professor Lane said is not inconsistent with what I am saying. The ECB is looking at these three things at the same time.

Deputy John Lahart: I thank Dr. Cassidy and Dr. O'Brien. I have a couple of quick questions to start with and if they can give reasonably quick answers, we might get into a little more detail after that. What is the country's debt, as we speak?

Dr. Mark Cassidy: It was in my opening remarks but my memory is not so good.

Dr. Martin O'Brien: It is around €232 billion.

Deputy John Lahart: That is nearly a quarter of a trillion euro. That is borrowed at relatively low interest rates. Is that correct?

Dr. Mark Cassidy: The effective rate over the entire borrowing is around 1.5%. If we were borrowing now we would be borrowing new money at less than that but the effective rate over the entire stock is 1.5%, which is very low. It is half the rate it was around four or five years ago.

Deputy John Lahart: I am surprised that the witnesses have not really outlined a worst-case scenario, although things are moving quickly. To me, we are into a worst-case scenario in relation to Ukraine. This is not going to end quickly. Its economy has come to a complete standstill. We are not finished with sanctions and we have not fully begun to feel the impact. We have not taken the maximum number or anywhere near the maximum number of refugees from the conflict as yet. Have the witnesses looked at the worst-case scenario where the Ukrainian economy was completely shut and imports of vital, necessary products from Russia and Ukraine were essentially gone? Have they worked out that scenario yet?

Dr. Mark Cassidy: I will ask Dr. O'Brien to mention some figures in a moment. We are looking at worse scenarios compared to the central scenario I mentioned in my opening response. However, they are not worst-case scenarios. We are looking at scenarios where there are even higher gas and oil prices in international markets for even longer than the market currently expects. They are very bad scenarios, and we are looking at two such ones, but they are not worst-case scenarios. All of them assume the conflict remains within Ukraine, for example. There would be much worse scenarios than that and we do not have numbers around those. We are developing some of these adverse scenarios. We will be referencing them and will publish them to an extent in our upcoming bulletin.

Dr. Martin O'Brien: I do not want to be too imprecise in my answer. It is probably easier for me to make generalities than give specific numbers. In general, most of our baseline or benchmark forecasts would still see energy prices come down from their current rates over the course of the next couple of years. Any situation like those mentioned by Deputy Lahart would probably be reflected in global energy prices being significantly higher than that, probably closer to their current levels than the benchmark expectation might be. Dr. Cassidy mentioned that we are adding 1% to 2% to inflation this year as a result of currently available information. If energy prices were expected to remain higher than they currently are for a longer period of time, we would be adding another 1% to 2% to the rate of inflation and doing something similar on the negative side to the growth rate. You would expect the growth rate to be significantly lower than what we currently forecast or envisage in the context of the conflict as it is today. Our previous forecasts had growth in the domestic economy of around 7% this year. Based on current information, one could expect that growth to be around 1% to 2% lower when we come out with our forecast. If energy prices were to remain at similar levels to what they are currently, as opposed to coming down, that would shave another 1% to 2% off that for next year.

Deputy John Lahart: Do we have any sense of how much Russian money there is floating around the Irish economy?

Dr. Mark Cassidy: We have estimates. The main exposure to Russian money would relate to financial vehicles called special purpose vehicles. They are not related to the domestic economy in that they flow between Russian financial entities. Our estimates are that these special purpose entities hold around €37.1 billion of Russian-issued assets.

Deputy John Lahart: Are they subject to sanctions, as a matter of interest?

Dr. Mark Cassidy: They are subject to sanctions.

Deputy John Lahart: What does that mean, in effect?

Dr. Mark Cassidy: This is a little outside the scope of my responsibility within the bank.

Deputy John Lahart: That is a good point. It just seemed an obvious question. I do not

want to press Dr. Cassidy on something that is outside his remit. That would be unfair. Let us get back to the debt. It is a quarter of a trillion euro, which we forget so easily about. How sustainable is that figure?

Dr. Mark Cassidy: Is the Deputy referring to our overall debt figure?

Deputy John Lahart: Yes.

Dr. Mark Cassidy: Notwithstanding current events, we think the debt is on a sustainable, favourable path. The debt outlook has improved significantly over a number of years. It still remains higher than we would like it to be by a considerable amount but it has got itself into a much better position. Most important, it is on a favourable path where it is reducing towards much better medium-term levels. We think it is in a good position.

Deputy John Lahart: Dr. Cassidy says it exceeds where he would like it to be by a considerable amount. It is €232 billion. Would he be more comfortable if it was in and around €150 billion? Would that be more manageable in the long term? We might not be as exposed to risks and shocks.

Dr. Mark Cassidy: That might be a useful money amount at the moment but we also have to look at it in the context of how the economy is performing over time. Rather than looking at the euro amount, we prefer to look at the capacity to repay the debt and the best metric of that is debt as a share of income. The current debt ratio as a share of income is around 100%. There is no precise figure. The days when people put a very exact figure on this are over. We would certainly like that to be reduced towards 60% or something like that over a period of time. We do not want a sudden knee-jerk reduction in debt. The reason I made my first clarification is that that will happen through sustained growth in the economy rather than reducing the nominal amount of debt. By increasing the income, the debt ratio will therefore reduce. It is not a case of looking to reduce the amount of debt but of increasing income.

Deputy John Lahart: The Parliamentary Budget Office, PBO, which informs this committee and does a lot of research for us, has published a number of pieces recently with which Dr. Cassidy may be familiar. We can all see the challenges facing the Government. There is real pressure coming from particular forces who argue every time there is a crisis, either with a small or a capital C, that the Government must respond with reductions across different areas. Obviously if the Government reduces VAT or excise duty, at some point it will have to raise them again when the crisis is over and therein lies the difficulty. The pandemic exacerbated the trend for increasing public debt but is that sustainable into the longer term, particularly with regard to health spending? What is the Central Bank's view on that?

Dr. Mark Cassidy: First, spending more money during a crisis is what one wants to do. Economically that is what one wants to do, to sustain spending in the economy and to prevent hardship within the economy. One of the reasons, if not the main reason, we argue for lowering the public debt ratio during good times is to build up the funds or the buffers to allow us to spend money during times like Covid or the war in Ukraine. When a temporary shock hits the economy it is absolutely appropriate to diagnose who is most affected and for money to be spent to alleviate the hardship caused. The lower the debt ratio is at the start of the crisis, the more the economy is able to do that while continuing to borrow on international markets. We came into this crisis in much better shape than the crisis of 2010 to 2012, when international markets would not lend to us because they judged that our debt position was not necessarily sustainable. The first point to emphasise is the importance of getting the debt lower when times are good.

The second point that is extremely important is the difference between a temporary shock hitting the economy and a permanent shock. If a permanent shock hits the economy, then it is a very different matter in terms of the appropriate policy response. To give an example in the current context, ultimately if higher energy prices are permanent and if the prices we see now persist forever, then for an energy importing economy like Ireland, the economy becomes permanently worse off and we have to pay that cost. No Government policies can restore the previous cost of energy supply and the money to meet the extra costs cannot be borrowed indefinitely. It then becomes a political decision on how the costs will be redistributed within society. Permanent shocks are very different because we cannot borrow the money forever to pay for them and society needs to make a choice about how those costs will ultimately be redistributed or absorbed over the longer term.

Deputy John Lahart: I ask Dr. Cassidy to define a permanent shock. I am not being stupid. I understand the concept of a temporary shock but the current shock could potentially be a decade long before it works itself out. Is that a permanent shock?

Dr. Mark Cassidy: Well, that certainly is not a temporary shock, if prices remain at their current high levels. A temporary solution would be to temporarily reduce VAT or excise duties to get over a situation whereby prices are high for the next year or two. However, if prices remain at their current high levels for the next ten years or 20 years, then having permanently reduced excise and VAT on energy is not going to be the solution to the problem. Then we need to look at longer-term solutions to the problem.

Deputy John Lahart: When does one decide it is not a temporary shock?

Dr. Mark Cassidy: That is a matter of judgment for politicians, bearing in mind all relevant information and that all shocks are different.

Chairman: Deputy Boyd Barrett is next.

Deputy Richard Boyd Barrett: I thank our contributors from the Central Bank. On the last point about the nature of the energy price increases, Europe has substantially increased its renewable energy production. I think I am correct in saying that 2020 was the first year in which the majority of electricity in Europe was produced renewably. We have actually increased the renewable energy supply in Europe and in this country but that has not made a damn bit of difference to the cost of energy. I ask Dr. Cassidy to explain that conundrum. The narrative we are hearing from the Government is that faced with these shocks, we have to wean ourselves off our reliance on fossil fuels. Now, for climate change reasons, we should do so anyway but there is an implication that if we do that, and develop more indigenous renewable energy, it will somehow lead to a reduction in the price of energy and electricity. Is there any reason to believe that, other than the ideological assumption underpinning it? It would be interesting to hear the Central Bank's response to that because when I look at the situation, given that the market is setting these prices regardless of where or how the energy or electricity is produced, there seems to be no evidence to support that suggestion.

The difficulty we have is that when we are talking about inflation and the cost of energy rising, there is an implication that we are all in this together in suffering the consequences, that this is a big problem for everybody. Is it fair comment to say that it is not a big problem at all for those who produce energy? Actually, they are doing extraordinarily well and this is a tale of two shocks. There is the shock for the majority who have to buy the petrol, energy or electricity from the producers and suppliers but what we are witnessing is a bonanza in profit for those

same producers and suppliers, whether the energy is renewable or fossil-fuel based. That is actually what is happening here. I would be interested to hear Dr. Cassidy's comments on that. Is that an accurate description of what is happening in this country, in Europe and globally?

Dr. Mark Cassidy: On the Deputy's first question, I agree. I do not think that what we will see in the transition to renewables are lower prices or that this is their main intention. The main intention of the transition to renewables away from fossil fuels relates to climate change objectives and, potentially, security of energy supply so that we become less reliant on international sources. As far as I know, there is no evidence to suggest that this is being done to reduce the cost of energy. Indeed renewables, at the moment at least, would be more expensive and there are potential inflationary effects in the shift to renewables. I do not disagree with what Deputy Boyd Barrett is saying. I am not very aware of the alternative argument, that it is being done for price reasons.

On the second issue, what Deputy Boyd Barrett is saying is also correct. From a national perspective, we could look at it as the difference between energy exporting and energy importing countries. This is a shock that benefits energy exporting countries at the expense of energy importing countries like Ireland. That said, there is a shock to supply so it is not that energy exporting countries are able produce and sell the same amount of energy as they did previously and charge twice the price. Certainly, the current situation benefits energy exporters at the expense of energy importers. It is a terms of trade shock, I suppose and that is the nature of the shock.

I would not say that it is the same within the energy sector. I would not say it is the same for those selling energy, for example, energy retailers because they are paying the higher prices in order to purchase the energy and passing those on. I do not have information on the extent to which they are passing those increases on or whether the increases are more or less than they are paying. Certainly, the benefits of higher energy prices generally are felt by those producing the energy, the ultimate producers of it, at the expense of the energy importers or consumers. I am not disagreeing with anything the Deputy is saying in that regard.

Deputy Richard Boyd Barrett: I thank Dr. Cassidy. I think there are important implications of this. In a globalised economy, the owners of the energy supplies are really the shareholders, who are not limited. The companies will be based in a particular country, whether that is BP or Shell in Britain or Aramco in Saudi Arabia, but people with additional wealth in this country buy shares in these companies. I often find the Central Bank's quarterly report at the beginning of the year fascinating, in which it shows the increases in household wealth, which have been pretty dramatic over the past ten years or so. Many households in this country would be stunned to hear that household wealth had increased dramatically year on year for the past decade or so, but the Central Bank's reports demonstrate that. That clearly indicates that very wealthy households have seen a very significant increase in their wealth. Some of that is property based, given the rise in the value of property, but if I read the report at the beginning of the year correctly, it indicated that many of those increases were accounted for by increases in financial assets, that is, shares, dividends, savings and all that kind of stuff.

The wealthiest households in this country - this is probably an international pattern - have seen their wealth increase greatly. Is it fair to say, therefore, that if they are shareholders in companies that are making significant profits, such as energy companies or arms companies, which have also been doing well recently, the inflation crisis is not a problem for them at all? The increasing value of their investments, if they have investments in companies such as petrol, energy or arms companies, means they actually are benefiting from the inflation crisis that is

crucifying everybody else. Is that a fair comment?

Dr. Mark Cassidy: I would not agree with that. According to the figures, by far the largest proportion of the increase in wealth relates to housing wealth. The main distinction that could be drawn would be between those who have owned houses throughout recent years during the period of this increase in wealth against those who have not owned houses.

The second large increase has related to household savings. There has been something of a distributional impact there. Household savings have increased significantly since the outbreak of Covid and they have been concentrated among those sectors of the economy that have been less severely affected by Covid, where people have not lost their jobs but have not had the same opportunities to spend, so they have accumulated significant savings. At the other end of the spectrum, those parts of the economy that were first to close did not accumulate the same level of savings and they tend to be dominated by lower-income workers. Lower-income workers did not have the same opportunities to save as did higher-income workers.

In regard to the increase in the value of other financial assets, Ireland holds a very small share of financial assets outside of bank accounts and of property, which of course is non-financial. Shares and so on constitute a very small overall proportion of the wealth in comparison with other countries and account for only a small proportion of the overall increase in wealth during that period. It is true equity markets did well over a number of years, although not over recent years. The current crisis is different from other fluctuations in oil prices whereby if oil prices increase, the oil producers make money, and *vice versa*. This is complicated by the fact that many of the oil producers will have been negatively affected by developments in Russia too. They may pull out of Russia and their businesses may be affected. It will take a while to understand the implications of the current developments in Ukraine for energy companies generally. As for the second part of the Deputy's question, suggesting the increase in wealth that has been recorded reflects the increase in value of shares in energy and oil companies, no, I really do not see that..

Deputy Richard Boyd Barrett: I was not saying it was just that, I was just giving that as an example. This predates Covid. The Central Bank's reports show a consistent increase in net household wealth for the past ten years or so, with fairly dramatic increases pre-Covid. It is interesting that is happening. Most people, particularly with the increasing rate of inflation and so on but even more generally, will not have felt their household wealth has increased. They will have been struggling already with the cost of living. This suggests there is a layer of the population that has additional money and that has seen its household wealth increase. Much of that relates to property, because these people are doing well out of the housing crisis, the high rents and so on, but they are also generating it from investments and savings.

Dr. Mark Cassidy: It relates primarily to home ownership. The graph tracks very closely with household prices. Over the past ten years, house prices have been increasing, while over the five years before that, they collapsed dramatically. House prices are only now back to where they were in 2008. Household wealth is determined much more than anything else by the value of a house, and in the case of people who own their own house, their wealth will increase when the value of that house increases. That is what we are seeing to a greater extent than anything else.

Deputy Seán Canney: I have listened with interest to the questions and answers during this meeting. I come from a rural area and see what is happening in rural Ireland with the explosions in the prices of fuel, grain supply, fertilisers and so on, and the impact they will have. The

short-term impact is such that the price of diesel and other fuel for cars has increased, as has the cost of heating and so on. These increases in the cost of living mean people have less spending power. There is also the issue of people on fixed incomes, who are again being negatively affected, and profoundly so, by the cost of living, heating their homes and all that goes with that.

Should we now consider taking very immediate measures by reducing VAT on these commodities in the short term to allow people to survive through the short term? As for the long term, I expect we will see the full effects of the war in Ukraine when we reach the next harvest, from a farming point of view, and when we see how much has been produced, given the more than threefold increase in the price of the likes of fertiliser. Buying 1 tonne of fertiliser, for example, will cost €250 more than it did last week. People are just not buying fertiliser to grow grass to feed cows to produce milk and the food we need because they cannot afford it. We are in a perfect storm and that drives up prices and creates scarcity. Should we now, as an emergency, consider cutting excise, VAT and carbon tax for the moment because of what is happening?

Moreover, should we help farmers by giving them a subvention to allow them to buy the fertiliser and seed they need to be able to create the food supply for feedstock and people for next winter?

Dr. Mark Cassidy: I can confirm everything the Deputy said about distributional effects. We recently produced an analysis, based on December 2021 data, that confirms that rural communities are more heavily affected than urban communities because of the nature of the price increases we have seen. The effective inflation rate in rural communities can be up to 0.5% higher than the average throughout the wider country. It is possible it will get somewhat worse. The analysis in December probably did not fully reflect what was coming down the line in terms of oil and gas prices, and fertiliser prices which will be a very important element of inflation this year. Deputy Canney is, therefore, absolutely correct.

The Deputy is also correct about fixed incomes or those parts of the economy that are not going to see the same increases in earnings as maybe other parts of the economy. Let us say the average rate of inflation this year is 6%. If average earnings across the economy are increasing by between 3% and 4%, that means the average household is having a decline in real incomes of around 2%. If somebody does not earn between 3% and 4% more and has the same income this year as last year, that is a much larger reduction in their purchasing power and real income during the year. It is absolutely correct to say that rural communities are harder hit and that people on a fixed income or those who earn lower income increases experience larger declines in real incomes.

In terms of policy, given how things have developed, more measures may well be warranted or necessary. That is a matter for Government, however, and it would be getting beyond our mandate for us to get into what specific policies may be introduced.

With regard to VAT, it is known that there are challenges with European fiscal rules. We have a derogation for electricity and gas where the current rate is lower than the rate for other products and it could not return to that lower rate. I am not an expert on European fiscal rules but it would be useful if any changes to those rules could be agreed at European level in order that one is operating within the framework. To go beyond would really be to get into the policy sphere, and it is more appropriate that elective representatives rather than us discuss and debate that.

Deputy Seán Canney: On the cost of living, Dr. Cassidy spoke about energy in terms of

security of supply and having independence. The way we are developing our offshore energy is way of track in the sense that, even with the announcement this week that seven projects may start the process of seeking planning permission, we probably will not see anything produced from that until 2028 or 2029. Given the emergency and our reliance on outside supplies of energy, should we put in place emergency measures in the interim to ensure we can fast-track projects to deliver the green energy we all crave?

A good example of a project that has gone pear-shaped is the Derrybrien wind farm located in my constituency. The ESB has now decided to decommission 70 wind power generating turbines because planning permission was not correct and the ESB has been told by An Bord Pleanála that substitute consent will not be given. This decision flies in the face of what we are trying to create, namely, a secure green energy supply for the country. Should we look at how we spread our resources around the country in terms of providing infrastructure, public transport and rail networks so that we can have connectivity, get people off the roads, out of their cars and into trains and have better options for people, including people who live in rural areas? That is why people in rural areas are more affected by the inflation we are currently experiencing.

Fiscal rules were mentioned. Does the Central Bank believe the fiscal rules that were relaxed during the recession should continue to be kept off the agenda until we see how the situation in Ukraine pans out?

Dr. Mark Cassidy: I might ask Dr. O'Brien to reply to the question about fiscal rules as he has done some thinking about the EU framework.

I agree with the first part of what the Deputy said. I am not aware of the specific projects that he referred to. At a more economy-wide level, a key challenge is that we need to attract more investors to build flexible, cleaner gas-fired generators to supplement what we will have from wind-generated sources of electricity.

In recent years, we have been moving from a reliance on fossil fuels towards more renewable sources of energy. Already, around 40% of our electricity is generated from renewable sources. At the same time, we still have a higher degree of reliance on fossil fuels. As the last couple of years have suggested, the generation of wind-powered electricity can be volatile. There can be shocks to that supply, whether that is due to weather conditions or for other reasons. One risks, and we have seen that risk called out during last year, the situation where, in moving out of fossil fuels and closing oil or coal plants, one is not making up the difference and one does not have enough renewable sources of energy. We have had that experience called out over the last couple of years. I do not have an answer in terms of exact policies but we need to think about incentivising and attracting more investors to build flexible, clean gas-fired generators to go along with wind-generated energy. That would help to continue to reduce the reliance on fossil fuels and must happen. At the same, we must reinforce energy supply to ensure we are not vulnerable to fluctuations in wind-powered energy.

My colleague, Dr. O'Brien, will respond to the question on fiscal rules.

Dr. Martin O'Brien: Specifically for 2022 and 2023, it would be a matter for the Council to decide the degree of flexibility that would be provided. I am sure, in the context of the relatively extreme situation we are now facing, that there will be some degree of flexibility considered by governments in Europe as a result of that.

In general, the Commission has taken this opportunity to reflect on reform of the Stability and Growth Pact, etc. The opportunity we have is to make the framework overall more simple and effective, more cognisant of national economic peculiarities and developments and also more cognisant of some of the longer term issues the Deputy mentioned and to which Dr. Cassidy referred, including the overarching long-term priorities for the European Union overall around energy security, digitalisation and these kinds of issues, in order that the fiscal framework reflects these issues more effectively. Certainly from our understanding, the European Council and the Commission are actively pursuing simplicity of roles and also making them more effective to reach longer term goals. I think that would be a good avenue to take.

Deputy Aindrias Moynihan: I thank the Central Bank for the various contributions, which contain a lot of information. The witnesses have spoken about the impact of inflation on the cost of living. I stress that the impact is not evenly distributed across the population and some communities are being hit harder than others. People in rural communities need to do a lot more driving so are hit more by inflation, and the same applies to some people who are on fixed incomes. The Central Bank has done some analysis on the various sectors and who is impacted more and by how much. I am interested to know who is impacted less and is more cushioned from the cost of inflation and the rising costs of living.

Dr. Mark Cassidy: We produced analysis recently so it is right up to date. It shows that those who are being hit disproportionately are lower income groups, people in rural compared with urban area and older people compared with younger people. That primarily reflects the different shares of people's weekly expenditure that goes on energy products. I will outline the figures I have for income groups. The average amount of a person's income spent on energy in the economy is 8%. The amount spent is 10% for the people with the lowest 20% of incomes and it is 6% for the highest 20% of incomes. That is a significant share of the disposable income of lower income groups. We think the average household energy bill this year could be €1,200 to €1,300 higher compared with two years ago. Older people and people in rural areas spend a higher proportion on energy. I do not have the breakdown for rural and urban areas, but the amount that lower income groups spend on their grocery bills is higher too. I can confirm what the Deputy is saying.

Deputy Aindrias Moynihan: I thank Dr. Cassidy for the snapshot. Is a copy of that analysis available? I would like the opportunity to drill deeper into it.

Dr. Mark Cassidy: It is available. It is on our website. We can arrange to have it sent to the Deputy. I gave the breakdown for energy. I have the corresponding breakdown relating to food. The average amount of a person's income spent on food is 21%. It is 16% for the highest 20% of incomes, but the people with the lowest 20% of incomes spend 26% of their income on food. There is some evidence of food price inflation. If it becomes more widespread, there would be a distributional effect. We will forward the Deputy the published analysis.

Deputy Aindrias Moynihan: Does it focus on transport costs?

Dr. Mark Cassidy: It does. It breaks down overall expenditure on transport, energy, food and other goods and services. It shows how one can create tailored inflation rates for younger or older, lower income or higher income, rural or urban, those with cars or those without cars, and homeowners or renters. We provide tailored inflation rates to show that while 5.7% is the average inflation rate, some groups face a higher rate and some groups face a lower rate. We estimate all of those.

Deputy Mairéad Farrell: I thank the witnesses for coming. It has been an interesting discussion so far. Unfortunately, I have had to pop in between different meetings. If I repeat something, please let me know. These are extremely difficult times. It is interesting to see the conversation in the media. Even before the invasion of Ukraine, there was a conversation about rising inflation. At that time, many media commentators seemed to think that interest rates would rise in the European Central Bank, ECB, although it was clear that it would not increase them. The witnesses speak about rising inflation and the underlying causes being supply bottlenecks for energy and so on. I do not know how making borrowing more expensive and reducing economic activity addresses that. We already have the second highest mortgage interest rates in the EU, at more than double the EU average. January saw the typical new mortgage rate increase by 0.7%, which was the largest monthly increase in almost five years. High mortgage rates add more than €2,200 a year to the cost of living in Ireland. Does an interest rate increase spell more bad news for homeowners who are nearing the end of their fixed term and for potential homeowners?

Dr. Mark Cassidy: Earlier this month, the ECB announced its latest monetary policy stance and what it expects to happen. It announced a reduction in the new asset purchases that it undertakes, that it will consider the future of asset purchases from the third quarter of this year, and that interest rates will only increase after asset purchases have stopped. That does not mean that asset purchases will finish from the third quarter but that it will be considered only at that time, and interest rates will not increase until after that. That is the official policy stance of the ECB.

Interest rates are abnormally low. At some time, interest rates will normalise. I will not put a timeframe on that. A normalisation of interest rates will affect floating rate mortgage holders first. Ultimately, it will affect those who have fixed rates of short duration. It will transmit through much of the market and lead to higher payments. We have looked at two scenarios. A one percentage point interest rate increase would lead to an additional repayment of approximately €130 each month. A two percentage point increase would lead to an additional repayment of approximately €260 a month. That would add to repayment issues. If that came along with the current severe pressures, that would make matters worse for households. Higher interest rates from the ECB will not bring down the current rate of inflation, which is currently 5.9%. That would not address the nature of the problem. Monetary policy acts with a lag. One cannot cure high inflation now. Higher rates could ultimately lead to stronger underlying demand pressures over the medium term, which need to be contained, otherwise higher inflation can set in.

Deputy Mairéad Farrell: I am happy to hear Mr. Cassidy say that. It is what I have been trying to say and sometimes shouting at the television. It is sometimes frustrating to hear about inflation and to hear people saying that we need to increase interest rates. It is nearly a reflexive reaction that people say without examining matters. I am delighted. I will quote Dr. Cassidy at length whenever I get the opportunity. He will be sick of me talking about him. I thank him for that. It was a nice upturn.

Predicting financial downturns is tricky. One metric that has a good predictive record is yield curve inversion. An inverted yield curve is a situation in which long-term debt is considered less risky than short-term debt of the same credit quality. In other words, it is seen as riskier to borrow short term than long term because it is expected that trouble is just around the corner. I was looking at the USA's yield curve on Monday. The five-year and ten-year yield curve was inverted, as was the three-year and ten-year yield curve. The two-year and ten-year yield curve was just 19 base points away from inversion. It seems that where the USA is con-

cerned, the market is pricing in a high recession risk. These inversions occur against a backdrop of an increase in interest rates by the Federal Reserve. What are the witnesses' views on higher interest rates increasing the risk of recession in the EU? What are the implications for Ireland, particularly with regard to the significant tax debt that has been warehoused and the significant number of companies experiencing cashflow problems at being at risk of going under? We saw a large construction company go bust this week. What are the implications for wage increases which, so far, have been concentrated in certain sectors where there has been strong demand, as Dr. Cassidy mentioned? We hope that will spill over into other, lower paid sectors.

Dr. Mark Cassidy: We are seeing the inversion of the yield curve in the USA. We do not see it in the euro area. Traditionally, an inversion of the yield curve often indicates that markets expert a downturn in the future. They expect that longer-term interest rates will be lower than shorter-term rates. Therefore, at some stage in the future, the Central Bank will reduce interest rates. The Central Bank usually reduces interest rates because economic conditions are bad. The Deputy is right in what she suggests. I am not sure at the moment and think other factors could be behind this. I would not put it down to expectations relating to the economic outlook. At the moment the expected pace of interest rate rises in the US is very sharp. Unless things divert from the current path there will be a number of interest rate rises in the near term, during 2022, into 2023. It reflects a number of things but as much as anything it may reflect the sharp short-term pace, which will then normalise, rather than the fact that the downturn indicates recession. I couch that with much uncertainty. There are many reasons why a yield curve could be inverted. Many market expectations can be reflected in that. I do not think that is the main reason it reflects.

In regard to the second point, did Deputy Farrell mean the impact if a recession was to happen here or if there was a downturn in the economy, the impact that would have here, or was it more about interest rates?

Deputy Mairéad Farrell: Apologies, I have audio issues. It can be difficult listening and speaking at the same time. I thank Dr. Cassidy.

Dr. Mark Cassidy: Essentially if the current crisis was to become much worse and we still expect strong growth in the Irish economy, there is no doubt about that, for us, as we see it the outlook remains positive, but growth could be weaker than we are currently expecting. It would take a very large shock to move into much more negative territory than that. Of course there are vulnerabilities around the economy coming out of Covid-19 and they will be exacerbated with additional stresses now, due to the current crisis. We will know much more about this when the income supports that are benefiting firms that have been affected by Covid-19 stop. We will then know much more about the vulnerabilities that exist. Much is currently exposed by these firms. We will know much more during the course of 2022 about what firms that are currently on income supports will no longer be viable when those supports are removed. The situation will become much clearer in terms of the pressures the Deputy quite rightly highlighted.

Deputy Mairéad Farrell: I have one more question. A piece in *The Irish Times* recently stated that energy industry figures here were predicting that Irish electricity prices will rise by 40% to 50%. Obviously that is attributed to external factors and as Dr. Cassidy noted in his opening statement, supply-side issues. Russian gas supplies, from what I can see, have actually been increasing rather than decreasing and according to one source by as much as 40%. I also checked the International Energy Agency's most recent report produced this month, which stated:

The OPEC+ alliance agreed on 2 March to stick with a modest, scheduled output rise ... insisting no supply shortage exists. Saudi Arabia and the UAE – the only producers with substantial spare capacity – are, so far, showing no willingness to tap into their reserves.

So, if supplies have not reduced but have actually increased and production costs are unchanged, is it speculation about future prices that is driving it? I would be interested to hear that because obviously I have heard about the price of oil and gas futures having risen sharply but as we know, futures are essentially bets on the future and we know the future is extremely uncertain as we saw in the last few months with the invasion of Ukraine. Who could have really predicted that? What role is monopoly pricing playing? Is price gouging a factor?

Dr. Mark Cassidy: I would not be close enough to be able to comment on that. The Commission for Regulation of Utilities is better placed. We are seeing enormous price increases for households, whether at the petrol pump or for electricity and gas but they are on the back of very large increases in international gas and oil prices. These figures change every day. International oil prices could be up maybe about 30% on where they were two years ago. International gas prices are up by several hundred percentage points, they have increased by multiples. That is actually something of a difference between the current energy crisis and previous ones. Previous energy crises have nearly always been dominated by fluctuations in oil prices. Fluctuations in gas prices is quite new and it shows the reliance that all of us have on gas.

In terms of gas and electricity, the latest increases show annual increases of 22.3% in one and 27.8% in the other. That was in February and does not take into consideration any of the latest increases so there will be still further increases on top of that. I reiterate that this reflects what we have seen. Whether there is less or more than full pass-on, it primarily reflects what we have seen in international markets.

The futures are for both to remain high and then gradually moderate from the second half of the year. That is what the futures are expecting but to remain much higher than would have been expected two to three years ago. However the expectation in future markets is to remain high but to moderate during the second half of the year. In making our own forecasts, we use future prices for oil and gas to reflect those. The one thing I always say about future oil and gas prices is that history and experience show that they are useless at forecasting what actually happens with oil and gas but they are probably better than anything else. The ECB and ourselves have done a great deal of work and have not found any better way of forecasting. We have done all the models we can. They are not accurate but in such a volatile market, it is very hard to predict what will happen.

Deputy Mairéad Farrell: Finally, may I ask one very quick question?

Chairman: Very quick. The Deputy is way over her time.

Deputy Mairéad Farrell: Apologies, I will leave it so.

Deputy Bernard J. Durkan: My apologies for ducking in and out as there is a whole series of meetings at the same time but that is in the nature of things unfortunately. I thank our guests and I will speak to the comments. I have a question in regard to interest rate increases. What are the most feared or the most obvious consequences in the event of there being interest rate increases in this country and across Europe?

Dr. Mark Cassidy: First of all, interest rates are abnormally low. At some stage they will begin to normalise. When they do, I firmly believe that the increases will be gradual and modest. When we see this normalisation it will be at a modest pace so I certainly do not see scenarios where we will get very rapid increases in interest rates. I will mention two effects. Households will undoubtedly see an increase in mortgage repayments. I quoted some figures whereby a 1% rise in interest rates would lead to an increase of around €130 per month for the average mortgage holders. Those most affected would be those on floating rates or tracker mortgages. That would be the most obvious impact that households would feel. From an economic perspective, higher interest rates also work to slow down business investment within the economy. Interest rates are usually increased because the economy is beginning to grow at a faster rate than the Central Bank is comfortable with and that is being reflected and shown up in higher interest rates. Higher interest rates slow the rate of economic growth overall because they slow household consumption, because households are paying more on mortgages and have pay more to borrow money. Firms have to pay more to invest. They are two main channels through which an economy is affected.

Deputy Bernard J. Durkan: I thank Dr. Cassidy. That confirms my own thinking on the issue. The problem is that nearly all mortgages are the level now that the mortgage holder cannot pay any more and the next series of properties being built will be even more expensive, resulting in a total inability of the householder to fund any increase in their mortgage at all. My question that follows on from that is what action, if any, can be taken to dissuade people, those in the appropriate section, from increasing interest rates?

Dr. Mark Cassidy: All I can say is report what the ECB policy is. The ECB has been given one mandate which is price stability, defined as keeping inflation at 2% over the medium term. The ECB will and has only got that mandate and if it sees risk to that price stability objective then it will act appropriately. That is the one thing on the ECB's mind. That is over the medium term, over the two to three-year horizon. It does not refer to what the inflation rate in the current month is. It is a medium-term objective. That is the mandate given to the ECB. It makes a lot of sense as a mandate because we may not have seen high inflation until this year. We have had an average rate of inflation of 0.5% over the past decade. In recent months, we are now seeing inflation for the first time since 2006 or 2007. It is easy to forget the dangers of high inflation but we are seeing them now. If high inflation were to persist for a number of years, we would see much worse problems. The ECB's actions are taken with the view and objective of keeping inflation contained at 2% and not allow it to get out of control. If central banks do not act, experience clearly shows that inflation rates can get out of control. Prices and wages can develop into this unfavourable dynamic with a spiral between the two, which is very damaging economically and very damaging for households and businesses. The purpose of ECB actions is to prevent inflation getting out of control over the medium term and to prevent the problems we have now becoming embedded in the economy.

Deputy Bernard J. Durkan: What measures have central banks taken to curtail inflation and ensure it does not get out of control? Can the ECB do this or is it left to the individual central banks of EU member states?

Dr. Mark Cassidy: It is the ECB. Ireland is a member of the euro system. We are represented on the governing council of the ECB, which is the sole authority setting monetary policy. We contribute to the formulation of monetary policy. Our governor sits on the board of the ECB and it makes those decisions.

Deputy Bernard J. Durkan: Could there be a conflict of interest between the interests of

individual member states and those of the European Union as a whole?

Dr. Mark Cassidy: Not in this regard. The role of the governor, as a member of the ECB, is to contribute to setting monetary policy for the euro system as a whole and not to take into consideration inflation developments in any specific country. The president of the Deutsche Bundesbank, the president of the Banque de France and every other national central bank are also legally obliged to take into consideration inflation for the euro system as a whole. At present, they are roughly equal. Irish inflation is approximately the same as that in the euro area at present. Sometimes, it can be more in one country than the average or less in another country.

Deputy Bernard J. Durkan: I have a final question, if the Chairperson permits. Is there any mechanism to deal with the issue of price increases that are not forced by increased costs but are simply from those who are jumping onto the bandwagon and increasing prices on the basis that everybody is doing it, which will lead to disaster?

Dr. Mark Cassidy: In fact, that is one of the ways inflation can take hold. When inflation gets very high, the pricing power of firms can increase, and the capacity of firms to pass on higher prices and to increase prices further becomes all the greater. That is one of the reasons it is so important to prevent inflation getting out of hand in the first place because it can lead to that unfavourable dynamic of increased pricing power for firms and inflation getting higher and higher. It is not that the ECB has specific powers to prevent any firms from increasing prices, but by keeping overall inflation at modest levels it reduces the risk of what the Deputy described. In any country, if there are any issues around competition or pricing powers within an individual market, there will be other authorities to deal with it. That is not the role of the Central Bank.

Deputy Patricia Ryan: I also apologise. I am running in and out to other meetings so apologies for that. I thank Dr. Cassidy and Dr. O'Brien. In his opening statement, Dr. Cassidy mentioned that rural households are more expensive to run. How concerned is he about this and the borrowing aspect to sustain that cost? I am also concerned that many people where I live in rural Ireland are quite elderly and there is a lot of fuel poverty and food poverty in the area. How can we sustain costs in those areas?

Dr. Mark Cassidy: The Deputy is correct that our analysis shows our rural communities, older people and lower income groups are more affected. In that regard, without giving any opinion on any particular policy, which is the role of elected representatives rather than us, policies will be more effective when they are targeted at those who are most affected. Policies targeted at lower income groups, such as fuel allowance, and at the consumption of petrol, diesel or electricity, such as rebates and reductions on excise duties, are examples of targeted measures because they get directly to the problem. I agree with the Deputy on that.

Deputy Patricia Ryan: The other matter I was worried about, and I apologise if this question has been asked, is the Central Bank identifying housing and climate action as areas requiring significant public investment. Does it believe the current plans are sufficient in that regard? Does it believe the economy currently has the capacity to absorb those levels of investment?

Dr. Mark Cassidy: That is a very important issue. We have a very ambitious, appropriately so, national development plan, targeted at housing, climate action and other things, as the Deputy mentioned. Recent developments make it more challenging. In particular, we are seeing higher building costs and higher costs in construction, partly because of the effects of the Covid pandemic in respect of supply chain disruptions and partly because of how the energy

crisis is feeding in to that. If the costs of delivering on the national development plan for the next decade increase, then it becomes more difficult. That is one thing.

The second issue is that some parts of that plan, though not all, will require quite significant additional labour over the lifespan of the plan, including building houses and retrofitting. Some of that labour will need to be sourced from abroad so there is always some risk as to whether the economy can attract the necessary labour over the duration of the plan. At present, we do not anticipate or forecast any deviation but if the economy gets closer to capacity, there are then risks in respect of costs and availability of labour, which are things that need to be monitored over the duration.

Deputy Patricia Ryan: Are there specific parts of that plan that are more fundable? What does Dr. Cassidy believe they might be?

Dr. Mark Cassidy: If the two vulnerabilities at present are higher building costs, such as the cost of materials, and the availability of labour, then those parts of the plan that are most sensitive to those issues will be affected. Housing is particularly important for this country. There is a clear housing deficit that is, leaving aside current developments, the most important social and economic challenge. It is an absolute requirement to significantly increase the number of houses we supply. That becomes more difficult because of the very significant increase in the cost of building a house that will materialise due to what we are seeing in global markets.

Deputy Patricia Ryan: Does the Central Bank have any concerns around overheating in the economy?

Dr. Mark Cassidy: Unfortunately, we have less of a concern than we did three months ago, but in our main outlook we still see the economy getting towards full capacity by the end of, say, 2024. The unemployment rate is falling to the mid-4% level. At that stage, the economy is operating close to full capacity. As demand increases, the risk then is there is no capacity to supply more so higher demand just feeds through, not to more output, but into higher prices. I will be clear that we do not see overheating now. We are not forecasting that it will arise but the risk of overheating develops, in essence, the better an economy does. We are forecasting the economy to do well and the risk of overheating increases as a result. We flagged that as the main medium-term risk two or three months ago. Unfortunately, events have overtaken that but it has not gone away.

Deputy Patricia Ryan: I very much appreciate that. I thank Dr. Cassidy for his time.

Chairman: I have some questions. We are at the end of the speaker list but I invite members who want to come back in to indicate, if they are online, by putting their hand up. I see Deputy Boyd Barrett has already done so. I will give people a chance to do that and ask my questions in the meantime.

I am aware that Ireland's exposure to Russia in terms of imports and exports, and Russian lenders and banking, is pretty low. Russia obviously operates in a global context as well. If Russian banks and banking firms default, will that have an impact on inter-bank interest rates? What might that mean? What would the impacts of that be? Is there a significant concern around that and, more broadly, around the impact of a default by the Russian state? I am interested that while Ireland is not particularly exposed, we might intersect with them in certain sectors. For example, I suspect there is lots of Russian investment, and probably lots of Irish investment too, in the London property market. Are there particular sectors like that which the

Central Bank might be aware of? There is that aspect. I will follow up in terms of Ireland's exposure.

Dr. Mark Cassidy: It is a very interesting issue. I would say that we see little risk from these. Certainly, there are few direct links. The channels that we see are, first, energy imports and second, a global overall economic slowdown to which we would be exposed. They are, very clearly, for us the two main effects.

On the possibility of default by the Russian banks, I rely little bit more the European Central Bank analysis for this because they have a greater insight into the European banking system. The Irish retail banks, the ones that matter for the stability of our financial system, have negligible exposures to Russia, Ukraine, or anything affected by that. In Europe there are some banks that are more exposed than others. There are some individual banks that could find the situation problematic because of their exposures but in terms of the overall banking system, they are not a significant enough part to cause concern for the financial stability overall. I would say the same for Ireland.

The London property market is an interesting example. I would say that there are localised sectoral concerns like that. In terms of the impact on Ireland, or those issues affecting the economy, those risks would be lower than the ones that I mentioned earlier. The financial links with Russia through special purpose vehicles do not have direct implications because there is no interlinkage with the domestic Irish economy.

Chairman: To follow up on that, I have been reading through ESRI's spring statement and their publication. One of the things they pick out is Ireland's vulnerability in respect of aircraft leasing. We manage in the region of €100 billion in assets. While they have not yet done so, there has been a lot of discussion about the possibility of Russia seizing aircraft. This might have a larger impact on the industry here. This might impact the Irish national accounts through investment flows and imports. What are Dr. Cassidy's thoughts on that?

Dr. Mark Cassidy: Yes. It is a good example of what we were getting at previously, which is some sectors being affected. Undoubtedly, Ireland has a large part of that leasing business, with around 60% of the world's leased aircraft being managed from Ireland. I believe that 18 of the world's top 20 companies are managed from Ireland. This is having an effect. I do not have to hand the value of the transactions that might be affected. As to how it affect the Irish economy, individual leasing firms clearly will be affected. Some will be affected more as some are more exposed than others. The Chairman has made a very useful distinction in the question. The national accounts will be affected to an extent. The national accounts are very volatile in Ireland. One reason is that aircraft leasing developments can affect investment and import developments but in fact they do so in a way that has no relevance for the actual Irish economy. This is why we make these distinctions and why, for example, we say that GDP is not particularly relevant. The relevance with these figures is that they can cause distortions to the statistics but they would not cause any increase or effect on incomes and employment within the Irish economy.

Chairman: That brings us to the domestic economy and the influx of Ukrainians into the country. In his opening statement, Dr. Cassidy very helpfully touched on things such as the labour market. What does the Central Bank consider to be some of the challenges? We have gone beyond the 10,000 mark in welcoming Ukrainians to Ireland. We are not really sure what the end number might be. Let us say that it is half of the 1.9% that Ireland would be responsible for, were 10 million Ukrainians to be displaced. Our figure would then be in the region

of 100,000. That is a huge number of people. We have talked a lot today about the supply-side issue and housing. Has the Central Bank started work on that or has it thought much about the impact on the supply side for services, housing and how it might feed into the labour market? This is not something that only Ireland will experience. The EU in general and everybody will be welcoming a huge number of people from Ukraine for who knows how long. Might we see a particular approach from the EU as a group to provide funding or put in place some kind of supports and a financial strategy?

Dr. Mark Cassidy: I will ask Dr. O'Brien to answer that because his team is currently working in advance of the bulletin in two weeks. I am sure he will reflect that while there will be economic implications, our thinking mainly has been on the humanitarian issues around this. There will be economic effects.

Dr. Martin O'Brien: I reiterate that any of the issues in respect of this are unavoidable in the sense that it has to be done.

The impact on the housing market, first and foremost, will be quite significant. Obviously, there will be plans put in place - I am sure - by the Government to try to address the most immediate need of people coming into the country. As was mentioned, over the longer term and the longer that people are expected to be here, this would also feed through into the general housing demand. That would be an issue.

With regard to the labour market impact, one also has to take on board the likely demographic profile of those who are coming. It is going to be those who are most vulnerable, younger children and older people. That will have implications in that the labour market impact might not be as significant as if they were patterns of normal migration. In the context of whether this is going to be a significant issue for Europe overall, undoubtedly "Yes". The sheer scale of the numbers involved means that it is going to be a significant issue. Whether there would be a European level of response is a matter for governments and the European Council to consider. First and foremost, yes, there will be implications. There will also be implications from a public finances perspective. The broad balance, from the conversations so far, is that there would certainly be capacity, given the flexibility around the performance of the public finances to address some of these most immediate humanitarian challenges. The labour market impact pales into insignificance given the immediate humanitarian concerns.

Chairman: Yes. I am sorry, I should be clear that I agree that this is inevitable and that we must support people at such a terrible time. To me, however, good financial planning is part of that support.

Deputy Richard Boyd Barrett: On the housing aspect, we all agree that it is an absolute priority to address the housing crisis. What is the Central Bank's view about our ability to do that? Even pre-Ukraine, we were reaching the point where rents are completely unaffordable for most people, house prices are completely unaffordable, and the cost of construction has reached a point where the market at least is not really capable of doing any better than that. It could not actually bring the prices below or to the level where the majority of people could afford them. Now we are seeing another inflation crisis on top of that, which means that the cost of building materials and so on is going up further. Is it not the case that we are absolutely goosed in our ability to do the most basic thing, the thing that the Central Bank representatives have certainly identified, and on which I and most people would concur, as an absolute priority? We are completely goosed in our ability to deliver on this. Even if we did have significant increases in labour from anywhere in the world, as alluded to by the Chairman, it does not really

deal with the bottleneck that we had reached. I have a very definite view of this, which is the unthinkable. We are looking at catastrophic market failure. It is absolute system failure. The market just cannot deliver any more and we must start thinking about the unthinkable, which means nationalising whole sections and effectively doing war economy stuff in order to be able to deliver the most basic things. Arguably, we are reaching similar points with energy and other key services and goods we need to simply sustain our society at all. What we are facing with inflation and all that is simply a market not being able to deliver and we must consider going beyond the market if we are to meet those basic needs and demands. I do not expect the officials to agree with my ideology but do they think we are at an existential kind of crossroads here, in that all the orthodoxies, rules and economic consensus have come up against a brick wall and we must think of radical measures outside the box if we are going to address these basic things?

Dr. Mark Cassidy: I agree with much of what Deputy Boyd Barrett says. I cannot agree with all of it. Let us agree there is a serious issue with the supply of housing. In the Housing for All plan there is such a high share of proposed building of social and affordable housing that it clearly reflects the nature of the problem and the fact there is not the expectation the market itself will produce these houses. Clearly, with such a problem, you need a lot of social and affordable houses to be built in order that we can house our population. There are issues with the building, development, cost and production of housing. It is absolutely nothing to do with labour and the Deputy is right about that. On the arguments for this around the planning and development issue, I am not an expert. So much has been written. Books have been written about it. The nature of the problem lies there. We need to be able to build houses better and smarter. I would not give up on the ability of the market to do that. It needs reforms within the housing sector that will allow the market to do that. That is where you will get the most efficient housing market, which is not to leave aside that there will always be a need for social and affordable housing and for the Government to build houses itself. There will always be a need for that but it needs to be side by side with an efficient, flourishing private market. There also needs to be an emphasis on creating the conditions for that private market. We have seen signs of optimism with housing supply building but in the short term, that might have glossed over some of the structural problems that need to be addressed.

I agree with so many elements of the argument but not with the idea the solution will be to remove the private element of the market. As the Deputy suggested, I would not go towards that.

Chairman: Deputy Boyd Barrett does not look especially shocked. Is he finished his questioning?

Deputy Richard Boyd Barrett: There is one other thing. Dr. Cassidy quoted some statistics there on the distributional impacts of inflation on different deciles of the population or whatever. Was that a document? I was trying to find it on the bank's website.

Dr. Mark Cassidy: It is. Dr. O'Brien has it to hand. I can see him looking at it there. It is on the website.

Dr. Martin O'Brien: It is on the website but we will send it through the secretariat.

Dr. Mark Cassidy: On the website, the Deputy should go to "Publications", then "Economic Letters" and then it should be the top item. It was written by Dr. Reamonn Lydon.

Deputy Richard Boyd Barrett: Okay, but the officials will send it to us as well.

Dr. Mark Cassidy: Absolutely, yes.

Deputy Richard Boyd Barrett: I thank the Chairman.

Deputy Mairéad Farrell: It has been a very interesting conversation. Something that popped up today is the petrodollar. I am sure the officials saw Saudi Arabia is considering selling oil to China in Chinese yuan. That would obviously be a departure from the petrodollar. I saw something in the news today about how Russia is demanding - how it will actually work out is another matter - that Europe pays for gas in roubles. On both of those points, I would be interested in what the officials think these events are telling us about the direction the global economy and the global financial system is going in.

Dr. Mark Cassidy: I thank the Deputy. That is very interesting but very difficult to answer. I think-----

Deputy Mairéad Farrell: I thought Dr. Cassidy would give me the direct answer straight away and we would be able to say that is it and we know what it is now.

Dr. Mark Cassidy: I do not know what it is. Ultimately, what is happening in Russia and Ukraine, that is, both the war and the sanctions, will have long-term economic effects. Traditionally, we have had many things, one of which being energy markets, that have been dollarised or dominated by dollars. We will see changes in global financial markets, energy markets and other markets. I do not know what the extent of those will be. I do not know whether some of those would have happened anyway. I do not know whether some will go to some degree and then come back a bit. It is much too early to tell but it is certain we will see some longer-term effects. There are geopolitical issues there with China-----

Deputy Mairéad Farrell: Of course.

Dr. Mark Cassidy: -----that are far beyond my scope of expertise.

Deputy Mairéad Farrell: Of course. The reasoning behind it is interesting in itself. It will be interesting to see how other countries would want the dollars. The US may even allow Venezuela in. It will be interesting to see. Hypothetically, leaving aside Russia and the situation in Ukraine, what of that whole move away from the dollar? That would be a really interesting development, as I am sure the witnesses will agree. I am not asking the officials to predict the future at all but what impact would that have, hypothetically? It would be such a departure.

Dr. Mark Cassidy: It would. The dollar has been the dominant global currency and so much internationally has been denominated in dollars. Whether things will go so far as to change that I do not know. That is what is uncertain. There will be some change to it but whether or not it will alter the dollar's dominance in international markets I do not know. We are a while away from that of course.

Deputy Mairéad Farrell: That is fair enough. I thank the Chairman.

Chairman: I thank the Deputy. As I do not see anybody else indicating, I might finish on a question I forgot during my original round. It is linked to the issue of inflation for SMEs in Ireland. I am thinking especially of micro-sized businesses. It may be in the region of 90%. A very high number-----

Dr. Mark Cassidy: It is really high.

Chairman: -----of SMEs are microbusinesses. Traditionally, they are very slow to access credit in Ireland. It is under 20%. Is it fair to say it is a very small amount? One report I saw said in a six-month period, only 11% of microbusinesses sought credit. Is that something that is on the bank's radar? I am aware we are undertaking a banking review and that is all being looked at but in this very uncertain period of high inflation, all sorts of businesses, especially retailers, are under pressure. Is that continuing reluctance to access credit - quite low levels or small amounts of it - a concern with respect to holding onto our SMEs?

Dr. Mark Cassidy: The key is diagnosing why they are not accessing the credit and that is unclear. There are a couple of reasons. We have seen a significant trend increase in non-bank lending to SMEs. There is nothing wrong with that.

Chairman: Does Dr. Cassidy mean credit unions?

Dr. Mark Cassidy: Not necessarily credit unions. I mean outside the traditional financial intermediaries.

Chairman: Okay.

Dr. Mark Cassidy: That is just accessing it in a different way. We also know it is not always credit. Sometimes for the very smallest businesses, especially those with a degree of an entrepreneurial element to them, there may be venture capital or other types of non-traditional approaches. It may not even be lending but taking a share in the business. Often that is the case for a riskier start-up firm or one where there is not the same collateral, as such, for a bank to lend against. While some firms have struggled, many firms globally have built up a lot of their own buffers, finances and own deposits. There is much evidence on that in Ireland and globally. The world has been awash with liquidity, while there are no interest rates to be earned by one investing one's money elsewhere. There are different ways, which are not bad, by which firms have been able to get credit. The concern would be if there was an issue with firms going to banks seeking credit and the credit not being available. If there was a supply issue we would be more concerned about that.

Chairman: Currently one in five is refused credit. That is not considered a particularly high rate, or it is?

Dr. Martin O'Brien: I do not think much of the evidence from colleagues in the bank and from various surveys the Department of Finance would have done would point to a problem with credit supply. The point the Chairman raised about demand is certainly an issue and it is quite stark. It has been quite persistent for a number of years for various reasons. Certainly on the microside, if businesses have been operating for a long time, there is a memory of what happened previously that could also influence behaviour. There is the cash buffer Dr. Cassidy mentioned but there has also been, to a certain extent as we have seen particularly during the past two years, the success of the support schemes that have been put in place, which have basically masked some of the need potentially for accessing liquidity through other means but that will be an issue, as was alluded to earlier, when those support schemes come to be wound down. Hopefully, the broad thrust of economic growth will ensure firms will be taken on and they will not need the supports but they will still need, as some evidence from colleagues who have done research on this in this bank would show, liquidity support in some way, shape or form, whether it would be come through State backed schemes such as through the Strategic Banking Corporation of Ireland, other schemes or through the private market unaided. There is definitely a need for that.

Chairman: I take the point that Covid has somewhat obscured what is really happening. From the perspective of a non-economist, when we see this level of inflation, would Dr. O'Brien typically expect to see SMEs under stress?

Dr. Martin O'Brien: Again, it depends on each individual business. Each individual sector will have different exposures, particularly to energy costs. They will also have different operating models and needs for reaching certain profitability margins, etc., to keep going. We would expect the capacity of firms to operate when their costs have been increasing would be challenging. Some firms operate in sectors where they can more easily pass on those costs to their customers while others are not in that position. We would expect there to be a little bit of an impact and it could be quite different across the different sectors.

Chairman: Is the Central Bank actively monitoring that?

Dr. Martin O'Brien: The would come under part of the general analysis of the work we are doing. Colleagues would be examining SME distress and financing. It would certainly be part of a big body of work this year.

Chairman: I thank Dr. O'Brien for that. As I do not see any other hands raised, either digitally or in person, it remains for me to thank the witnesses very much for their presence this evening and for what has been a very useful and thought provoking session. I thank Dr. Mark Cassidy and Dr. Martin O'Brien for their assistance to the committee today.

It is proposed to meet in private session at 5 p.m. on Wednesday, 30 March. Unless anybody speaks up, I will assume that is agreed. Agreed.

The select committee adjourned at 7.34 p.m. *sine die*.