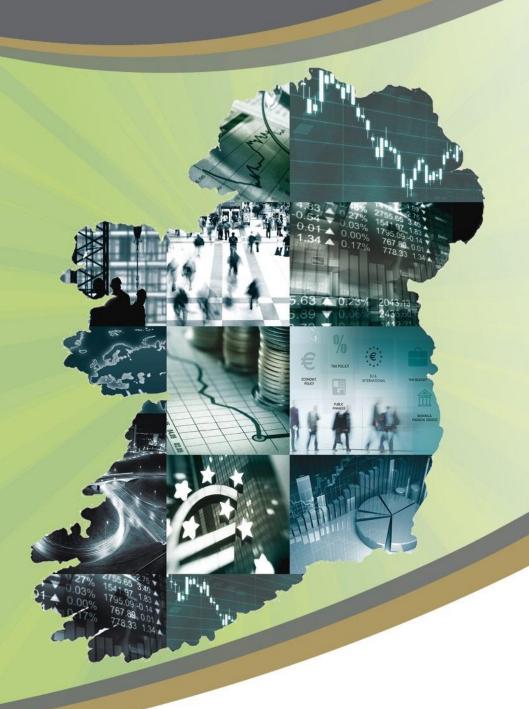


STABILITY PROGRAMME UPDATE

Incorporating the Department of Finance's Spring Forecasts

APRIL 2016





Ireland's Stability Programme April 2016 Update

Incorporating the Department of Finance's Spring Forecasts

Foreword

This Update of Ireland's Stability Programme takes account of Budget 2016 and other Government initiatives. It is Ireland's national medium-term fiscal plan and includes an update of the economic and fiscal outlook. This document was submitted to the European Commission on 29 April 2016 in accordance with the requirements of the European Semester.

It was debated in Dáil Éireann on 27 April prior to submission.

The economic and fiscal forecasts set out in this document are prepared on a technical, nopolicy change basis.

The document incorporates horizontal guidance provided by the European Council to Member States in December 2015 and March 2016 as part of the discussions on the Annual Growth Survey. It has been prepared in line with the September 2012 guidelines on the format and content of Stability and Convergence Programmes.

This document should be read in conjunction with the 2016 Update of Ireland's National Reform Programme (NRP), which outlines progress to date in achieving Ireland's national targets within the context of the *Europe 2020* Strategy.

The analysis and forecasts contained in this document are based on data available to mid-April 2016. The macroeconomic forecasts contained herein were endorsed by the Irish Fiscal Advisory Council on 20 April 2016.

Contents

Foreword List of Tab	oles and Figures	Page i ii
1.	Overview and General Policy Strategy	1
1.1.	Policy Strategy	1
1.2.	Economic and Budgetary Outlook	1
2.	Economic Outlook	4
2.1.	Summary	4
2.2.	Macroeconomic Outturn 2015	4
2.3.	Macroeconomic Projections 2016	5
2.4.	The Labour Market	9
2.5.	Price Developments	9
2.6.	Medium-Term Growth Prospects 2017 to 2021	10
2.7.	Comparison of Short-term Forecasts	11
2.8.	Comparison with Last Year's Update	11
3.	Fiscal Outlook	13
3.1.	Fiscal Outturn 2015	13
3.2.	Fiscal Outlook 2016	13
3.3.	Fiscal Outlook 2017 to 2021	16
3.4.	Debt Developments	19
3.5.	Structural Budget Balance and Medium Term Budgetary Objective	23
4.	Risk and Sensitivity Analysis	25
4.1.	Summary	25
4.2.	Risks to the Economic Forecasts	25
4.3.	Risks to the Fiscal Forecasts	27
5.	Quality of the Public Finances	31
5.1.	Summary	31
5.2.	Quality of the Public Finances	31
6.	Long-Term Sustainability of the Public Finances	33
6.1.	Summary	33
6.2.	Background	33
6.3.	Long-Term Budgetary Prospects	34
6.4.	Policy Strategy	36
6.5.	Conclusion	37
Annex 1	Supplementary data	38
Annex 2	Ireland's National Reform Programme – Summary of Progress	46
Annex 3	Irish Fiscal Advisory Council's endorsement letter	47

	Tables, Figures and Boxes	Page
Tables		
Table 1	Summary table – main economic and fiscal variables	2
Table 2	External assumptions	5
Table 3	Macroeconomic prospects	7
Table 4	External balance	7
Table 5	Labour market developments	9
Table 6	Price developments	10
Table 7	Range of forecasts	11
Table 8	Comparison with previous Stability Programme Update	12
Table 9	Analysis of taxation receipts – cumulative performance to end-March against profile	14
Table 10	Analysis of taxation receipts – cumulative year-on-year performance	14
Table 11	Budgetary outturn 2015 and projections 2016-2021	17
Table 12	General government debt developments 2015-2021	19
Table 13	General government debt and net general government debt 2015 and 2016	21
Table 14	Irish Sovereign Credit Ratings	21
Table 15	Cyclical developments	23
Table 16	Risk Assessment Matrix (key macro-economic risks)	26
Table 17	Sensitivity analysis	27
Table 18	Contingent liabilities	29
Table 19	Long-term spending projections	35
Table A1	Explanation of net differences between the Exchequer borrowing requirement and general government balance, 2015-2021	38
Table A2.1	General government budgetary forecasts 2015-2021	39
Table A2.2	General government budgetary forecasts 2015-2021	41
Table A2.3	Comparison of vintages of Receipts and Expenditures	42
Table A3	General government interest expenditure 2015-2021	43
Table A4	Projected movement in general government debt 2015-2021	43
Table A5	Breakdown of revenue	43
Table A6	Expenditure developments	44
Table A7	Budgetary plans	44
Table A8	Macroeconomic assumptions	45
Figures	Facus and a transfer	0
Figure 1	Economic trends	8
Figure 2	Fiscal trends	18
Figure 3	Composition of general government debt at end-2015	20
Figure 4	Maturity profile of long-term marketable and official debt as at end-March 2016	22
Figure 5	Fan chart of real GDP	25
Figure 6	Sensitivity analysis: Public pension expenditure as a share of GDP	36
Boxes		
Box 1	Alternative measure of potential output	24

Chapter 1 Overview and General Policy Strategy

1.1 Policy Strategy

The underlying general government deficit was 1.3 per cent of GDP last year. However, a once-off banking-related transaction has been unexpectedly classified as a capital transfer, resulting in a headline deficit of 2.3 per cent of GDP for 2015.

Both measures – the headline and the underlying figure – are well below the 3 per cent of GDP Treaty reference value. Accordingly, the excessive deficit procedure, to which Ireland has been subject since 2009, should be formally closed this summer. While the formal abrogation of the procedure will be undertaken as part of the European Semester, the public finances in Ireland have been subject to the requirements of the preventive arm of the Stability and Growth Pact (the 'Pact') since the beginning of this year.

The cornerstone of the preventive arm is the achievement of the so-called Medium Term Budgetary Objective (MTO). The Government is defining Ireland's MTO as a structural deficit of 0.5 per cent of GDP.¹ Budgetary policy over the coming years will be framed in the context of making sufficient progress towards the MTO, which on the basis of current technical estimates is expected to be achieved in 2018. This strategy, on the basis of reasonable forecasts for nominal economic growth, would be sufficient to ensure compliance with the debt reduction requirements of the Pact.

1.2 Economic and Budgetary Outlook

The Irish economy is projected to grow by 4.9 per cent this year, an upward revision of just over half of a percentage point relative to the forecast that underpinned the October Budget. Achieving this pace of economic expansion would mark the third successive year of very strong growth for the Irish economy. For next year, the central scenario is for a growth rate of 3.9 per cent.

While the central scenario for economic activity in Ireland over the next eighteen months or so is a reasonably benign one, internationally the level of uncertainty is higher than at any stage since the height of the financial crisis. A more disruptive international economic environment could generate significant headwinds for the Irish economy, highlighting the importance of prudent fiscal management and competitiveness-oriented policies that would help the Irish economy to weather any global economic storm that may emerge.

There are numerous sources of uncertainty at present. There is, in particular, heightened uncertainty regarding near-term prospects for many Emerging Market Economies (EMEs), including China. The share of world GDP accounted for by EMEs has risen significantly in

¹ While this represents a change in policy, a future Minister for Finance can choose to over-achieve the MTO.

recent years,² and any sharper-than-assumed slowdown in these regions could pose a significant headwind for the global economy. The widespread deterioration in financial market conditions that occurred in the early months of the year reflects, in the main, concerns that spill-overs from economic adjustment in some large EMEs could push the global economy towards recession. While it is not the central scenario, it is crucial from an Irish perspective to be cognisant of the risks posed by a sharper-than-assumed global slowdown.

The forthcoming referendum in the UK regarding its continued membership of the European Union is also a source of short-term uncertainty, and appears to be at least partly behind the depreciation of sterling vis-à-vis the euro since the beginning of the year. As has been documented,³ the Irish economy is potentially more exposed than most in the event of a UK exit.

Table 1: Summary table – main economic and fiscal variables

% change (unless stated)	2015	2016	2017	2018	2019	2020	2021
Economic Activity							
Real GDP	7.8	4.9	3.9	3.9	3.3	3.1	2.9
Real GNP	5.7	4.1	3.7	3.7	2.8	2.6	2.4
Prices							
HICP	0.0	0.4	1.7	1.9	1.9	1.9	1.9
GDP deflator	5.3	2.6	1.2	1.3	1.3	1.3	1.3
Labour Market							
Total Employment ('000)^	1,965	2,015	2,060	2,105	2,140	2,175	2,205
Employment	2.6	2.6	2.3	2.3	1.7	1.6	1.4
Unemployment (per cent)	9.5	8.4	7.8	7.0	6.6	6.3	6.0
Public Finances (per cent of GDP)							
General government balance	-2.3	-1.1	-0.4	0.4	1.2	2.0	2.8
Structural balance	-2.4	-2.0	-0.8	0.1	1.0	2.0	2.8
Debt ratio (year-end)	93.8	88.2	85.5	81.3	77.7	73.3	68.9
Net debt position (year-end)*	79.8	75.7					

^{*} Net debt position is for 2015 and 2016 only.

Source: 2015 - CSO; 2016 to 2021 - Department of Finance

Turning to the public finances, tax receipts – in aggregate terms – have evolved broadly in line with expectations in the first quarter of the year. On this basis, tax receipts for the year as a whole are forecast to amount to just over €47 billion, a projection that is unchanged from

² IMF data put the share of EMEs at 58 per cent of world GDP at PPP currently, compared with a figure of 43 per cent as recently as 2000.

[^] nearest 5,000.

³ See, for instance, the ESRI report "Scoping the possible economic implications of Brexit on Ireland" November 2015 (commissioned by the Department of Finance).

Budget 2016. With regard to non-voted expenditure, higher EU Budget contributions will be offset by debt service savings as well as higher-than-forecast increases in non-taxation revenue. With voted expenditure moving in line with expectations as set out in the Revised Estimates Volume (REV), a headline deficit of 1.1 per cent of GDP is now projected for this year, a 0.1 percentage point improvement relative to expectations at the time of the Budget.

As outlined above, the tax revenue and voted expenditure projections for this year are currently unchanged relative to those that underpinned Budget 2016. While the Department of Public Expenditure and Reform will do everything possible to maintain expenditure within existing allocations, it is likely that over the course of the year, voted spending pressures amounting to c. ¼ per cent of GDP could materialise; at the same time, there is potential upside to the revenue projections. It is envisaged that this can be accommodated within the fiscal rules.

The public debt-to-GDP ratio peaked at just over 120 per cent in 2012 before declining to 93.8 per cent of GDP last year. A further decline – to around 88 per cent – is projected for this year. Net public indebtedness – that is after allowing for the fact that the Government (through the NTMA) has accumulated significant liquid and semi-liquid assets – is considerably lower, at around 80 per cent of GDP at the end of last year.

Chapter 2 Economic Outlook

2.1 Summary

First estimates show that the Irish economy grew by 7.8 per cent in 2015, the strongest pace of growth since 2000. Another year of robust growth is expected this year, with GDP projected to increase by 4.9 per cent, an upward revision of just over half a percentage point relative to the Budget. Domestic demand is projected to make a strong contribution once again, which should yield further dividends in the labour market, where employment growth of 2.6 per cent is expected and where the unemployment rate is likely to fall further to an average of around 8.4 per cent. On the nominal side, a continuation of the recent trend of low consumer price inflation is expected this year, in part due to the drag from lower oil prices.

2.2 Macroeconomic Outturn 2015

First estimates of full-year economic activity for 2015 were published by the Central Statistics Office (CSO) in mid-March. These show a GDP growth rate of 7.8 per cent for the year as a whole, with a year-on-year growth rate of 9.2 per cent recorded in the fourth quarter, providing positive momentum into this year.

The composition of GDP growth last year was heavily weighted towards domestic demand, with a contribution of over 7 per cent. This reflects, in part, the on-shoring of intellectual property assets – treated as investment in R&D – by some multinationals; while this boosted domestic demand the impact on aggregate activity was much less significant given that these assets were imported. For the future, the on-shoring of these assets in Ireland should, *ceteris paribus*, contribute positively to net export growth (*inter alia* due to lower royalty payments abroad). Elsewhere investment spending was robust last year, with growth in most of the sub-components of capital formation.

Based on positive developments in the labour market, low inflation and rising consumer confidence, personal consumer expenditure grew by 3.5 per cent last year, the highest rate of growth since 2007.

Export performance was very strong once again last year, with overall growth of nearly 14 per cent recorded. Merchandise exports grew by 17 per cent, driven mainly by the pharma-chem sector, though high single-digit growth was evident in some of the more labour-intensive indigenous sectors. Services exports grew by a very strong 10 per cent, with exports of aircraft leasing and ICT services posting notable growth rates.

Imports grew at a rate of just over 16 per cent last year, driven in large part on the services side by purchases of intellectual property assets from abroad. Even allowing for this, strong import growth would have been expected at this stage of the economic cycle, given the high import content of final demand in Ireland.

2.3 Macroeconomic Projections 2016

The international economic situation remains fragile, with risks firmly tilted to the downside. Several large EMEs are in the midst of deep recessions (partly triggered by commodity price shocks) while the pace of growth is slowing in others. Advanced economies – with whom Ireland conducts the bulk of its trade – are faring somewhat better, although international organisations (IMF, OECD, European Commission) are generally revising downwards their short-term forecasts for advanced economies also. The Department's near-term forecasts are based on the European Commission's latest economic forecasts, which are set out in the table below.

Table 2: External assumptions

% change (unless stated)	2015	2016	2017	2018	2019	2020	2021
External GDP growth							
United States	2.4	2.3	2.2	2.2	2.1	2.0	2.0
Euro area	1.6	1.7	1.9	1.6	1.6	1.6	1.6
United Kingdom	2.3	2.1	2.1	2.2	2.1	2.1	2.1
Technical assumptions							
Euro-sterling exchange rate (€1=)	0.73	0.77	0.78	0.78	0.78	0.78	0.78
Euro-dollar exchange rate (€1=)	1.11	1.09	1.09	1.09	1.09	1.09	1.09
Brent crude (dollars per barrel)	53	39	45	45	47	47	47

Sources: Eurostat; European Commission forecasts for 2016-2017. Projections from 2018 to 2021 are taken from the IMF World Economic Outlook (April 2016).

Note 1: Oil prices (futures) in 2016 and 2017 are taken from the Commission's latest forecasts. Oil prices in 2018 are calculated on the basis of futures as of mid-March 2016 and remain unchanged thereafter.

Note 2: Exchange rates in 2016 and 2017 are taken from the Commission's latest forecasts and remain unchanged thereafter.

Data published since the Budget relating to the exporting sectors have been mixed. Growth forecasts for key export markets have, in general, been revised downwards somewhat while the euro has appreciated by around 8 per cent against sterling since the beginning of this year, implying more difficult trading conditions for the indigenous sector in particular. By contrast, high frequency data for the opening months of the year (e.g. purchasing managers indexes, monthly trade and production statistics) point to relatively good export growth. This is partly attributable to the sectoral composition of Irish exports – in recent years Ireland has benefited from the high share of exports accounted for by pharmaceuticals and ICT services, sectors that have recorded an increased share in global trade. This has helped to drive Ireland's export performance in excess of the growth in import demand of key trading partners. While sector-specific developments are difficult to project, taking all factors into account an export growth rate of 8 per cent for this year seems reasonable.

Investment spending looks set to put in a strong performance once again this year. Strong demand for both new residential and commercial property should support continued growth in building and construction investment, although supply-side constraints will restrain the pace of growth. The ongoing recovery in domestic demand should support further investment in (core) machinery and equipment. Investment in intangible assets and some other components is extremely volatile but does not materially impact on aggregate demand

in the short-term due to the high import content of such spending. In these circumstances, an overall increase in investment spending of 13.5 per cent is projected for this year.

The rate of growth in personal consumer expenditure is forecast to accelerate this year, with a growth rate of 3.9 per cent expected. Consumption growth will be supported by the ongoing recovery in the labour market – with both employment and pay increases assumed – the low rate of consumer price inflation, the targeted reduction in the labour tax burden in Budget 2016 and an assumed modest fall in the household savings ratio. High frequency data support this view. Core retail sales, for instance, were up almost 7 per cent year-on-year in January and February, while new car licences were up by 30 per cent in the first quarter. Another relevant indicator, consumer sentiment, reached a 15-year high in the early part of this year.

Imports of goods and services are expected to grow by 9 per cent this year, in line with the projection for final demand. Consistent with recent outturns, a higher rate of growth is expected on the services side relative to goods imports.

Taking all of these factors into account, GDP growth of 4.9 per cent is expected for this year, a 0.6 percentage point increase relative to the Budget forecast. GNP is projected to increase by 4.1 per cent this year.

A surplus of 4.4 per cent of GDP was recorded on the current account of the balance of payments last year – the largest surplus on record. A current account surplus means that the nation as a whole is reducing its net international liabilities. The surplus last year reflects, in part, an increase in the trade (goods and services) surplus, supported by a significant improvement in the terms-of-trade, the latter mainly due to exchange rate developments. For this year, a current account surplus amounting to 4.5 per cent is expected, with the merchandise trade surplus exceeding the combined deficits in services trade and in primary income flows.

Table 3: Macroeconomic prospects

Table 3. Macroeconom	p							
	2015	2015	2016	2017	2018	2019	2020	2021
			У	ear-on-y	ear per ce	nt change	е	
Real GDP		7.8	4.9	3.9	3.9	3.3	3.1	2.9
Nominal GDP		13.5	7.6	5.2	5.3	4.6	4.4	4.2
Real GNP		5.7	4.1	3.7	3.7	2.8	2.6	2.4
Components of GDP	€m		yea	r-on-year	per cent	change (r	eal)	
Personal consumption	92,381	3.5	3.9	2.7	2.4	2.0	1.8	1.6
Govn. consumption	27,851	-0.8	1.5	1.6	1.3	1.0	1.0	1.0
Investment	47,249	28.2	13.5	7.0	4.8	4.7	3.9	3.8
Stock changes^	2,650	0.4	-0.7	0.0	0.0	0.0	0.0	0.0
Exports	260,593	13.8	8.0	5.5	5.1	4.5	4.3	4.2
Imports	215,830	16.4	9.0	5.8	4.6	4.3	4.0	4.0
Contributions to real GL	OP growth		annu	ial percen	ntage poir	nt contrib	ution	
Domestic demand		7.0	4.9	3.0	2.3	2.1	1.8	1.7
Net exports		0.1	0.7	0.9	1.6	1.2	1.2	1.1
Stock changes		0.4	-0.7	0.0	0.0	0.0	0.0	0.0
Statistical discrepancy		0.3	0.0	0.0	0.0	0.0	0.0	0.0
Current prices (nearest	nearest €25m) € millions							
GDP		214,625	230,950	242,975	255,825	267,725	279,575	291,375
GNP		181,025	193,650	203,350	213,575	222,350	231,150	239,800

Source: 2015 - CSO; 2016 to 2021 - Department of Finance. Rounding can affect totals.

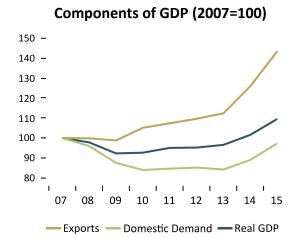
Table 4: External balance

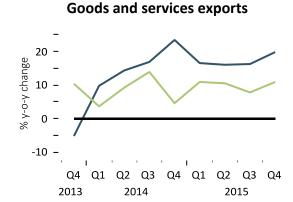
% of GDP	2015	2016	2017	2018	2019	2020	2021
Current account of which:	4.4	4.5	3.9	3.8	3.2	2.7	2.4
- trade balance	20.9	21.7	21.2	21.4	21.4	21.6	21.7
- income balance	16.4	17.1	17.3	17.6	18.2	18.9	19.3

Source: 2015 - CSO; 2016 to 2021 - Department of Finance. All data on a BPM6 basis. Rounding can affect totals.

[^] contribution to GDP growth.

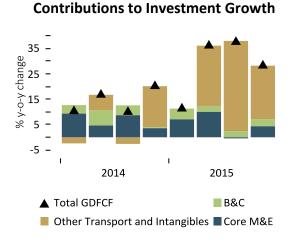
Figure 1: Economic Trends

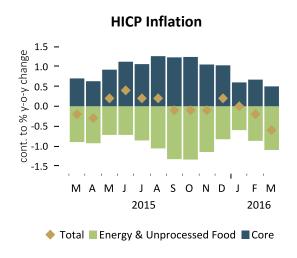


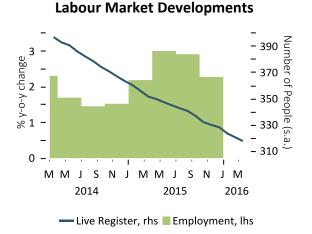


Services — Goods









Source: CSO and Department of Finance calculations

2.4 The Labour Market

Overall, labour market conditions continue to improve, with the latest data indicating that employment has recovered to levels last seen in early 2009. Importantly, employment growth remains broad-based, with gains posted in all of the main sub-sectors reported by the CSO. Growth also remains exclusively driven by an increase in full-time jobs, and is aligned with evidence of a continued reduction in under-employment. Unemployment continues to decline, with monthly data indicating that the unemployment rate fell to 8.6 per cent in March, the lowest since December 2008. The labour force posted annual growth of 0.5 per cent last year.

The short-term outlook for the labour market remains positive. For this year, employment growth of 2.6 per cent is projected. Unemployment is forecast to remain on a downward trajectory, falling to a yearly average of 8.4 per cent this year, and on the basis of the current trajectory is likely to be close to 8 per cent by end-year. In response to strengthened labour market dynamics, labour supply is also expected to increase.

Table 5: Labour market developments

% change (unless stated)	2015	2015	2016	2017	2018	2019	2020	2021
	('000s)			year-or	-year %	change		
Employment	1964	2.6	2.6	2.3	2.3	1.7	1.6	1.4
Unemployment rate (QNHS basis)	204	9.5	8.4	7.8	7.0	6.6	6.3	6.0
Labour productivity^		4.0	1.6	1.4	1.4	1.4	1.4	1.4
Compensation of employees*		4.9	5.2	4.8	4.8	4.4	4.4	4.4
Compensation per employee*		2.2	2.6	2.5	2.5	2.7	2.8	2.9

[^] GDP per hour worked.

Source: 2015 - CSO; 2016 to 2021 - Department of Finance. The wage bill figure for 2015 is a Department of Finance estimate pending 2015 National Income and Expenditure release.

2.5 Price Developments

Consumer price inflation – as measured by the Harmonised Index of Consumer Prices (HICP) – was flat last year. Indeed, low and even negative rates of inflation are increasingly becoming a feature of developed economies, including Ireland, and this is posing challenges. From an Irish perspective, the decline in the price of oil-related consumer products last year, arising from the fall in the wholesale price of oil, offset price increases in other areas, notably for services. Core inflation (i.e. excluding energy and unprocessed food), which gives a better picture of the underlying developments in the economy, averaged 1.2 per cent last year.

While HICP inflation is expected to gradually turn positive in 2016, price pressures will likely remain subdued. Futures prices for oil suggest a continued drag from this source during the year, with the fall in oil prices being a key driver of the decline in headline inflation in the first quarter (when HICP inflation averaged -0.3 per cent and core HICP inflation averaged 0.7 per cent). On the other hand, the continued pick-up in domestic demand and the ongoing recovery in the labour market are expected to lead to further services price inflation. Taking

^{*}Non-agricultural sector.

all these factors into account, HICP inflation is expected to average 0.4 per cent this year, with core inflation projected at 1.0 per cent.

Table 6: Price developments

% change	2015	2016	2017	2018	2019	2020	2021
GDP deflator	5.3	2.6	1.2	1.3	1.3	1.3	1.3
Personal consumption deflator	0.4	0.8	2.0	2.0	2.0	2.0	2.0
Harmonised index of consumer prices (HICP)	0.0	0.4	1.7	1.9	1.9	1.9	1.9
Core HICP inflation	1.2	1.0	1.4	2.0	2.0	2.0	2.0
Export price deflator (goods and services)	6.5	1.5	1.1	1.3	1.3	1.3	1.3
Import price deflator (goods and services)	2.9	0.3	1.6	1.8	1.6	1.6	1.6
Terms of trade (good and services)	3.6	1.2	-0.5	-0.5	-0.4	-0.4	-0.3

Source: 2015 - CSO; 2016 to 2021 - Department of Finance. Rounding can affect totals.

The GDP deflator – which is an implicit measure of the price changes in the economy as a whole – is forecast to increase by 2.6 per cent this year. This would represent a significant moderation relative to last year, when the increase of over 5 per cent was largely driven by the depreciation of the euro-dollar exchange rate.

2.6 Medium-Term Growth Prospects 2017 to 2021

The medium term forecasts assume a potential growth rate averaging around 3.8 per cent per annum over 2017-2021, with a closing of the output gap by 2020. It must be acknowledged that the concept of potential growth is less meaningful in an Irish context than for larger, more closed economies; this is evident from the positive output gap currently estimated for this year, which is inconsistent with, for instance, an unemployment rate that is still relatively high.

The path for potential output, and hence the output gap is slightly different to that set out in Budget 2016. This reflects a greater alignment between the Department's application of the harmonised methodology and that which the Commission will use when assessing compliance with the fiscal rules. In particular, statistical filters are applied up to 2017 only, with mechanical extensions in line with the harmonised methodology applied thereafter.

Over the medium term, personal consumer expenditure is expected to grow roughly a half of a percentage point faster than real household incomes, i.e. the household savings rate is assumed to moderate gradually over the medium term as *inter alia* household balances sheets improve. Investment as a share of GDP is assumed to revert to more 'normal' levels, with a likely increase in the relative share of intangible assets in the capital stock.

Exports are expected to grow in excess of trading partner demand growth reflecting compositional effects, i.e. the concentration of Irish exports in 'high-growth' sectors. Imports are projected to grow in line with weighted final demand. Employment growth averaging around 2 per cent per annum over the 2017-2021 period is envisaged, resulting in implied labour productivity growth of 1.6 per cent. Driven by a resumption in positive inward migration, together with a pick-up in participation rates, aggregate labour supply is expected

to increase over the medium-term horizon. As a result, the unemployment rate is projected to fall steadily towards 6 per cent by 2021.

2.7 Comparison of short-term forecasts

Table 7 below compares the Department's forecasts with those of other public sector institutions, both domestic and international, for the main macro-economic variables.

Table 7: Range of forecasts

2016	annual % change						
2016	GDP	GNP	HICP	Employment			
Department of Finance	4.9	4.1	0.4	2.6			
Central Bank of Ireland	5.1	4.7	0.6	2.3			
IMF	5.0	n.a.	0.9	2.0			
ESRI	4.8	5.0	1.2	2.0			
European Commission	4.5	n.a.	0.6	1.6			
OECD	4.1	n.a.	1.6	n.a.			

2017		annual % change						
2017	GDP	GNP	HICP	Employment				
Department of Finance	3.9	3.7	1.7	2.3				
Central Bank of Ireland	4.2	3.7	1.7	1.8				
IMF	3.6	n.a.	1.4	1.9				
ESRI	4.1	4.3	2.2	1.8				
European Commission	3.5	n.a.	1.4	1.4				
OECD	3.5	n.a.	2.0	n.a.				

Source: Central Bank, Quarterly Bulletin, April 2016; IMF, World Economic Outlook, April 2016; ESRI, Quarterly Economic Commentary, March 2016; European Commission, Winter Forecasts 2016, February 2016; OECD, Economic Outlook, November 2015.

2.8 Comparison with last year's Update

Table 8 compares the headline macroeconomic and fiscal figures with the projections set out in the April 2015 Update of the Stability Programme. As is evident the outturn for GDP growth last year was considerably stronger than originally anticipated and is attributable to the overperformance both of domestic demand and net exports.

Table 8: Comparison with previous Stability Programme Update

	2015	2016	2017	2018	2019	2020	2021
Real GDP growth (per cent)							
- Previous forecast	4.0	3.8	3.2	3.2	3.0	3.0	
- Current update	7.8	4.9	3.9	3.9	3.3	3.1	2.9
- Difference	+3.8	+1.1	+0.7	+0.7	+0.3	+0.1	
Net lending of general governm	nent (per c	ent of GD	P)				
- Previous forecast	-2.3	-1.7	-0.9	-0.1	0.7	1.7	-
- Current update	-2.3	-1.1	-0.4	0.4	1.2	2.0	2.8
- Difference	0.0	+0.6	+0.5	+0.5	+0.5	+0.3	-
General government gross deb	t (per cent	of GDP)					
- Previous forecast	105.0	100.3	97.8	93.6	89.4	84.7	-
- Current update	93.8	88.2	85.5	81.3	77.7	73.3	68.9
- Difference	-11.2	-12.1	-12.3	-12.3	-11.7	-11.4	-

Source: CSO, Department of Finance Note: Totals may not sum due to rounding.

Chapter 3 Fiscal Outlook

3.1 Fiscal Outturn 2015

The headline General Government Deficit for 2015 as reported by the CSO in the March EDP notification was 2.3 per cent of GDP. The higher-than-anticipated headline figure reflects an instruction from *Eurostat* regarding the statistical treatment of an AIB-related share transaction. Excluding this once-off statistical factor, the underlying deficit was 1.3 per cent of GDP. The change to last year's outturn does not impact on the position for this or later years.

Crucially, both the headline and underlying General Government deficits are below the Treaty reference value (3 per cent of GDP). Accordingly, the Excessive Deficit Procedure (EDP) for Ireland is expected to be abrogated this summer within the timeline set by the European Council in December 2010. Even before formal abrogation, Ireland is subject to the requirements of the preventive arm of the Stability and Growth Pact from the beginning of this year.

The final Exchequer tax-take of €45.6 billion last year was 7.8 per cent (€3.3 billion) above the Budget 2015 forecast, with all major heads exceeding their annual target. In year-on-year terms, taxes were up 10.5 per cent (€4.3 billion). Increases were broadly-based, with virtually all heads experiencing solid growth, with corporation tax the stand-out performer, growing by 49 per cent on the preceding year.

Overall, gross voted expenditure of €54.7 billion was 2.7 per cent (€1.4 billion) above the *Revised Estimates Volume (REV) 2015* profile, with the additional spending accommodated through supplementary estimates approved by Dáil Éireann. In annual terms, while this outturn represents a 1.2 per cent (€665 million) increase, it was €245 million below the revised gross estimate. In terms of net voted expenditure, the year-end outturn of €42.9 billion was 2.8 per cent (€1.2 billion) above profile which represented a 1.5 per cent (€639 million) year-on-year increase.

3.2 Fiscal Outlook 2016

Tax forecast

In Budget 2016 last October, total tax revenue for this year was projected at €47.2 billion. In terms of the performance to the end of the first quarter of this year (see tables 9 and 10), tax receipts were ahead of profile by just 1.1 per cent (€119 million). This equates to a year-on-year increase of 6.4 per cent (€667 million). However, due to payment-related timing issues, tax receipts of just over €100 million, primarily VAT and income tax, were delayed until April. After adjusting for this timing factor, cumulative tax receipts are up 2.1 per cent (€227 million) on profile and up 7.4 per cent (€775 million) year-on-year.

Table 9: Analysis of taxation receipts – cumulative performance to end-March against profile

Exchequer Tax Receipts	Outturn €m	Target €m	excess/shortfall €m	excess/shortfall %
Income Tax (including USC)	4,355	4,508	-153	-3.4
VAT	3,895	4,088	-193	-4.7
Corporation Tax	654	349	305	87.3
Excise	1,522	1,408	114	8.1
Stamps	229	261	-32	-12.3
Capital Gains Tax	113	79	34	43.1
Capital Acquisitions Tax	35	28	7	25.0
Customs	69	84	-15	-17.5
Levies	0	0	0	-
Local Property Tax	216	211	5	2.3
Unallocated Tax Deposits	47	0	47	
Total	11,136	11,017	119	1.1

Source: Department of Finance.

Table 10: Analysis of taxation receipts – cumulative year-on-year performance

Exchequer Tax Receipts	end-March 2016	end-March 2015	y-on-y	y-on-y
	€m	€m	€m	%
Income Tax (including USC)	4,355	4,241	114	2.7
VAT	3,895	3,797	98	2.6
Corporation Tax	654	555	99	17.9
Excise	1,522	1,177	344	29.3
Stamps	229	236	-7	-3.0
Capital Gains Tax	113	68	46	67.3
Capital Acquisitions Tax	35	30	5	17.2
Customs	69	75	-6	-7.5
Levies	0	0	0	-
Local Property Tax	216	244	-28	-11.5
Unallocated Tax Deposits	47	46	1	2.3
Total	11,136	10,469	667	6.4

Source: Department of Finance.

Looking across the four main tax heads, the strong performance of excise duties and corporation tax is of particular note. The increase in personal consumer expenditure is helping to underpin excise duty growth, up 8.1 per cent (€114 million) against profile or 29.3 per cent (€344 million) year-on-year. While annual increases have been recorded across the majority of excise components, the main factors driving this performance are increased VRT (car sales up c. 30 per cent annually) and a front-loading of tobacco stocking ahead of the introduction of the plain packaging initiative, the impact of which can be expected to "washout" over the course of the year. In relation to corporation tax, receipts of €654 million were recorded to end-March, some 87 per cent (€305 million) more than profiled. This represents a 17.9 per cent (€99 million) annual increase. However, €300 million of the over-performance

can be attributed to a number of large unexpected payments from a small number of companies, which could be repaid over the course of the year. Excluding these, corporation taxes are on profile.

Income tax and VAT were somewhat disappointing in the first quarter. Excluding the payments delayed into April, income tax is down 3.4 per cent (€153 million) against profile, which is attributable across a broad range of income tax components. With regard to VAT, receipts are 4.7 per cent (€193 million) below target. However, in year-on-year terms, both tax heads have performed reasonably well in the first quarter, with income tax up 2.7 per cent (€114 million) and VAT up 2.6 per cent (€98 million).

While the performance in the first three months of the year is generally in line with expectations, a number of risks remain, both specific and more general, to the tax forecast. Notwithstanding these, the positive performance in the first quarter underpins the expectation that the forecast for tax revenue growth in 2016 will be at least achieved and perhaps exceeded.

Non-tax revenue

The projection for non-tax receipts this year has increased by around €0.2 billion relative to the *Budget 2016* estimate, mainly due to an increase in Central Bank surplus income. On the capital resources side, increased ERDF receipts and loan repayments from the Insurance Compensation Fund have been offset by lower cash flow repayments from FEOGA.

Capital resources will also benefit from an expected €1.6 billion from the redemption of contingent convertible capital notes (CoCos) in AIB this year. However, there will be no benefit to the headline balance because, in general government accounting terms, these receipts are considered as financial transactions, i.e. they represent the exchange of an asset for cash, although the receipts will reduce general government debt levels.

Expenditure

The current estimate for 2016 non-voted expenditure has increased slightly from Budget 2016, with provision for an expected increase in EU budget contributions, primarily due to the expected ratification of the Own Resource Decision, being partially offset through reduced debt servicing costs this year.

In terms of voted expenditure, the REV for 2016 sets out the detailed allocations for all Government Departments. Total gross voted expenditure is €55.3 billion, with net voted expenditure projected to be €43.6 billion.

In terms of year-to-date, gross voted expenditure up to the end of March 2016 was 0.1 per cent (€19 million) lower than profiled and down 0.3 per cent (€43 million) year-on-year. Net voted expenditure was 0.2 per cent (€15 million) below profile and 0.7 per cent (€71 million) lower than the same period last year. While the Department of Public Expenditure and Reform will do everything possible to maintain expenditure within existing ceilings, it is nonetheless anticipated that some pressures will emerge later in the year.

Taking all of these developments into account, the general government deficit for 2016 is now projected at 1.1 per cent of GDP, a 0.1 percentage point improvement relative to the projection at the time of the Budget.

3.3 Fiscal Outlook 2017-2021

In terms of the outlook for 2017 the projected headline general government deficit is 0.4 per cent of GDP, which represents a 0.1 per cent of GDP improvement on the projection at Budget time. This arises mainly from a combination of a projected increase in tax revenues and expectations of lower debt service costs. Over the remainder of the forecast period a small general government surplus of 0.4 per cent of GDP will be achieved in 2018, gradually increasing thereafter, underpinned by continuing Exchequer improvements. The post-2016 projections revert to a no-policy change scenario in-line with that set out in Budget 2016.

Tax forecast

While the baseline tax revenue estimate incorporates provision for the indexation of the income tax system at a cost of c. €0.4 billion per annum taxes are expected to continue to grow at an average of about 5 per cent over the 2017 – 2021 forecast horizon, broadly in line with projections for nominal economic growth over this period. In addition, it should be noted that due to year-end timing issues, some 2017 Exchequer tax revenues will be received in 2018. This is due to the impact of the Single European Payments Area (SEPA) and a reduced number of banking days available towards the end of next year. It is estimated this could result in c. €1.0 billion of Exchequer taxes from 2017 falling into 2018. While this cash-flow development impacts upon the Exchequer position, it has no impact on the general government balance as the vast majority of these taxes will be accrued to 2017.

Non-tax revenue

An anticipated increase in Central Bank surplus income will boost non-tax revenues over the 2017-2021 period, benefitting the Exchequer and ultimately feeding through to lower debt levels. However, the statistical treatment of capital gains realised on the sale of floating rate bonds means a significant proportion of these will not benefit the general government balance.

Capital Investment Plan

The capital plan entitled "Building on Recovery: Infrastructure and Capital Investment 2016-2021" announced an exchequer capital spend of €27 billion over six years. Looking specifically at 2017-2021, the total exchequer capital spend amounts to €23.2bn.

The Exchequer component of the Capital Plan, supplemented by the new €500 million phase of the PPP programme, is primarily targeted at addressing priority needs in transport, education, housing and health care. Investments will be made in public transport, including commencement of a metro project in Dublin, new and upgraded schools, Primary and Continuing Care health facilities, and new social housing will be delivered. Investments will also be made to mitigate risks from flooding. There will also be continued large investment in job creation and export rich enterprises such as manufacturing, services, agriculture and tourism.

Expenditure

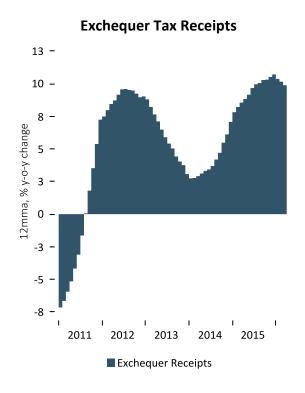
The favourable financial environment means debt servicing cost are expected to decline over the forecast horizon. As this comprises over two thirds of Central Fund expenditure, this should see a decline in non-voted expenditure. However, Ireland's strengthening relative economic growth, which increases Gross National Income, is expected to increase our EU budget contribution, eroding some of these savings. The net impact of these Exchequer-positive developments will contribute to an improving general government position. Voted expenditure forecasts for 2017-2021 are unchanged since Budget 2016.

Table 11: Budgetary outturn 2015 and projections 2016-2021

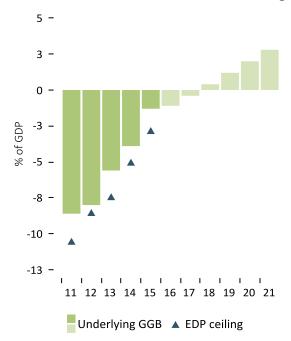
€ million	2015	2016	2017	2018	2019	2020	2021
CURRENT BUDGET							
Expenditure							
Gross Voted Current Expenditure	50,845	51,330	52,195	52,815	53,195	53,630	54,090
Non-Voted (Central Fund) Expenditure	9,775	9,845	9,405	9,485	9,310	9,140	8,545
Gross Current Expenditure	60,620	61,175	61,600	62,300	62,505	62,770	62,635
less Expenditure Receipts and Balances	11,500	11,410	11,410	11,410	11,410	11,410	11,410
Net Current Expenditure	49,120	49,765	50,190	50,890	51,095	51,360	51,225
Receipts							
Tax Revenue	45,600	47,225	48,660	53,345	54,835	57,385	60,110
Non-Tax Revenue	3,515	3,375	2,175	2,075	2,100	2,090	1,985
Net Current Revenue	49,115	50,600	50,835	55,420	56,935	59,475	62,095
CURRENT BUDGET BALANCE	-5	835	650	4,530	5,840	8,115	10,870
CAPITAL BUDGET							
<u>Expenditure</u>							
Gross Voted Capital	3,825	3,965	3,970	4,230	4,600	5,000	5,400
Non-Voted Expenditure	1,645	1,065	1,140	1,140	1,135	1,130	860
Gross Capital Expenditure	5,470	5,035	5,110	5,370	5,735	6,130	6,260
less Capital Receipts	310	275	305	305	305	305	305
Net Capital Expenditure	5,160	4,760	4,810	5,065	5,430	5,825	5,955
Capital Resources	5,105	2,430	910	960	960	945	955
CAPITAL BUDGET BALANCE	-60	-2,330	-3,900	-4,105	-4,470	-4,880	-5,000
EXCHEQUER BALANCE	-60	-1,495	-3,250	425	1,370	3,240	5,865
GENERAL GOVERNMENT BALANCE	-4,935	-2,480	-1,080	915	3,090	5,555	8,125
% of GDP	-2.3%	-1.1%	-0.4%	0.4%	1.2%	2.0%	2.8%

Source: Department of Finance Note: Rounding may affect totals

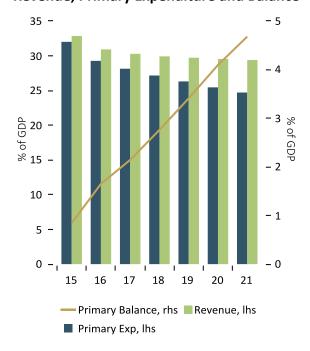
Figure 2: Fiscal trends



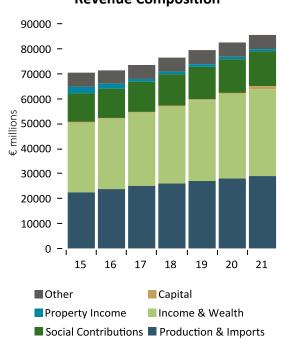
General Government Balance and Ceilings



Revenue, Primary Expenditure and Balance



Revenue Composition



Source: Department of Finance

3.4 Debt Developments

Debt position and outlook

Ireland's year-end general government debt-to-GDP ratio peaked in 2012 at just over 120 per cent. Since then, it has fallen significantly and at end-2015 stood at 93.8 per cent. Strong nominal economic growth and declining public sector deficits have been the main factors behind the sharp fall in the debt ratio.

The end-2015 ratio is three percentage points of GDP lower than projected in *Budget 2016*, due to factors including higher nominal GDP and the cancellation of €1 billion of floating rate bonds post Budget in Quarter 4. In nominal terms there was a reduction of some €2 billion in the debt stock in 2015, from €203 billion to €201 billion. This reflected the repayment of debt from surplus cash generated in large part from banking asset disposals, namely AIB preference shares, PTSB shares and contingent convertible capital notes (CoCos).

Table 12: General government debt developments 2015-2021

9									
	2015	2016	2017	2018	2019	2020	2021		
Gross debt (€billions)	201.3	203.8	207.9	208.0	208.0	205.0	200.6		
% of GDP									
Gross debt	93.8	88.2	85.5	81.3	77.7	73.3	68.9		
Change in gross debt (=1+2+3)	-13.8	-5.5	-2.7	-4.3	-3.6	-4.4	-4.5		
Contribu	itions to ci	hange in g	ross debt	ratio:					
1. General Government Balance	2.3	1.1	0.4	-0.4	-1.2	-2.0	-2.8		
2. Stock-flow adjustment	-3.2	0.0	1.2	0.4	1.1	0.9	1.3		
3. Nominal GDP cont. to Δ in debt ratio	-12.8	-6.6	-4.4	-4.3	-3.6	-3.3	-3.0		
Composition of GGB									
4. General Government Balance	-2.3	-1.1	-0.4	0.4	1.2	2.0	2.8		
5. Interest expenditure	-3.1	-2.7	-2.6	-2.4	-2.2	-2.1	-1.9		
6. Primary balance (= 4 - 5)	0.8	1.6	2.1	2.8	3.4	4.1	4.7		
Composition of stock-flow adjustment									
7. Change in liquid assets	-0.6	-0.1	0.0	0.1	0.1	-0.1	0.3		
8. Interest adjustments	0.0	0.2	0.1	0.1	0.1	0.0	-0.0		
9. Equity transactions	-1.9	-1.1	-0.3	-0.3	-0.3	-0.3	-0.3		
10. Accrual adjustments	0.2	0.2	0.6	-0.2	0.2	0.2	0.2		
11. Impact of NPRF	-0.8	0.1	0.1	0.1	0.1	0.1	0.1		
12. Impact of IBRC	-0.2	-0.0	0.0	0.0	0.0	0.0	0.0		
13. Collateral held	-0.1	0.0	0.0	0.0	0.0	0.0	0.0		
14. Other	0.1	0.6	0.6	0.6	0.9	0.9	0.9		
Memorandum item:									
Average interest rate (per cent)	3.3	3.1	3.1	3.0	2.9	2.8	2.7		

Source: 2015 CSO, 2016-2021 Department of Finance

Looking ahead, the debt ratio is expected to continue on a sharp downward path. Nominal GDP growth is forecast to be above the average interest rate on Government debt again in 2016, while the State will also generate a primary surplus of 1.7 per cent of GDP. As a result,

Government debt is forecast to be €203.8 billion or 88.2 per cent of GDP by end-2016, below the projected euro area average.

Debt composition

Figure 4 shows the compositional breakdown of the stock of debt at end-2015. Some 62 per cent of government debt was in the form of government bonds, with 11 per cent of the total debt relating to the floating rate bonds issued in 2013 to replace the IBRC promissory notes held by the Central Bank of Ireland. The outstanding balance of these bonds declined by €2 billion in 2015, to €22.5 billion at year end.

Programme Assistance,
€51.1 bn

Fixed Rate Treasury and Amortising Bonds, €102.6 bn

Other, €3.2 bn

Short-term Paper,
€2.4 bn

State Savings including POSB deposits, €19.4 bn

Floating rate bonds,

Figure 3: Composition of general government debt at end-2015

Source: Department of Finance, NTMA (National Debt data provider) and CSO. Rounding may affect totals. Note: The "other" category includes consolidation adjustments in respect of debt, including bonds, held by general government entities.

Funding sourced under the EU-IMF Programme – which consists of loans from the IMF; the European Financial Stabilisation Mechanism (EFSM); the European Financial Stability Facility (EFSF); as well as bilateral loans from the UK, Sweden and Denmark – comprised a further 25 per cent of the stock of government debt at end-2015, down from 30 per cent at end-2014. This reduction reflects the completion of the early repayment of the majority of the IMF loan facility in the first quarter of last year, a process which commenced in December 2014. State savings, short term paper and other debt make up the remainder.

Gross debt and net debt

General government debt, as defined under the Excessive Deficit Procedure (EDP) regulation, is a gross measure of government liabilities. Net general government debt (obtained by deducting the value of the financial assets corresponding to the categories of financial

€22.5 bn

liabilities which comprise gross debt) is reported in table 13. The assets deducted include: Exchequer cash and other assets, Ireland Strategic investment Fund (ISIF) cash and non-equity investments, IBRC cash and loan assets and other cash and assets held by central government. Net debt is currently forecast to decrease at a broadly similar rate to gross debt over the forecast horizon.

Table 13: General government debt and net general government debt 2015 and 2016

% of GDP, end-year	2015	2016
General government debt	93.8	88.2
EDP debt instrument assets	13.9	12.5
Net debt position	79.8	75.7

Source: Department of Finance, NTMA (National Debt data provider) and CSO

Credit ratings

Ireland has investment grade status with all of the main credit rating agencies. Further positive developments in the Irish economy and improving debt dynamics led to credit rating upgrades during 2015 and to date in 2016. Following an upgrade in Ireland's credit rating to A+ in June 2015 by Standard and Poor's (S&P), there was a one-notch upgrade by Fitch to A in February 2016. The current ratings with the three main rating agencies are outlined in table 14 below.

Table 14: Irish Sovereign Credit Ratings*

Rating Agency	Long-term rating	Short-term rating	Outlook
Standard & Poor's	A+	A-1	Stable
Moody's	Baa1	P-2	Positive
Fitch Ratings	Α	F1	Stable

^{*}As at mid-April 2016

Funding Developments

The NTMA issued €13 billion⁴ of bonds in 2015 at a weighted average yield of 1.51 per cent and with a weighted average maturity of just under 18 years. The NTMA raised €8 billion from two bond syndications, issuing new 7 and 30-year bonds – the first 30-year euro benchmark bond for Ireland – as part of that process. The NTMA also held six bond auctions during the year, raising a total of €5 billion. These transactions helped to improve debt sustainability, locking in low interest rates and longer maturities.

A part of the proceeds of this funding were used to repay approximately €9 billion of borrowings from the IMF in the first quarter of 2015, thereby completing the early repayment process which began in December 2014. In total, just over €18 billion or 81 per cent of the original €22.5 billion IMF loan facility was repaid early, delivering significant interest savings.

⁴ Excludes funds raised from non-competitive auctions.

The NTMA held cash and other liquid assets of just under €11 billion at end-2015. Turning to 2016, the NTMA announced in December 2015 that it planned to issue €6 - €10 billion of Government bonds this year as a means of pre-funding for Exchequer requirements and maturing debt in 2017. €4.75 billion has been raised to date – through the issue of a new 10-year benchmark bond – at a weighted average yield of 1.07 per cent. The NTMA has also raised some ultra-long-term debt, issuing a €100 million 100-year note at a yield of 2.35 per cent in March.

Yields generally remain close to historically low levels, reflecting Ireland's continuing economic and fiscal improvements but also ongoing ECB bond purchasing under its Quantitative Easing (QE) programme.

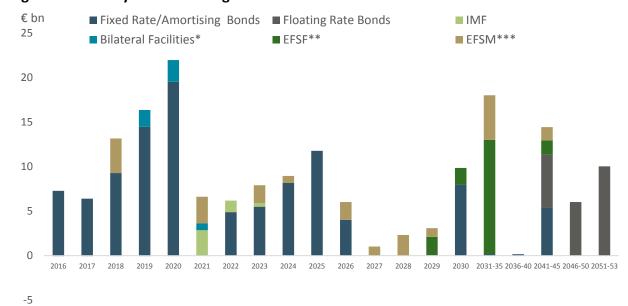


Figure 4: Maturity Profile of Long-Term Marketable and Official Debt at end-March 2016

Figures reflect the effect of currency hedging transactions, where applicable.

The NTMA is currently targeting year-end cash and liquid asset balances of circa €10 billion, consistent with funding the 2017 EBR of €3.25 billion and the maturing of the October 2017 bond of €6.4 billion.

Looking further ahead out over the forecast horizon, the Exchequer is forecast to move into surplus from 2018 onwards; however there are significant bond redemptions to fund, particularly in 2019 and 2020 when four separate Treasury Bonds mature. The current outstanding balance on these four bonds is €34 billion.

Figure 4 shows the maturity profile of Ireland's long-term marketable and official debt – that is Government bonds and EU/IMF Programme loans – as at end-March 2016.

^{*}Bilateral loans were provided by the United Kingdom, Sweden and Denmark.

^{**}EFSF loans reflect the maturity extensions agreed in June 2013.

^{***}EFSM loans are also subject to a seven year extension. It is not expected that Ireland will have to refinance any of its EFSM loans before 2027. However the revised maturity dates of individual EFSM loans will only be determined as they approach their original maturity dates. The graph reflects both original and revised maturity dates of individual EFSM loans.

3.5 Structural Budget Balance and Medium Term Budgetary Objective (MTO)

Ireland's Medium Term Budgetary Objective (MTO) is to achieve a structural deficit of -0.5 per cent of GDP. The public finances in Ireland are on the adjustment path towards the MTO; the current trajectory sees the MTO achieved in 2018. These calculations are highly sensitive and will change on foot of the actual figures for actual GDP growth, the actual deficit and decisions on how any fiscal space is allocated. As has been highlighted previously, estimates of the business cycle generated using the commonly agreed methodology are not always suitable in an Irish context, given *inter alia* the openness of the labour market.

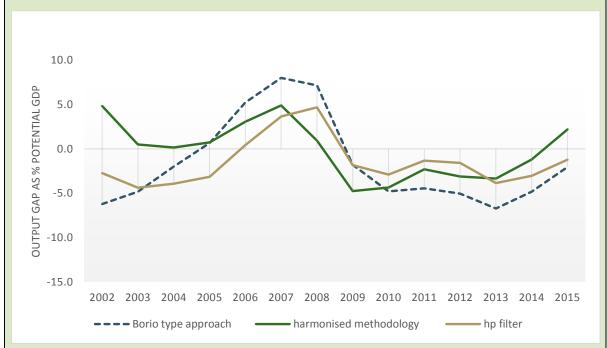
Table 15: Cyclical developments

% of GDP (unless stated)	2015	2016	2017	2018	2019	2020	2021
1. Real GDP growth	7.8	4.9	3.9	3.9	3.3	3.1	2.9
2. General government balance	-2.3	-1.1	-0.4	0.4	1.2	2.0	2.8
3. Interest expenditure	3.1	2.7	2.6	2.4	2.2	2.1	1.9
4. One-off / temporary measures	-0.8	0.0	0.0	0.0	0.0	0.0	0.0
5. Potential GDP growth (%)	4.4	5.0	5.0	4.2	3.5	3.3	2.8
Contributions to potential growth							
- labour	1.3	1.6	1.6	1.1	0.6	0.4	-0.1
- capital	1.3	1.7	1.8	1.4	1.2	1.1	1.4
 total factor productivity 	1.7	1.6	1.6	1.6	1.7	1.7	1.7
6. Output Gap	1.7	1.7	0.7	0.4	0.2	0.0	0.0
7. Cyclical budgetary component	0.9	0.9	0.4	0.2	0.1	0.0	0.0
8. Structural budget balance [2-4-7]	-2.4	-2.0	-0.8	0.1	1.0	2.0	2.8
9. Structural primary balance [2+3-4-7]	0.7	0.7	1.8	2.5	3.3	4.1	4.7

Source: Department of Finance. Estimates of output gap based on harmonised methodology and assumed mechanical closure of output gap from 2018 onwards. Estimates based on harmonised value of NAWRU upper bound = 0.3038 and a lambda smoothing parameter for the participation rate of 10. Cyclical budgetary component based on estimated elasticity of 0.53 (EC-OECD 2015).

Box 1: Alternative measure of potential output

The harmonised methodology for estimating potential output, on which the European Commission's assessment of fiscal surveillance is based, is subject to limitations, particularly when applied in the Irish context. In light of this the Department has been developing alternative methodologies which meet the criteria of reliable, stable, intuitive and transparent approaches to estimating the output gap. One approach under consideration controls for the role of financial sector variables when estimating trend output volumes. This approach has been applied elsewhere by models developed by the Bank of International Settlements (BIS) by Borio *et al* (2013, 2014⁵). The Department has developed a model calibrated to Ireland which includes financial sector channels specifically incorporating the movement in house prices, private sector credit (excluding financial sector intermediation) and the current account (net of re-domiciled plcs).



Source: Department of Finance estimates

Results produce more intuitive estimates of the output gap consistent with a greater degree of overheating in the years leading up to the crisis, followed by a more pronounced period of underperformance relative to trend over the period to 2015. The Department will shortly publish a working paper illustrating a detailed application of this approach. Alternative trajectories of the output gap are contrasted in the chart above comparing these results ('Borio type approach') against those of the harmonised methodology, together with estimates based on a purely mechanical statistical filter (the Hodrick Prescott HP filter).

5 Borio, C., P. Disyatat and M. Juselius (2014) "A parsimonious approach to incorporating economic information in measures of potential output" BIS Working Paper No. 442, February 2014. Borio, C., P. Disyatat and M. Juselius (2013) "Rethinking Potential Output: Embedding Information about the Financial Cycle", BIS Working Paper No. 404, February 2013.

Chapter 4 Risk and Sensitivity Analysis

4.1 Summary

As outlined earlier, the central scenario is for GDP growth of 4.9 per cent this year, with the growth rate moderating over the medium term as the output gap is closed and aggregate demand is assumed to move in line with the economy's estimated trend growth rate. As always, these are contingent forecasts – they are based on assumptions for key inputs such as world growth, the evolution of commodity prices, etc. The purpose of this chapter is to set out the main identifiable risks which, if they were to materialise, could alter the economic and fiscal trajectory in Ireland over the short- and medium-term. Quantitative estimates of the impact of particular shocks on the Irish economy and on the public finances are also provided.

Despite the recent strong performance of the Irish economy, the balance of risk to the baseline forecast remains tilted to the downside. This is mainly a reflection of heightened international uncertainty, and it would appear that external risks have intensified since the Budget last October. This uncertainty is reflected in the fan chart set out in figure 5 below.

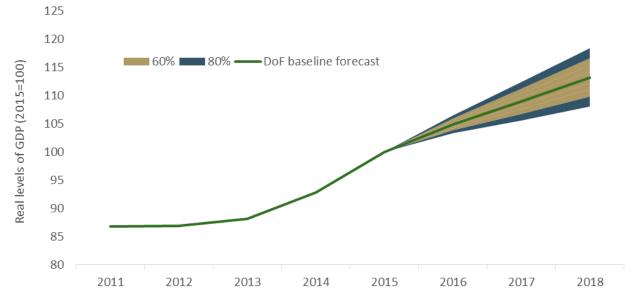


Figure 5: Fan chart of Real GDP

4.2 Risks to the Economic Forecasts

A risk assessment matrix – which lists the main identifiable economic risks as well as an assessment of their relative likelihood and impact – is set out in table 16. The principal downside risks in the short-term relate to trading partner growth and the forthcoming referendum regarding the continued participation of the UK in the European Union. Over the medium term, key risks include the concentrated nature of Ireland's industrial base and competitiveness developments.

Table 16: Risk Assessment Matrix (key macro-economic risks)

Risk	Likelihood	Impact and main transmission channel
Estamal		
External demand shocks	Medium	High – growth in EMEs in recent quarters has disappointed and while Ireland's direct exposure to EMEs is small, second round impacts through lower trading partner demand could have a material impact on the Irish economy.
Geopolitical risks	Medium	High – geopolitical factors have the potential to disrupt growth in key regions and generate headwinds for output and employment in Ireland.
Persistence of low inflation	Medium	Medium – a prolonged period of 'excessively' low inflation would harm aggregate demand in many advanced economies, and ultimately could restrain the pace of growth in Ireland.
Currency developments	Medium	High – the euro-sterling rate has appreciated by c.8 per cent since the beginning of the year, potentially impacting on Irish exports to the UK (especially for the more 'traditional' sectors).
Rapid rebound in oil prices	Low	Medium – as an energy importer, higher oil prices would reduce consumer spending power and lower corporate profitability in Ireland.
Global financial market conditions	Medium	Medium – in a global environment of historically low funding costs, and the associated search for yield, the global financial system is exposed to changes in market sentiment, which could increase risk premia.
"Brexit"	Medium	High – research undertaken by the ESRI estimated a significant negative economic impact for Ireland in the event of a "Brexit".
Domestic		
Concentrated industrial base	Low	High – Ireland's industrial base is highly concentrated in a small numbers of high-tech sectors, with the result that output and employment are exposed to firm- and sector-specific shocks.
Loss of competitiveness	Medium	High – as a small and open economy, Ireland's business model is very much geared towards exportled growth, which, in turn, is sensitive to the evolution of cost competitiveness.
Private sector deleveraging	Low	Medium – notwithstanding recent improvements, levels of household and NFC debt remain high in Ireland, which may prompt stronger-than-assumed deleveraging over the medium term.
Housing supply pressures	High	Medium – supply constraints in the housing sector can adversely impact on competitiveness by <i>inter alia</i> restricting the mobility of labour.

4.3 Risks to the Fiscal Forecasts

A shock to the economy would clearly have implications for the evolution of the public finances. However, the magnitude of this effect is sensitive to the type of shock and channel through which it were to originate. A number of stylised shocks are presented below outlining how key macro-fiscal aggregates might evolve in the event of a deviation from the baseline economic forecasts.

Table 17: Sensitivity analysis

Total Revenue % char Total Expenditure % char Deficit-GDP Ratio pp cha Debt-GDP Ratio pp cha Real GDP % char Total Revenue % char Deficit-GDP Ratio pp cha Debt-GDP Ratio pp cha Debt-GDP Ratio pp cha Primary Surplus—GDP Ratio pp cha Debt-GDP Ratio pp cha Primary Surplus—GDP Ratio pp cha Primary Surplus—GDP Ratio pp cha Total Revenue % char Total Revenue % char Total Expenditure % char Total Expenditure % char	nge compared to base age compared to base age compared to base ange compared to base ange compared to base ange compared to base age compared to base age compared to base age compared to base age compared to base ange compared to base	-0.8 -0.2 0.1 0.1 0.9 -0.1 1 pe -0.3 -0.3	-0.9 -0.4 0.1 0.2 1.3 -0.1	-1.0 -0.7 0.0 0.2 1.6 -0.2 e point in -0.3	-1.1 -0.9 0.0 0.3 1.9 -0.2	-1.1 -1.0 0.0 0.3 2.2 -0.2	-1.1 -1.0 0.0 0.3 2.4 -0.2
Total Revenue % char Total Expenditure % char Deficit-GDP Ratio pp cha Debt-GDP Ratio pp cha Real GDP % char Total Revenue % char Deficit-GDP Ratio pp cha Debt-GDP Ratio pp cha Debt-GDP Ratio pp cha Primary Surplus—GDP Ratio pp cha Debt-GDP Ratio pp cha Primary Surplus—GDP Ratio pp cha Primary Surplus—GDP Ratio pp cha Total Revenue % char Total Revenue % char Total Expenditure % char Total Expenditure % char	age compared to base age compared to base ange compared to base ange compared to base ange compared to base ange compared to base age compared to base age compared to base age compared to base age compared to base ange compared to base ange compared to base ange compared to base	-0.2 0.1 0.1 0.9 -0.1 1 pe -0.3 -0.3 0.0	-0.4 0.1 0.2 1.3 -0.1 rcentage -0.3	-0.7 0.0 0.2 1.6 -0.2 e point in -0.3	-0.9 0.0 0.3 1.9 -0.2	-1.0 0.0 0.3 2.2 -0.2	-1.0 0.0 0.3 2.4 -0.2
Total Expenditure % char Deficit-GDP Ratio pp cha Debt-GDP Ratio pp cha Primary Surplus—GDP Ratio pp cha Real GDP % char Total Revenue % char Deficit-GDP Ratio pp cha Debt-GDP Ratio pp cha Primary Surplus—GDP Ratio pp cha Primary Surplus—GDP Ratio pp cha Real GDP % char Total Revenue % char Total Revenue % char Total Revenue % char Total Expenditure % char Total Expenditure % char	age compared to base inge compared to base	0.1 0.9 -0.1 1 pe -0.3 -0.3	0.1 0.2 1.3 -0.1 rcentage -0.3	0.0 0.2 1.6 -0.2 e point in -0.3	0.0 0.3 1.9 -0.2 crease in	0.0 0.3 2.2 -0.2	0.0 0.3 2.4 -0.2
Deficit-GDP Ratio pp character	inge compared to base	0.1 0.9 -0.1 1 pe -0.3 -0.3	0.2 1.3 -0.1 rcentage -0.3	0.2 1.6 -0.2 point in -0.3	0.3 1.9 -0.2 crease in	0.3 2.2 -0.2 • savings	0.3 2.4 -0.2
Primary Surplus—GDP Ratio pp char Real GDP % char Total Revenue % char Total Expenditure pp char Debt-GDP Ratio pp char Primary Surplus—GDP Ratio pp char Real GDP % char Primary Surplus—GDP Ratio pp char Real GDP % char Total Revenue % char Total Expenditure % char	inge compared to base	0.9 -0.1 1 pe -0.3 -0.3	1.3 -0.1 rcentage -0.3	1.6 -0.2 • point in -0.3	1.9 -0.2 crease i n	2.2 -0.2 n savings	2.4 -0.2 rate
Primary Surplus—GDP Ratio pp char Real GDP % char Total Revenue % char Total Expenditure % char Deficit-GDP Ratio pp char Debt-GDP Ratio pp char Primary Surplus—GDP Ratio pp char Real GDP % char Total Revenue % char Total Expenditure % char	nge compared to base age compared to base age compared to base age compared to base ange compared to base	-0.1 1 pe -0.3 -0.3 0.0	-0.1 rcentage -0.3	-0.2 e point in -0.3	-0.2 crease in	-0.2	-0.2 rate
Real GDP % char Total Revenue % char Total Expenditure % char Deficit-GDP Ratio pp cha Debt-GDP Ratio pp cha Primary Surplus—GDP Ratio pp cha Real GDP % char Total Revenue % char Total Expenditure % char	nge compared to base nge compared to base nge compared to base nge compared to base	1 pe -0.3 -0.3 0.0	rcentage -0.3	point in	crease in	savings	rate
Total Revenue % char Total Expenditure % char Deficit-GDP Ratio pp cha Debt-GDP Ratio pp cha Primary Surplus-GDP Ratio pp cha Real GDP % char Total Revenue % char Total Expenditure % char	nge compared to base nge compared to base nge compared to base	-0.3 -0.3 0.0	-0.3	-0.3		_	
Total Revenue % char Total Expenditure % char Deficit-GDP Ratio pp cha Debt-GDP Ratio pp cha Primary Surplus-GDP Ratio pp cha Real GDP % char Total Revenue % char Total Expenditure % char	nge compared to base nge compared to base nge compared to base	-0.3 0.0			-0.3	0.2	
Total Expenditure % char Deficit-GDP Ratio pp cha Debt-GDP Ratio pp cha Primary Surplus—GDP Ratio pp cha Real GDP % char Total Revenue % char Total Expenditure % char	nge compared to base ange compared to base	0.0	-0.4	0.4		-0.3	-0.2
Deficit-GDP Ratio pp character	inge compared to base			-0.4	-0.4	-0.4	-0.3
Primary Surplus-GDP Ratio pp char Real GDP % char Total Revenue % char Total Expenditure % char	-		0.0	0.0	0.0	0.1	0.1
Primary Surplus–GDP Ratio pp char Real GDP % char Total Revenue % char Total Expenditure % char	ngo compared to been	0.1	0.1	0.1	0.1	0.1	0.1
Real GDP % char Total Revenue % char Total Expenditure % char	inge compared to base	0.4	0.5	0.6	0.7	0.8	0.9
Total Revenue % char Total Expenditure % char	inge compared to base	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Total Revenue % char Total Expenditure % char		1 pe	rcentage	point in	crease in	interest	rate
Total Expenditure % char	ige compared to base	-0.3	-1.4	-2.1	-2.4	-2.4	-2.2
•	ige compared to base	-0.7	-1.7	-2.1	-2.3	-2.1	-1.7
Deficit-GDP Ratio pp cha	ige compared to base	0.2	0.5	0.6	0.7	0.7	0.7
	inge compared to base	0.4	8.0	0.9	1.0	0.9	8.0
	inge compared to base	1.7	3.5	5.3	6.7	7.4	7.7
Primary Surplus–GDP Ratio pp cha	inge compared to base	-0.3	-0.6	-0.6	-0.6	-0.4	-0.2
		5 pe	rcentage	point st	erling de	preciatio	n
	ige compared to base	-0.6	-0.8	-1.0	-0.9	-0.8	-0.5
Total Revenue % char	nge compared to base	-0.6	-1.5	-1.7	-1.5	-1.3	-0.7
Total Expenditure % char	nge compared to base	0.1	0.2	0.1	0.0	0.0	-0.1
Deficit-GDP Ratio pp cha	inge compared to base	0.4	0.7	0.6	0.5	0.4	0.2
Debt-GDP Ratio pp cha	inge compared to base	2.8	3.6	4.2	4.3	4.1	3.5
Primary Surplus-GDP Ratio pp cha	inge compared to base	-0.3	-0.5	-0.5	-0.3	-0.2	-0.0

Source: Economic and Social Research Institute, based on HERMES model estimates

In terms of risks from the external environment, a permanent reduction in levels of global output would dampen Irish GDP growth with impacts transmitted primarily through the trade channel. This, in turn, would worsen the deficit path with the effect reaching a third of a percentage point.

^{*}depreciation of sterling vs euro.

Were the household savings rate to remain permanently elevated at an illustrative 1 percentage point higher than baseline assumptions, this would dampen GDP levels by ¼ of a percent with adverse impacts on key public finance aggregates.

In the event of a sustained exchange rate appreciation (shown below as an illustrative 5 percentage point depreciation in sterling) this could be expected to reduce GDP levels in Ireland by some 1 percentage point by 2018-19 with attendant impacts on public finance dynamics.

The baseline fiscal forecast is exposed – both positively and negatively – to factors that go beyond shocks emanating from an alternative economic trajectory. For instance, Ireland's non-discretionary contribution to the EU Budget has been automatically affected by economic data revisions, including retrospective changes, which have boosted the Irish relative share of EU28 Gross National Income (the key metric which determines the bulk of the contribution key). Volatile GNI data heighten this fiscal risk.

There are fiscal risks associated with a legally binding EU Effort Sharing Decision on climate change covering the 2013-2020 period. Ireland is obliged to achieve a 20 per cent Greenhouse Gas emissions reduction (compared to 2005 levels) in certain sectors. Current EPA projections estimate that Ireland will not achieve this reduction and failure to comply may incur costs of hundreds of millions through the purchase of carbon credits until such time as the target is complied with. Similarly, further new costs may arise in the context of a new EU climate and energy framework for the period 2020-2030, which will set new emissions reduction targets.

Turning to estimates for interest expenditure, market sentiment towards Ireland is currently positive, underpinned by strong domestic economic, financial and fiscal indicators. While recent Irish debt issuance has benefitted from this, wider bond market conditions have also been supportive of government financing. Any deterioration in sentiment (i.e. towards Ireland or a more general change in risk aversion) could potentially affect the cost of funding. Having said that, the bulk of the outstanding stock of Irish public debt is at fixed rates which helps to mitigate this risk, at least in the short-term.

In terms of financial sector developments, risks relate to the non-payment (or lower-than-assumed payments) arising from the State's shareholdings in the banks. Distributions from the banks to their shareholders (including the State) are a function of on-going business performance and outlook, regulatory requirements and are subject to bank board approval over which the State has no control.

In terms of upside risks, it is stressed that the fiscal path outlined in this document does not contain any assumptions regarding the disposal by the State of its shareholding in a number of financial institutions. This is due to the difficulty in projecting the timing of any disposals, which will depend on prevailing market conditions. In addition, and for similar reasons, the receipt of surplus funds following the liquidation of IBRC, termination of NAMA or the wind-up of the Credit Union Restructuring Board are also not included in the baseline debt forecasts. When funds from any of these sources are eventually realised, it will lower the debt ratio accordingly.

Contingent and future liabilities

Two additional sources of risk to the State's balance sheet relate to contingent liabilities and explicit future liabilities (mainly in the form of future pension liabilities). In order to increase transparency in this area, the Departments of Finance and Public Expenditure and Reform have been publishing improved data in these areas.

In terms of contingent liabilities a large exposure remains in relation to the guarantees relating to NAMA and the Eligible Liabilities Guarantee (ELG) Scheme. However, it should be stressed that exposure to these guarantees has declined significantly in recent years with, for instance, the contingent liability arising from NAMA's senior debt now less than one-fifth of its peak size. As has been previously highlighted, NAMA remains on course to eliminate, in full, this contingent liability by 2018. Furthermore, the covered liabilities under the ELG scheme will wind down by March 2018.

Table 18: Contingent Liabilities (at end-year)

% of GDP	2013	2014	2015
Public guarantees	31.2	13.3	5.9
of which linked to the financial sector			
Eligible Liabilities Guarantee	11.2	5.4	1.5
National Asset Management Agency	19.3	7.2	3.8
Other	0.7	0.7	0.6

Source: Department of Finance, CSO

In addition to the contingent liabilities outlined above, the State has certain other long-term future payment liabilities which are contractually conditional on the continued availability to the State of public infrastructure provided under public private partnerships (PPPs). PPPs involve contractual arrangements between the public and private sectors for the purpose of delivering infrastructure or services which are traditionally provided by public sector procurement. Typically, the PPP structure involves the private sector being responsible for the construction, up-front financing, and maintenance of an infrastructure asset and also possible its design and/or operation.

PPPs involve contractual arrangements between the public and private sectors for the purpose of delivering infrastructure or services which were traditionally provided by public sector procurement. Under PPPs, infrastructure is delivered by a private sector firm and the asset is made available for public use, paid for by the State by way of an annual unitary payment over the period of the contract (typically 20 – 25 years). At the end of the contract period, the asset comes into State ownership'

The calculation of the contractual capital value of all Irish PPPs as at 31st October 2015 is €496.8 million on the government balance sheet, and €3,702.7 million off-balance sheet amounting to a total of €4,199.5 million.

Separately, as a member of various international organisations, Ireland has entered into commitments to provide capital. This can take the form of paid-in capital or callable capital. Paid-in capital is funding which has already been made to the organisation and callable capital

is funding which may be called upon by the organisation if needed. The most significant of these contingent or potential liabilities is Ireland's callable capital contribution of approximately €9.87 billion to the European Stability Mechanism.

The accrued liability of the pension promise the State has made to its serving and former employees is measured by the Department of Public Expenditure and Reform. The separate liability for State pensions is assessed as part of the actuarial reviews of the Social Insurance Fund which are carried out at 5 yearly intervals. Under European law from 2017, Ireland will be required to give an estimate of its total accrued pension liabilities, based on a standard series of assumptions, for publication in its national accounts.

Chapter 5 Quality of the Public Finances

5.1 Summary

A series of reforms to the budgetary process have been introduced in recent years to enhance the quality of public finances, each ensuring that public monies are spent in an effective and correct manner. The introduction of performance budgeting has strengthened the link between the expenditure allocations for Departments and the public services they deliver.

The publication of the revised Public Spending Code and the recent addition of staff resources in the Irish Government Economic and Evaluation Service (IGEES) have meant that there is a better framework and greater scope to ensure that both current programmes and capital projects are fully appraised before commencement. In addition, the IGEES now has enhanced resources to carry out value for money reviews and focussed policy assessments on existing programmes to ensure that public funds are being spent efficiently and effectively.

5.2 Quality of the Public Finances

A number of important budgetary reforms have been introduced in recent years including the establishment of the Irish Fiscal Advisory Council (IFAC), enhanced fiscal rules and coordination of budgetary timelines across Europe. These have enhanced the transparency and credibility of the budgetary process and have been outlined in detail in previous Stability Programme Updates.

'Performance Budgeting' became a key initiative in the past number of years, with the aim of strengthening the link between the resources allocated to Departments and the outputs/outcomes provided for citizens. Performance information is now published alongside financial and human inputs as part of the Revised Estimates Volume (REV), linking outputs and outcomes to budgetary allocations and helping to inform resource allocation decisions. In addition, the 'Ireland Stat' website has been set up as part of the performance budgeting initiative with the aim of making the whole of Government more transparent, accountable and efficient.

The Public Spending Code ensures that the best possible value-for-money is obtained whenever public money is being spent or invested. This Code contains a set of rules and procedures which ensure that these standards are upheld across the Irish public service. The key rules of the code are, that where public monies are being invested, a full value for money analysis and a project logic model are detailed. Any capital or current expenditure project must undergo a multi-criteria analysis and/or a cost-benefit analysis to ensure:

- 1) the project is delivering value for money ('doing it right'); and
- 2) that the project is superior to other possible options for delivery and necessary outputs/outcomes are being achieved ('doing the right thing').

In addition to the processes above, there are ongoing evaluations and value for money reviews on existing programmes to ensure that outcomes are being delivered and at the best

value. The new Irish Government Economic and Evaluation Service (IGEES) was set up in 2012 to carry out such evaluations and reviews to ensure expenditure was being spent correctly and effectively. There have been a number of quality research papers and evaluations published on the IGEES website⁶ over the past few years and further staffing resources have been added to the service to provide these skills to a wider range of Departments. It is expected that, among a range of Departments, there will be an increased number of policy assessments carried out on existing programmes, including counterfactual impact evaluations to assess whether programmes are achieving the outcomes desired. The value for money reviews should then assess that the money spent is correct to deliver the successful outcomes of the programmes.

⁶ Link to IGEES website: http://igees.gov.ie/

Chapter 6 Long-Term Sustainability of the Public Finances

6.1 Summary

While Ireland's population is currently one of the youngest in the EU, unfavourable demographic trends in the coming decades will have significant implications for the economy and the evolution of the public finances. Foremost amongst these is a rise in age-related public expenditure as a larger share of the population move into age brackets requiring such spending. Given the budgetary implications of likely demographic shifts, a range of reform measures have been implemented in recent years in order to mitigate the impact on the public finances.

6.2 Background

Ireland's demographic profile is set to change significantly over the coming decades with the share of the population aged 65 years and over expected to double between 2013 and 2050. Alongside this, the share of the working age population is expected to fall from approximately 60 per cent in 2013 to 50 per cent in 2050 contributing to a significant rise in the old-age dependency ratio. Whereas in 2013 there were three and a half people employed for every retired (inactive) person over 65, this figure is projected to fall to just over one and a half by 2050.

Given the importance of population ageing (in Ireland and elsewhere in the EU), the EU Economic Policy Committee (EPC) undertakes an assessment every three years reviewing the impact of long term demographic trends on the public finances of the Member States. The results below pertain to the Ageing Report 2015 (AR2015⁷) and are based on long-term demographic projections produced unilaterally by Eurostat (EUROPOP2013⁸). The Report outlines age-related expenditures covering pensions, health care, long-term care, education, and unemployment benefits. All components with the exception of the pensions element were produced unilaterally on a harmonised basis by the Commission.

These projections will be used in the context of the European Semester to identify policy challenges in the area of age-related spending (as the quantitative underpinning for Country Specific Recommendations), for annual assessments of the sustainability of the public finances (to update the long run sustainability S1 and S2 indicators) and for updating Member State's medium-term (budgetary) objectives (MTOs).

Ireland has significant reservations around the population projections used in this exercise, where a significant net negative outward migration out to 2037 is estimated by the Eurostat model for migration flows. Based on assumptions about future cyclicality of net migration,

⁷ Budgetary projections and statistical annex tables can be found at: http://ec.europa.eu/economy_finance/publications/european_economy/ageing_report/index_en.htm

⁸ Europop 2013 harmonised projections conducted by Eurostat can be found at: http://ec.europa.eu/eurostat/data/database?node_code=proj.

Ireland expects that net migration will turn positive significantly more rapidly than is envisaged under the EUROPOP2013 projections. However, Eurostat has adopted for Ireland the same methodology used for other countries. Whilst an exception for the basis of population projections for Ireland was endorsed by the EPC on 1 April 2015 for future t+10 projection exercises (up to 2025), the impact of this agreement is not reflected in AR15 projections. As a result, any assessment of implied future policy challenges based on figures contained in the 2015 Ageing Report should reflect this concern.

6.3 Long-Term Budgetary Prospects

Despite significant demographic pressures over the coming decades, Ageing Report projections suggest that increases in total age-related expenditure will be modest rising by some 1.9 percentage points of GDP reaching 23.9 per cent of GDP in 2060. This is a significant improvement relative to the 2012 Ageing Report where age-related spending was expected to rise by 4.3 percentage points of GDP over the same period.

The positive impact of reform measures is clearly evident in relation to pension expenditure ⁹ with a reduction in pension benefits and coverage of the population aged 65 and over partially offsetting demographic pressures over the forecast period. As a result, total pension expenditure is set to increase by a modest 1.1 percentage points of GDP in the 2015 Ageing Report compared to the larger increase of 3.8 percentage points of GDP under the previous exercise.

It should again be noted that the underlying assumptions below were produced by the European Commission and should not be misinterpreted as consistent with or an extension beyond 2020 of the 2015 Stability Programme Update projections.

-

⁹ The Ageing Report adopts a broad definition of pensions, which also includes schemes such as invalidity pension, illness benefit, disability allowance and carer's allowance.

Table 19: Long-term spending projections

% of GDP unless otherwise stated	2013	2020	2030	2040	2050	2060
Total age-related expenditure [1-5]	22.1	22.9	23.9	24.6	25.6	23.9
1. Total pension expenditure	7.4	8.0	9.1	10.0	10.0	8.4
Social security pensions	5.5	5.5	6.4	7.4	8.0	7.0
Gross occupational pensions (Public Service)	1.8	2.5	2.7	2.6	2.0	1.4
2. Health care	6.0	6.3	6.9	7.3	7.3	7.2
3. Long-term care	0.7	0.7	0.9	1.1	1.3	1.4
4. Education expenditure	6.0	6.4	5.8	5.2	6.0	5.9
Other age-related expenditures (Unemployment benefit)	2.1	1.5	1.2	1.0	1.0	1.0
Underlying Assumptions	2013	2020	2030	2040	2050	2060
Labour productivity growth	-0.1	1.4	1.6	1.5	1.5	1.5
Potential GDP (growth rate)	0.5	1.4	1.8	1.4	1.9	2.7
Participation rate males	76.9	74.5	72.1	73.5	73.9	72.9
Participation rate females	62.7	63.1	63.1	64.1	63.4	63.1
Total participation rates aged 15-64	69.7	68.8	67.6	68.8	68.7	68.2
Share of population over 65 years old	12.4	15.0	19.4	23.1	24.9	21.4
Economic old-age dependency ratio	28.7	34.5	43.9	53.9	63.0	52.5

Source: Economic Policy Committee and European Commission using Commission forecasts out to 2060. As reported in 2015 Ageing Report Economic and Budgetary projections for the EU28 Member States 2013-2060. Based on EUROPOP2013 population projections.

Note: Participation rates refer to 15-64 cohorts. Economic old-age dependency ratio refers to inactive population over 65 as a share of employed population aged 15 to 64.

Further detail of the above projections is set out in the 2015 Ageing Report and accompanying Country Fiche for Ireland. A sensitivity analysis was also conducted around the baseline to assess the robustness of the public pension projections. The results of the harmonised range of shocks endorsed by the EPC are illustrated below. The most significant impact relates to the 'policy scenario' (linking statutory retirement age to changes in life expectancy). Results suggest this would support sustainability, reducing pension related spending by approximately 0.5 percentage points of GDP by 2050.

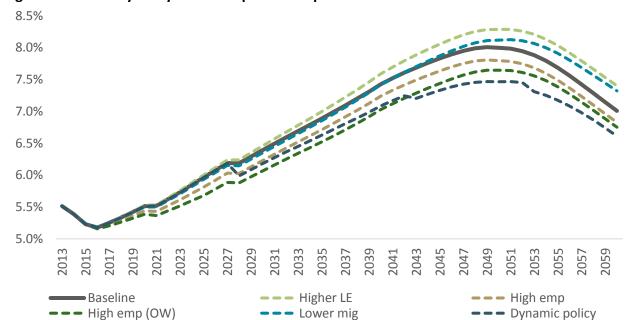


Figure 6: Sensitivity analysis: Public pension expenditure as a share of GDP

Source: Economic Policy Committee and European Commission using Commission forecasts out to 2060. As reported in 2015 Ageing Report Economic and Budgetary projections for the EU28 Member States 2013-2060. Based on harmonised sensitivity analysis outlined in 2015 Ageing Report: Underlying assumptions and projection methodologies.

Note: Policy scenario shifts the statutory retirement age, every five years, by the entire past five years' increase in life expectancy (only full-year step increases are modelled).

6.4 Policy Strategy

A range of policy reforms have been introduced in recent years to address the budgetary challenges posed by population ageing. For example:

Public service pensions

The Single Public Service Pension Scheme (Single Scheme) for all new entrants took effect from 1 January 2013. Under this scheme, pension benefits are based on career average earnings rather than final salary. The pension age is now linked to the statutory state pension age of 66, rising progressively to 67 and 68. In addition, post-retirement pension increases will now be linked to consumer prices rather than wage movements of existing public servants. These changes are reflected in the gross occupational pensions (public service pension) shown in Table 21.

Department of Public Expenditure and Reform estimates suggest that annual savings from the introduction of this scheme will amount to €1.8 billion, with over a half due to changes to indexation, almost a third due to the impact of career averaging, and the remainder from the increase in pension age. This will significantly reduce longer-term pension costs once this cohort begins to retire.

State Pensions

A number of reform measures have been implemented in recent years to further help improve the long-run sustainability of the public pension system. For instance, the State Pension (Transition) was abolished in 2014, while the qualifying age for State Pensions increased to 66 in 2014, and has been legislated to rise to 67 in 2021 and then to 68 in 2028.

Separately, the criteria to qualify for a contributory pension have been amended to increase the minimum number of years of required contributions from five to ten years in April 2012.

In addition to the above, the National Pensions Framework provided for a 'total contributions approach' to replace the current average contributions test for the State Pension (Contributory) from 2020 onwards. Under this approach, a person would accumulate 1/30th of a pension for each year of PRSI contributions up to a maximum of 30/30ths. To qualify for the contributory State Pension, a person would have to make 10 years (or 520 weeks) worth of contributions, at which point they would receive 10/30ths of the full pension amount. This would ensure that the level of pension payments would be directly proportionate to the number of PRSI contributions paid by the person over their working life, thereby removing some of the anomalies associated with the current averaging approach.

Long-term care

The aim of the Nursing Homes Support Scheme (also known as the 'Fair Deal') introduced in October 2009 is to put the financing of individuals' long-term residential care needs on a fair and equitable basis, whereby people contribute towards the cost of their long-term nursing home care according to their means and can enter any nursing home (public, private or voluntary) subject to it having an available bed and being able to cater for their particular needs.

When the Scheme commenced in 2009, a commitment was made that it would be reviewed after three years. The report of the review was published in July 2015. The review included a general examination of the Scheme, as well as the balance between residential care and care in the community, and the cost of long-term care in public and private residential facilities. An Interdepartmental/Agency Working Group has been established to progress the recommendations contained in the review. The Working Group is due to report on its progress to the Cabinet Committee on Health in June 2016.

Further issues under consideration in designing services and supports for the older population include not only residential provision but also community and home-based supports, together with new models of residential care.

6.5 Conclusion

A range of policy measures have been undertaken over recent years to address the budgetary implications of population ageing including legislated step-increases in the state pension age over time, a multi-year nominal freeze in State Pension payment rates, the planned introduction of a total contributions approach for the State Pension (Contributory), reform of public service pension entitlements and moves to place long-term care expenditure on a more sustainable footing. These reform measures will help mitigate the impact of demographic pressures over the coming decades.

Annex 1 Supplementary Data

Table A1: Explanation of net differences between the Exchequer borrowing requirement and general government balance, 2015-2021

€ million	2015	2016	2017	2018	2019	2020	2021
(a) Exchequer balance (b) Exclude equity and loan	-60	-1,495	-3,250	425	1,370	3,240	5,865
transactions	-4,575	-2,535	-685	-750	-775	-815	-850
(c) Adjust for interest accrual	450	565	175	245	190	180	-35
(d) Adjust for tax accruals	245	250	1,290	-735	275	285	285
(e) Adjust for other accruals	160	260	150	140	175	170	160
(f) Impact of NPRF	-1,385	315	355	370	370	390	390
(g) Other government bodies	65	-45	0	0	0	-5	0
(h) Net lending/borrowing of NCSSBs	-480	-145	220	140	-50	125	-145
(i) Surplus of the Social Insurance Fund	-45	250	660	1,085	1,530	1,990	2,450
(j) Net lending of Local Government (k) General government balance (=a to	690	100	0	0	0	0	0
j)	-4,935	-2,480	-1,080	915	3,090	5,555	8,125
(I) Financial sector measures	2,115	15	0	0	0	0	0
(m) Underlying balance	-2,820	-2,465	-1,080	915	3,090	5,555	8,125
(n) Underlying balance as % of GDP	-1.3%	-1.1%	-0.4%	0.4%	1.2%	2.0%	2.8%
(o) Nominal GDP	214,625	230,950	242,975	255,825	267,725	279,575	291,375

Source: Department of Finance, Department of Public Expenditure and CSO estimates

Notes: Rounding may affect totals

Table A1 shows a reconciliation from the Exchequer balance to the general government balance. The general government balance measures the fiscal performance of all arms of Government, i.e. central government; Local Authorities and non-commercial State sponsored bodies, as well as funds such as the SIF and the NPRF which are managed by Government agents. It thus provides an accurate assessment of the fiscal performance of a more complete 'Government' sector. It does not reflect the position of commercial State sponsored bodies as these agencies are classified as being outside the general government sector. The general government balance is calculated in accordance with ESA2010, a consistent standard developed by the EU to facilitate budgetary comparisons between EU Member States in accordance with their obligations under the Maastricht Treaty.

- a. The Exchequer Balance is the traditional domestic budgetary aggregate which measures the net surplus or deficit position of the Exchequer account. It is the difference between total receipts into and total expenditure out of the Exchequer account of the Central Fund.
- b. Equity and loan transactions are excluded from the balance on the basis that they affect the composition but not the level of assets and liabilities.
- c. Interest expenditure by general government is calculated on an accruals basis and includes an adjustment to remove the impact of interest rate swaps. This item also includes an adjustment for the repayment of EBS promissory note.
- d. & e. Adjustments required in respect of certain transactions recorded on an accruals basis including tax accruals, Departmental balances, EU transfers and the impact of the capital carryover.
- f. This is the net lending/borrowing of the NPRF. This fund is within the general government sector and transactions within the sector do not have an impact on the general government balance.
- g. Transfers between units within the general government sector do not affect the general government balance.
- h, i, j & k. These adjustments add the net lending/borrowing of other government bodies and local government to arrive at a full concept of general government. m. This reflects potential deficit worsening expenditure of payments into the financial sector. For the purposes of assessing adherence to EDP general government balance targets, this expenditure is therefore excluded

Table A2.1: General government budgetary forecasts 2015-2021

	ESA	2015	2015	2016	2017	2018	2019	2020	2021
		€m				% of GDP			
Net lending (EDP B.9) by sub-sector									
1. General government (=6-7)	S.13	-4,935	-2.3	-1.1	-0.4	0.4	1.2	2.0	2.8
p.m.: Underlying balance		-2,820	-1.3	-1.1	-0.4	0.4	1.2	2.0	2.8
2. Central government	S.1311	-5,625	-2.6	-1.1	-0.4	0.4	1.2	2.0	2.8
3. State government	S.1312	N/A	-	-	-	-	-	-	-
4. Local government	S.1313	690	0.3	0.0	0.0	0.0	0.0	0.0	0.0
5. Social security funds	S.1314	N/A	-	-	-	-	-	-	-
General government (S.13)									
6. Total Revenue	TR	70,495	32.8	30.9	30.3	29.9	29.7	29.5	29.4
7. Total Expenditure	TE	75,430	35.1	32.0	30.7	29.6	28.6	27.5	26.6
8. Net lending/borrowing (=6-7)	B.9	-4,935	-2.3	-1.1	-0.4	0.4	1.2	2.0	2.8
9. Interest expenditure	D.41	6,745	3.1	2.7	2.6	2.4	2.2	2.1	1.9
10. Primary balance (=1+9)		1,810	0.8	1.6	2.1	2.8	3.4	4.1	4.7
11. One-off and other temporary measures		-1,655	-0.8	0.0	0.0	0.0	0.0	0.0	0.0
Selected components of revenue									
12. Total taxes (12=12a+12b+12c)		50,745	23.6	22.7	22.5	22.4	22.3	22.3	22.3
12a. Taxes on production and imports	D.2	22,465	10.5	10.3	10.3	10.2	10.1	10.0	10.0
12b. Current taxes on income, wealth etc.	D.5	27,880	13.0	12.2	12.1	12.1	12.1	12.1	12.0
12c. Capital taxes	D.91	400	0.2	0.1	0.1	0.1	0.1	0.1	0.4
13. Social contributions	D.61	11,430	5.3	5.1	5.0	4.9	4.9	4.8	4.8
14. Property Income	D.4	2,615	1.2	0.9	0.5	0.4	0.4	0.4	0.3
15. Other		5,705	2.7	2.3	2.3	2.2	2.1	2.0	2.0
16. (=6) Total revenue (=12+13+14+15)	TR	70,495	32.8	30.9	30.3	29.9	29.7	29.5	29.4
p.m.: Tax burden		62,680	29.2	28.0	27.7	27.5	27.4	27.3	27.3
Selected Components of Expenditure									
17a. Compensation of employees	D.1	19,545	9.1	8.7	8.5	8.2	7.9	7.6	7.4
17b Intermediate consumption	P.2	9,325	4.3	4.2	4.0	3.9	3.7	3.6	3.5
18. Social payments (18 = 18a+18b)		27,990	13.0	12.0	11.4	10.9	10.5	10.1	9.8
18a. Social transfers in kind supplied via market producers	D.63	4,010	1.9	1.7	1.6	1.5	1.5	1.4	1.4
18b. Social transfers other than in kind	D.62	23,980	11.2	10.3	9.8	9.3	9.0	8.7	8.4
19=9 Interest expenditure	D.41	6,745	3.1	2.7	2.6	2.4	2.2	2.1	1.9
20. Subsidies	D.3	1,840	0.9	0.7	0.7	0.7	0.6	0.6	0.6
21. Gross fixed capital formation	P.51	3,905	1.8	1.7	1.6	1.7	1.8	1.8	1.9
22. Capital Transfers	D.9	3,510	1.6	0.7	0.7	0.6	0.6	0.6	0.6

23. Other		2,575	1.2	1.2	1.2	1.2	1.1	1.1	1.1
24=7 Total expenditure (=17+18+19+20+21+22+23)	TE	75,430	35.1	32.0	30.7	29.6	28.6	27.6	26.6
p.m.: Government consumption	P.3	32,965	15.4	14.7	14.1	13.7	13.2	12.7	11.9
GDP at current market prices (€ billion)	B.1*g	214,625	214,625	230,950	242,975	255,825	267,725	279,575	291,375

Sources: CSO, Department of Finance and Department of Public Expenditure and Reform

Table A2.1 sets out the general government deficit for the years 2015-2021 in terms of selected components of general government receipts and expenditures. Note that the revenue and expenditure forecasts for 2016-2018 reflect the adjustment path necessary to achieve the MTO which is the overarching fiscal policy of the Government. Specific policy decisions which will be made in the context of annual budgets are not reflected in these forecasts.

Notes to table A2.1:

- Item 1: Net lending by general government is identical with the general government balance.
- Item 9 & 19: Interest expenditure by general government is calculated on an accruals basis and includes interest rate swaps.

Item 12a: Taxes on production and imports include VAT; customs, excise and stamp duty; local authority rates; the non-household part of motor tax; the stamps collected by the Risk Equalisation Fund; and the local property tax.

- Item 12b: Current taxes on income and wealth comprise income tax; capital gains tax; corporation tax; the banking levy introduced in Budget 2014; and the household part of motor tax and of television licences.
- Item 12c: Capital taxes comprise capital acquisitions tax and the pension funds and bank levies.
- Item 13: Social contributions consist mainly of contributions to the Social Insurance Fund. Imputed social contributions are also included.
- Item 14: Property income is made up of investment or dividend income.
- -Item 15: Other receipts include miscellaneous receipts such as Departmental receipts (appropriations in aid), rents and receipts from abroad, receipts by non-commercial State sponsored bodies and miscellaneous capital receipts.
- Item 17a: Compensation of Employees includes wages and salaries as well as an estimate of the amount that would have to be contributed if public sector pensions were actually funded schemes.
- Item 17b: Intermediate consumption is current spending on goods and services by government units.
- Item 18: Social transfer payments include pensions; child benefit; payments for medical goods; transfers to the rest of the world; and other unrequited payments to households. Social transfers in kind include such items as free travel on public transport and fuel allowances.
- Item 20: Subsidies, include payments to commercial state sponsored bodies such as CIE.
- Item 21: Gross fixed capital formation is acquisitions less disposals by government of capital formation such as construction and machinery.
- Item 22. Capital Grants, includes grants for capital investment.
- Item 23: Other expenditure includes transfer payments to non-government bodies. It also includes acquisitions less disposals of non-produced assets such as royalties, mobile phone licences and the licence to operate the National Lottery.

Memo items:

Tax burden: the sum of total taxes (D.2, D.5 and D.91), social contributions (D.61) and EU taxes.

The underlying balance: the net lending of general government adjusted for the effect of certain expenditures into the financial sector.

Government consumption: This is comprised of expenditures on compensation of employees; goods and services; social transfers in kind; plus depreciation; less miscellaneous receipts. This aggregate is government's contribution to expenditure on GDP.

Table A2.2: General government budgetary forecasts 2015-2021

€ million	ESA code	2015	2016	2017	2018	2019	2020	2021
Revenue	couc							
Taxes on production and imports	D.2	22,465	23,785	25,040	26,020	27,045	28,025	29,010
Current taxes on income, wealth	D.5	27,880	28,195	29,370	30,925	32,385	33,950	34,890
Capital taxes	D.91	400	345	335	375	385	395	1,185
Social contributions	D.61	11,430	11,735	12,110	12,580	12,985	13,450	13,900
Property Income	D.4	2,615	1,995	1,110	1,010	1,050	1,050	920
Other		5,705	5,350	5,600	5,630	5,675	5,690	5,675
Total revenue	TR	70,495	71,400	73,575	76,540	79,525	82,560	85,585
Expenditure								
Compensation of employees	D.1	19,545	20,010	20,695	21,090	21,230	21,350	21,465
Intermediate consumption	P.2	9,325	9,815	9,775	10,020	10,015	10,090	10,160
Social payments	D.6	27,990	27,685	27,800	27,835	28,025	28,240	28,485
Interest expenditure	D.41	6,745	6,290	6,290	6,145	5,980	5,815	5,440
Subsidies	D.3	1,840	1,695	1,685	1,700	1,725	1,735	1,735
Gross fixed capital formation	P.51	3,905	3,985	3,980	4,240	4,765	5,075	5,460
Capital Transfers	D.9	3,510	1,545	1,590	1,635	1,650	1,615	1,615
Other		2,575	2,860	2,840	2,950	3,045	3,085	3,110
Total expenditure	TE	75,430	73,885	74,650	75,625	76,435	77,005	77,460
	B.9=TR							
General government balance	-TE	-4,935	-2,480	-1,080	915	3,090	5,555	8,125
Financial measures affecting B.9		2,115	15	0	0	0	0	0
Underlying balance		-2,820	-2,465	-1,080	915	3,090	5,555	8,125
Underlying GGB as % of GDP		-1.3%	-1.1%	-0.4%	0.4%	1.2%	2.0%	2.8%

Sources: CSO, Department of Finance and Department of Public Expenditure and Reform Notes: - Rounding may affect totals.

⁻ Table A2.2 is a reproduction of Table A2.1 showing the main aggregates of government revenue and expenditure at nominal values.

⁻ Financial sector measures affecting the balance: This reflects potential deficit worsening expenditure into the financial sector and the credit union sector which may be excluded for the purposes of assessing adherence to EDP targets.

⁻ The underlying balance: the net lending of general government adjusted for the effect of financial measures.

Table A2.3: Comparison of vintages of Receipts and Expenditures

Document	Budget 2016	SPU 2016	Total	Classification	Revised	Other	Notes
Reference period	2016	2016	Δ	Δ	data Δ	Δ	
Revenue	€	millions					
Taxes on production and	22.445	22.705	240	-	240	-	
imports Current taxes on income,	23,445	23,785	340		340		
wealth	28,325	28,195	-130	-	-130	-	
Capital taxes	375	345	-30	-	-30	-	
Social contributions	11,875	11,735	-140	-	-140	-	
Property Income	2,065	1,995	-70	-	-70	-	
Other	5,205	5,345	140	-	140	-	
Total revenue	71,285	71,400	115	-	115	-	
Expenditure							
Compensation of employees	19,870	20,010	140	-	140	-	
Intermediate consumption	9,670	9,815	145	-	145	-	
Social payments	28,010	27,685	-325	-	-325	-	
Interest expenditure	6,585	6,290	-295	-	-295	-	
Subsidies	1,960	1,695	-265	-	-265	-	
Gross fixed capital formation	4,205	3,985	-220	-	-220	-	
Capital transfers	1,090	1,545	455	-	455	-	
Other	2,665	2,860	195	-	195	-	
Total expenditure	74,050	73,880	-170	-	-170	-	
General government balance	-2,765	-2,480	285	-	285	-	
Underlying balance	-2,750	-2,465	285	-	285	-	

Source: Department of Finance

Notes- Rounding may affect totals.

The differences (Δ) are displayed under categories relating to new data, re-classifications, and other items.-Some particular identifiable changes are detailed in the notes.

- For SPU 2016 there were no policy or statistical decisions impacting the 2016 data therefore all movements relate to revised data primarily based on updated out turns from the CSO.

⁻Table A2.3 compares the forecast of receipts and expenditures for 2016 as set out in Budget 2016 with the current forecast (April 2016).

The layout of this table presents the changes in vintages of 2016 data since Budget 2016, October 2015.

Table A3: General government interest expenditure 2015-2021

	2015	2016	2017	2018	2019	2020	2021
			€	millions an	nd %		
National Debt Cash Interest	6,979	6,837	6,464	6,386	6,125	5,912	5,292
% of GDP	3.3%	3.0%	2.7%	2.5%	2.3%	2.1%	1.8%
National Debt Cash Interest							
Accruals	28	-289	55	-82	-88	-129	41
Consolidation and grossing	-85	-54	-91	-82	-54	-22	18
Accrued promissory note							
interest	-11	0	0	0	0	0	0
Other	-163	-204	-139	-75	-1	52	90
Total Interest on ESA2010							
basis	6,748	6,289	6,289	6,147	5,981	5,813	5,440
% total General							
government revenue	10%	9%	9%	8%	8%	7%	6%
% of GDP	3.1%	2.7%	2.6%	2.4%	2.2%	2.1%	1.9%

Sources: CSO, Department of Finance and NTMA (National Debt data provider)

Notes: Rounding may affect totals

Table A4: Projected movement in general government debt 2015-2021

	0	0					
€ billion	2015	2016	2017	2018	2019	2020	2021
Opening general government debt	203.3	201.3	203.8	207.9	208.0	208.0	205.0
Exchequer borrowing requirement	0.1	1.5	3.3	-0.4	-1.4	-3.2	-5.9
Change in Exchequer Deposits	-1.2	-0.2	0.1	0.2	0.4	-0.2	1.0
Net lending of local government and							
NCSSBs	0.6	0.1	0.4	0.1	0.5	-0.2	-0.2
Change in collateral held	-0.2	0.1	0.0	0.0	0.1	0.0	0.1
Other	-1.2	1.0	0.3	0.2	0.5	0.5	0.6
Closing general government debt	201.3	203.8	207.9	208.0	208.0	205.0	200.6
General government debt to GDP ratio							
(% of GDP)	93.8%	88.2%	85.5%	81.3%	77.7%	73.3%	68.9%

Sources: CSO, Department of Finance and NTMA (National Debt data provider)

Notes: Rounding may affect totals

Table A5: Breakdown of revenue

	2015	2015	2016	2017	2018	2019	2020	2021
	€ million				% of GDF)		
Total revenue at unchanged policies ¹	70,495	32.8	30.9	30.3	29.9	29.7	29.5	29.4
Discretionary revenue ²	-0.9	-0.4	-0.3	-0.1	0.0	0.0	0.0	-0.1

Source: Department of Finance

Notes:

^{1.} This table is produced to comply with the Code of Conduct and is on a no policy change basis.

^{2.} Total general government revenue on the basis already implemented up to and including Budget 2016.

^{3.} Discretionary revenue measures include PRSI adjustments and are inclusive of carry-over from previous years. All figures are up to and including Budget 2016 and incorporate previous budgetary measures.

Table A6: Expenditure developments

	2015	2015	2016	2017	2018	2019	2020	2021
	€ billion				% of GDP)		
Expenditure on EU Programmes fully matched by revenue from EU funds	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Expenditure fully matched by mandated revenue increases	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-discretionary changes in unemployment benefit expenditure*	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.3

Source: Department of Finance calculations and Department of Public Expenditure and Reform

Table A7: Budgetary plans

% of GDP	2015	2016	2017	2018	2019	2020	2021
1. General government balance	-2.3	-1.1	-0.4	0.4	1.2	2.0	2.8
2. Structural balance	-2.4	-2.0	-0.8	0.1	1.0	2.0	2.8
3. Cyclical budgetary component	0.9	0.9	0.4	0.2	0.1	0.0	0.0
4. One-offs and other temporary measures	-0.8	0.0	0.0	0.0	0.0	0.0	0.0
5. General government balance	-2.3	-1.1	-0.4	0.4	1.1	2.0	2.8
6. Total revenues	32.8	30.9	30.3	29.9	29.7	29.5	29.4
7. Total expenditure	35.1	32.0	30.7	29.6	28.6	27.6	26.6
Amounts to be excluded from the expenditure benchmark							
7a. Interest expenditure	3.1	2.7	2.6	2.4	2.3	2.1	1.9
7b. Expenditure on EU programmes fully matched by EU funds revenue	0.2	0.2	0.2	0.2	0.2	0.2	0.2
7c. Cyclical unemployment benefit							
expenditure*	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.3
7d. Effect of discretionary revenue measures	-0.2	-0.3	0.0	0.2	0.1	0.1	0.1
7e. Revenue increases mandated by law	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8. Tax burden	29.2	28.0	27.7	27.5	27.4	27.3	27.3
9. Gross debt	93.8	88.2	85.5	81.3	77.7	73.3	68.9

Source: Department of Finance

^{*}Broad methodology for calculation is set out in SPU 2013

^{*}Broad methodology for calculation based on estimation of unemployment gap is set out in SPU 2013.

Table A8: Macroeconomic assumptions

% change (unless stated)	2015	2016	2017	2018	2019	2020	2021
1. Real GDP growth	7.8	4.9	3.9	3.9	3.3	3.1	2.9
2. Nominal GDP growth	13.5	7.6	5.2	5.3	4.6	4.4	4.2
3. GDP deflator growth	5.3	2.6	1.2	1.3	1.3	1.3	1.3
Potential GDP growth	4.4	5.0	5.0	4.2	3.5	3.3	2.8
Output gap	1.7	1.7	0.7	0.4	0.2	0.0	0.0
Employment growth	2.6	2.6	2.3	2.3	1.7	1.6	1.4
Hours worked*	1.0	0.7	0.3	0.2	0.2	0.1	0.0
Unemployment rate	9.5	8.4	7.8	7.0	6.6	6.3	6.0
Gross fixed capital formation	28.2	13.5	7.0	4.8	4.7	3.9	3.8
Compensation per employee**	2.2	2.6	2.5	2.5	2.7	2.8	2.9

Source: Department of Finance

^{*}Based on AMECO HPERE definition.**Based on AMECO HWCDW definition. Differs from non-agriculture wages per head reported in table 5.

Annex 2

Ireland's National Reform Programme Summary of Progress

Preparation of our National Reform Programme (NRP) is an important part of the European Semester process.

Ireland's NRP reports on the progress made in addressing key economic policy challenges, including those identified in the European Commission's Country Report on Ireland published in February.

In this context the NRP reports on progress across the four Country Specific Recommendations (CSRs) received in 2015. CSRs are tailored, concrete recommendations for actions in areas where it is considered that individual Member States should focus their reform efforts.

Ireland's CSRs in 2015 covered the following areas:

- 1) Public Finances
- 2) Health Sector Reform
- 3) Work-intensity of households/risk of poverty
- 4) Private debt, including mortgage arrears

Ireland's NRP also reports on progress towards our Europe 2020 targets across the five headline targets:

- 1) Employment;
- 2) Research and Development;
- 3) Climate Change and Energy;
- 4) Education; and
- 5) Poverty reduction.

The NRP also reports on the use of structural funds and on stakeholder engagement which is regarded as an important part of the European Semester process.

Annex 3 Irish Fiscal Advisory Council's Endorsement of the **Macroeconomic Forecasts**



Cearnóg Whitaker | Whitaker Square Baile Átha Cliath 2 Dublin 2

Sir John Rogerson's Quay

ww.fiscalcouncil.ie | info@fiscalcouncil.ie | (+353 1) 8632005

20 April 2016

Dear Secretary General Moran,

The Council has an obligation under the Fiscal Responsibility Act to endorse, as appropriate, the macroeconomic forecasts prepared by the Department of Finance on which Stability Programme Update 2016 (SPU 2016) will be based.1

The SPU 2016 forecasts were provided to the Council on 7 April 2016 and discussed by the Council with Department of Finance staff on 18 April 2016, ahead of the Council's endorsement meeting. 2

The Council's approach to endorsement of the macroeconomic forecasts has three elements: a comparison of the Department of Finance's forecasts to IFAC's Benchmark forecasts, consideration of the methodology used to produce the forecasts and a review of past forecast errors for evidence of systematic bias.

The Irish Fiscal Advisory Council endorses as within the range of appropriate forecasts the set of medium-term macroeconomic projections prepared by the Department of Finance for SPU 2016.

The Department's supply-side estimates in SPU 2016 are produced in line with the EU Commonly Agreed Methodology (CAM) and the mechanical application of this methodology to estimate trend supply-side variables in SPU 2016 has been verified. However, as highlighted in the November 2015 Fiscal Assessment Report, and on numerous occasions by the Department of Finance, the methodology is not well equipped to estimate the supply side of the Irish economy.

It is essential that the Department's macroeconomic forecasts for the medium term are wellfounded to provide a sound basis for setting the economy and the public finances on a sustainable path. This requires the development of a fuller picture of the supply side complementary to the Commonly Agreed Methodology, which is used primarily for fiscal surveillance by the European Commission. Further progress on developing and reporting alternatives to the CAM is necessary to improve the quality of the Department's supply-side forecasts.

A detailed discussion of the endorsement process and an assessment of the macroeconomic projections will be provided in the Council's forthcoming Fiscal Assessment Report which is scheduled for publication in June.

Yours sincerely

John M. Hale John McHale, Chair.

Comhairle/Council: John McHale (Chair) - Sebastian Barnes - Seamus Coffey - Ide Kearney - Michael G. Tutty.

¹ The Fiscal Responsibility Act 2012, as amended by the Ministers and Secretaries (Amendment) Act 2013, states that: "The Fiscal Council shall— (a) endorse, as it considers appropriate, the macroeconomic forecasts prepared by the Department of Finance on which the Budget and stability programme will be based".

The key variables taken into account in the endorsement are those listed in Section 2 of the Memorandum of Understanding (MOU). The MOU between the Department of Finance and the Council as amended in 2015 sets out the agreed modalities of the endorsement function in relation to the Budget and the Stability Programme Update (SPU).

