BUDGET 2017

ECONOMIC AND FISCAL OUTLOOK

(Incorporating the Department of Finance's Autumn Forecasts)

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Chapter 1
Overview and General Policy Strategy

1.1 Policy Strategy

The economic landscape is characterised by considerable uncertainty at present, particularly on the external front. Perhaps the main source of uncertainty relates to the fallout from the UK referendum in June, which creates considerable institutional, political and economic challenges in the months and years ahead.

From an economic perspective, the short-term impact has mainly been reflected in exchange rate developments and, in particular, the significant appreciation of the euro-sterling bilateral rate already evident. Indeed the current bilateral rate and its recent evolution will pose significant challenges, particularly for parts of the exporting sector and areas sensitive to cross-border trade. Over the medium and longer term, the economic impact will crucially depend upon the post-exit relationship between the EU and the UK. From an Irish perspective, a 'soft exit' – that is one which, as much as possible, retains the existing economic relationship – would clearly be preferable; a 'hard exit', entailing greater restrictions on trade and factor flows, would be more damaging to Irish economic prospects.

Beyond Brexit-related issues, it is also the case that economic growth remains relatively subdued in many of our key export markets. Indeed, there is an open question as to whether this prolonged slowdown is now becoming a permanent feature of some advanced economies. Finally, imbalances remain a feature of many emerging market economies, whose share of world economic activity has been rising in recent years.

Given this highly uncertain external environment, the over-arching policy priority must be to enhance the resilience of the Irish economy, i.e. to be able to respond to external shocks in an efficient manner so that any damage to the domestic economy is contained.

This is what the Government is doing. At a macro-economic level, budgetary policy will be geared towards balancing the budget by 2018 (a balanced budget is defined as a structural deficit of no more than 0.5 per cent of GDP). As previously announced, the Government will establish a rainy day fund once a balanced budget is achieved. The Government is also announcing a new target for the debt-to-GDP ratio, namely that this will be brought to 45 per cent by the end of the next decade in order to provide an additional safety buffer.

At a more micro-economic level, Budget 2017 contains several measures designed to ensure that firms in Ireland – especially those in the SME sector – can respond to the more difficult environment that seems inevitable following Brexit.[8] Targeted measures are also being implemented to help unlock existing blockages in the housing market, which will help improve Ireland's attractiveness as a place to live and work.

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[8] The UK government has indicated that it will trigger article 50 by end-March 2017, meaning that the UK's formal exit from the Union could take place by end-March 2019.

1.2 Short-term Economic and Budgetary Outlook

The publication during the summer of revised national accounts data for Ireland clearly show that, while compiled in line with international standards, the information content in key macro-economic aggregates – such as GDP and GNP – is more limited than elsewhere. This reflects in part the importance of the multinational sector to the Irish economy. It also reflects changes to international statistical classifications, introduced some years ago, which have a disproportionate impact on measures of economic activity in Ireland (examples include the classification within national accounts of aircraft leasing activity as well as so-called 'contract manufacturing' activity).

In these circumstances it is necessary to look beyond the aggregate measures to gain insights as to how the economy is performing. A broader assessment – taking into account consumer spending trends and taxation receipts – clearly shows that the economy is performing relatively well at the moment, and the central scenario is for a continuation of reasonably solid growth in the short term. This assessment is based on the crucial assumption that there are no major disruptions in key export markets.

Table 1: Summary table – main economic and fiscal variables

% change (unless stated)	**2015**	**2016**	**2017**
Economic Activity			
Real GDP	26.3	4.2	3.5
Real GNP	18.7	7.5	3.3
Prices			
HICP	0.0	-0.1	1.3
Core HICP	1.2	0.7	1.2
GDP deflator	4.9	-1.3	1.0
Balance of Payments			
Current account (per cent of GDP)	10.2	9.4	8.2
Labour Market			
Total Employment ('000)^	1,965	2,015	2,060
Employment	2.6	2.6	2.1
Unemployment (per cent)	9.5	8.3	7.7
Public Finances (per cent of GDP)			
General government balance	-1.9	-0.9	-0.4
Structural balance	-2.2	-1.9	-1.1
Debt ratio (year-end)	78.6	76.0	74.3
Net debt position (year-end)*	66.9	66.0	64.1

^ nearest 5,000.
Source: 2015 - CSO; 2016 and 2017 - Department of Finance

Table 1 sets out the Department of Finance's short-term economic and fiscal projections. The macro-economic projections for 2016 and 2017 have been endorsed by the Irish Fiscal

Advisory Council (IFAC); the figures presented in the table have been amended to take into account the budgetary package (reconciliation table is set out in the appendix). In summary terms the economy is projected to grow by 3.5 per cent next year, following an estimated outturn of 4.2 per cent for this year.

Tax receipts – at least in aggregate terms – have evolved broadly in line with expectations this year, although at a disaggregated level, shortfalls in some tax heads have been offset by over-performance in other areas. Tax receipts for the year as a whole are projected to amount to just over €48 billion. With regard to non-voted expenditure, higher EU Budget contributions will be offset by debt service savings. While voted expenditure is slightly higher than set out during the summer, the headline deficit is projected to be 0.9 per cent of GDP this year, a figure that is unchanged relative to earlier projections. A further reduction in the headline deficit to 0.4 per cent of GDP is projected for next year.

Taking into account the impact of the economic cycle, the structural budget balance is projected to improve by 0.8 per cent next year in compliance with Ireland's obligations under the Stability and Growth Pact and the Medium Term Objective of a balanced budget in structural terms is likely to be achieved by 2018.

The public debt-to-GDP ratio is projected at 76.0 per cent of GDP this year. It must be stressed while factors such as the much lower deficit have played an important role in reducing the debt ratio since its peak in 2012, the sharp fall last year mainly reflects the substantial increase in nominal GDP. In this sense it is important to look beyond the simple debt-to-GDP ratio to assess debt developments in Ireland. Other metrics such as debt service costs as a percentage of tax revenue point to continued improvements in debt sustainability (see Chapter 3). In addition, it is worth highlighting that net public indebtedness is considerably lower than the gross figure, given that the Government (through the NTMA) has accumulated significant liquid and semi-liquid assets.

Chapter 2
Economic Outlook

2.1 Summary

GDP is projected to increase by 3.5 per cent next year, following growth of 4.2 per cent this year. As indicators of well-being both GDP and GNP suffer from considerable shortcomings in an Irish context, as highlighted from last year's exceptional figures. Nevertheless, other indicators – such as employment growth, trends in consumer spending and tax revenue developments – all point to an economy that continues to perform solidly. The unemployment rate is projected to continue on a downward trajectory, although the pace of decline is expected to moderate as labour supply picks up. In terms of price developments, some of the factors that have been holding back inflation are expected to subside; however, in common with elsewhere inflation is projected to remain modest in the short term.

2.2 Macroeconomic Outturn 2016

GDP is forecast to increase by 4.2 per cent this year, with a positive contribution from domestic demand partly offset by a negative contribution from net trade.

On the domestic front, consumer spending is now playing a more prominent role in the recovery. Supported by increases in disposable income, gains in purchasing power associated with the decline in oil prices, and reasonably solid consumer confidence, personal consumer expenditure is projected to rise by 3.3 per cent this year.

Investment spending in Ireland is extremely volatile due to inter alia the inclusion of the aircraft of leasing operators and intangible assets in the Irish capital stock.[9] Investment activity is set to record double-digit growth again this year, with a growth rate of 15.8 per cent projected. Investment in intangibles will be the main driver once again but encouragingly building and construction investment is also making a strong contribution to growth.

Externally, growth has been relatively modest in most of our key export markets while, notably, the euro-sterling bilateral exchange rate – of crucial importance to large parts of the SME sector – has appreciated significantly over the course of this year. Nevertheless, merchandise trade has increased significantly in the year-to-date. However, once account is taken of production (and subsequent exports) that takes place under contract from Irish-based entities by third parties in other jurisdictions (i.e. so-called contract manufacturing), the export figures are less flattering, rising at an annual rate of under 4 per cent in the first half of the year. Imports, on the other hand, have risen at a faster pace, although part of this reflects the purchasing of intellectual property (classified as investment).

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[9] Arising out of changes implemented over 2014 and 2015 as part of the implementation of European System of Accounts 2010 and other statistical regulations.

A surplus of 9.4 per cent of GDP on the current account of the balance of payments is projected for this year, so that ceteris paribus the nation as a whole is reducing its net international liabilities. However, this headline figure is heavily distorted by the multinational sector in Ireland through inter alia contract manufacturing, aircraft leasing and re-domiciled PLC's.

2.3 Macroeconomic Projections 2017

The international economic situation remains fragile, with international organisations such as the IMF and OECD revising downwards their short-term global growth forecasts. Slowing global trade, caused in part by the rebalancing of the economy in China, alongside slowing productivity growth and weak wage growth are containing GDP growth in most advanced economies where Ireland conducts most of its trade. Near-term projections for Ireland's key export markets, as published by the IMF in October, are set out in table 2 below. The exchange rate trajectory is based on the technical assumption of unchanged bilateral rates as of mid-September. More recent developments in the euro-sterling bilateral rate, if sustained, could be problematic for some firms, especially those in more labour-intensive industries with tighter profit margins. Based on the forward curve, a modest increase in oil prices is projected for next year.

The Department's near-term forecasts are based on the IMF's latest economic forecasts, which are set out in the table below. A major source of uncertainty – especially from an Irish perspective – relates to the trajectory for the UK economy; while high-frequency data have been relatively solid since the result of the referendum, it is likely that the impact will materialise with a lag.

Table 2: External assumptions

% change (unless stated)	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
External GDP growth							
United States	2.6	1.6	2.2	2.1	1.9	1.7	1.6
Euro area	2.0	1.7	1.5	1.6	1.5	1.5	1.5
United Kingdom	2.2	1.8	1.1	1.7	1.8	1.9	1.9
Technical assumptions							
Euro-sterling exchange rate (€1=)	0.73	0.81	0.85	0.85	0.85	0.85	0.85
Euro-dollar exchange rate (€1=)	1.11	1.12	1.12	1.12	1.12	1.12	1.12
Brent crude (dollars per barrel)	54	44	51	54	56	56	56

Sources IMF, World Economic Outlook, October 2016. Note 1: Oil (spot) prices as of September 2016. Oil (future) prices until December 2018 and 10-day moving averages thereafter. Note 2: Exchange rate outturns as of mid-September 2016, and unchanged thereafter (while this is a standard technical assumption, it is acknowledged that the euro-sterling bilateral rate has appreciated further in the period since then).

Against this background, exports are projected to increase by 4.5 per cent next year. This is based on the assumption that exports arising from contract manufacturing-type activity no longer weigh on overall exports (as appears to be the case this year).

A further expansion of consumer spending is assumed. Labour income – by far the largest component of aggregate household income – is forecast to increase once again, supported by employment gains and increases in both the number of hours worked and hourly pay. A decline in the household savings rate is also assumed to support consumer spending growth next year.

Underlying investment spending – defined here as building and construction plus non-aircraft machinery and equipment investment – is expected to drive activity next year as firms increase their productive capacity to meet the anticipated demand. Having said that, it is possible that some planned investment spending may be postponed given the uncertainty created by the Brexit vote in the UK. On this basis, investment is projected to grow by 6 per cent next year. As outlined above, investment in intangible assets and some other components is extremely volatile and large swings in these areas could lead to a significantly different figure; crucially, however, this does not materially impact on aggregate demand in the short-term due to the high import content of such spending.

Imports of goods and services are expected to grow by 5.1 per cent next year, in line with the projection for final demand.

Taking all of these factors into account, GDP growth of 3.5 per cent is expected for next year, with GNP projected to increase by 3.3 per cent.

Table 3: Macroeconomic prospects (as provided to IFAC and Budget Oversight Committee)[10]

	2015	2016	2017	2018	2019	2020	2021
				year-on-year per cent change			
Real GDP	26.3	4.2	3.5	3.4	3.2	2.8	2.6
Nominal GDP	32.4	2.8	4.5	4.6	4.5	4.2	4.1
Real GNP	18.7	7.5	3.3	3.2	3.0	2.6	2.4
Components of GDP				*year-on-year per cent change (real)*			
Personal consumption	4.5	3.3	2.9	2.2	1.8	1.5	1.3
Govn. consumption	1.1	5.9	2.4	1.3	1.0	0.9	0.9
Investment	32.7	15.8	6.0	4.7	4.3	3.5	3.4
Stock changes^	-0.8	0.1	0.0	0.0	0.0	0.0	0.0
Exports	34.4	3.6	4.5	4.8	4.7	4.2	4.0
Imports	21.7	5.9	5.1	4.8	4.5	4.1	3.9
Contributions to real GDP growth				*annual percentage point contribution*			
Domestic demand	8.9	5.1	2.8	2.1	1.9	1.6	1.5
Net exports	18.3	-1.0	0.7	1.3	1.4	1.2	1.1
Stock changes	-0.8	0.1	0.0	0.0	0.0	0.0	0.0
Statistical discrepancy	-0.1	0.0	0.0	0.0	0.0	0.0	0.0

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

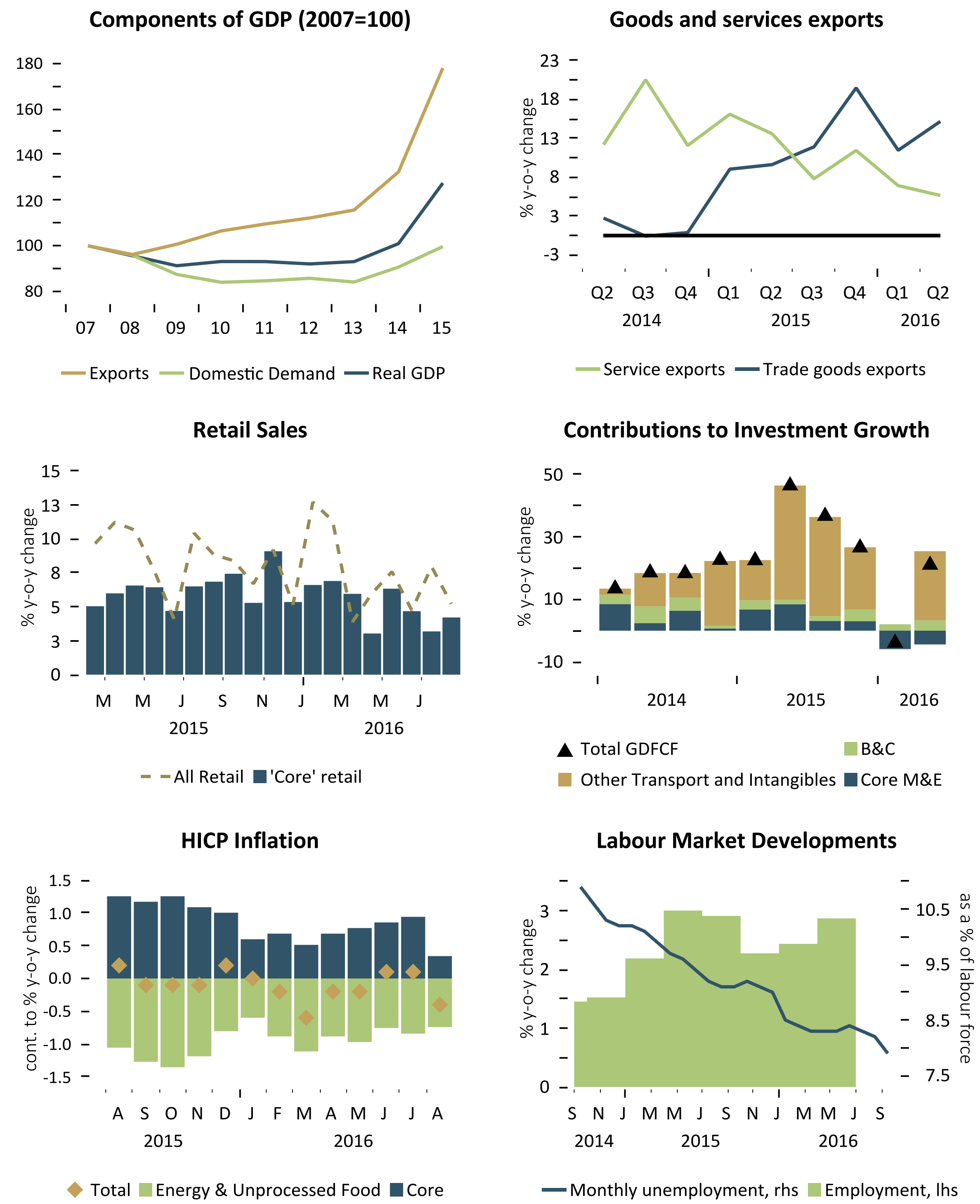
Table 4: External balance

% of GDP	2015	2016	2017	2018	2019	2020	2021
Current account	10.2	9.4	8.2	7.8	7.7	7.6	7.5
of which:							
- trade balance	31.7	27.9	27.0	26.8	26.8	26.9	27.0
- income balance	-21.5	-18.6	-18.8	-19.0	-19.1	-19.3	-19.5

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

[10] With the figures for 2016 and 2017 amended to take into account the final budgetary package. Figures from 2018 onwards are on a no policy change basis.

Figure 1: Economic Trends



Source: CSO and Department of Finance calculations

2.4 The Labour Market

The labour market continues to benefit from the ongoing recovery. The level of employment rose above the 2 million mark in the second quarter of this year, with job gains being broadly-based. The unemployment rate continues to decline, although as would be expected at this stage in the cycle, labour supply is now increasing steadily both through higher participation rates and via net inward migration.

The short-term outlook for the labour market remains positive. For this year, employment growth of 2.6 per cent (52,000 jobs) is projected, with the unemployment rate set to average 8.3 per cent. For next year, employment gains of 2.1 per cent (43,000 jobs) are anticipated, with unemployment set to average 7.7 per cent.

Table 5: Labour market developments

% change (unless stated)	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Employment	2.6	2.6	2.1	2.1	1.8	1.6	1.4
Unemployment rate (QNHS basis)	9.5	8.3	7.7	7.3	6.9	6.5	6.1
Labour productivity	23.1	1.6	1.4	1.4	1.4	1.2	1.1
Compensation of employees*	5.7	5.7	4.9	4.8	4.6	4.3	4.1
Compensation per employee*	2.8	2.9	2.7	2.7	2.7	2.7	2.6

*Non-agricultural sector.
Source: 2015 - CSO; 2016 to 2021 - Department of Finance.

2.5 Price Developments

Low and even negative rates of inflation have become a feature of developed economies, including Ireland, and this is posing challenges. Annual inflation in Ireland – as measured by the Harmonised Index of Consumer Prices (HICP) averaged -0.2 per cent in the first eight months of the year (to August) and is expected to be slightly negative on average for 2016 as a whole. In Ireland, the decline in the price of oil and related energy costs were partially offset by price increases in other areas, notably for services. Core inflation (i.e. excluding energy and unprocessed food), which gives a better picture of underlying price developments in the economy, averaged 0.8 per cent in the year to August.

While HICP inflation is expected to be slightly negative in 2016, price pressures will likely rise gradually but remain subdued into 2017. Futures markets for oil suggest a pickup in oil prices during the final quarter of this year, with a further gradual recovery in oil prices expected over the course of 2017. Core and headline HICP inflation are therefore expected to converge next year as the effect of the drag from oil prices on headline inflation diminishes. In addition, the continued growth in domestic demand and the ongoing recovery in the labour market are expected to lead to further services price inflation. Taking all these factors into account, HICP inflation is expected to average -0.1 per cent this year with core inflation projected at 0.7 per cent. For 2017, headline inflation is expected to increase to 1.3 per cent, with core inflation rising to 1.2 per cent.

Table 6: Price developments

% change	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
GDP deflator	4.9	-1.3	1.0	1.1	1.2	1.4	1.5
Personal consumption deflator	0.7	1.1	2.0	2.1	2.1	2.1	2.1
Harmonised index of consumer prices (HICP)	0.0	-0.1	1.3	1.8	1.9	1.9	1.9
Core HICP inflation	1.2	0.7	1.2	1.8	1.9	1.9	1.9
Export price deflator (goods and services)	7.4	-2.4	0.5	0.6	0.7	0.8	0.8
Import price deflator (goods and services)	4.7	-1.1	1.1	1.1	1.0	1.0	1.0
Terms of trade (good and services)	2.5	-1.3	-0.6	-0.5	-0.4	-0.2	-0.1

Source: 2015 - Eurostat for Core HICP and CSO otherwise. 2016 to 2021 - Department of Finance. Rounding can affect totals.

The GDP deflator – a measure of the price changes in the economy as a whole – is forecast to decline by 1.3 per cent this year, mainly due to a deterioration in the terms-of-trade (export prices falling more rapidly than import prices). Due to a base effect and on the basis of the technical assumption of unchanged exchange rates from those prevailing during mid-September, a more modest deterioration in the terms-of-trade is projected for next year. Combined with a modest increase in consumer prices, the GDP deflator is assumed to increase by 1.0 per cent next year.

2.6 Medium-Term Growth Prospects 2018 to 2021[11]

Over the medium term potential output is forecast to grow at an average of 3 ¼ per cent per annum. 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.

Over the medium term, growth is projected to be more balanced with strong positive contributions from domestic demand and net exports. Personal consumer expenditure is expected to grow by 1.7 per cent per annum over the 2018-2021 period supported by continued increases in real incomes and a slower pace of household deleveraging, while underlying investment is expected to gradually return towards more normalised levels. Exports are expected to grow slightly in excess of external demand reflecting the favourable sectoral composition of Irish exports. Imports are projected to grow in line with weighted final demand (i.e. consumption, investment and exports).

[11] The medium term outlook discussed in this section is on a no policy change basis, as these figures were supplied to the IFAC and the Budget Oversight Committee at the beginning of October. As outlined in the fiscal chapter, the medium budgetary projections are now being presented on an *ex post* basis in order to better align the Department's projections with a medium term budgetary framework. The allocation of the fiscal space would, in turn, boost the growth rate of the economy by around ¼ pp per annum over the medium term. Estimates of the revised GDP trajectory are included in table 11.

Employment growth averaging 1.7 per cent per annum over the 2018-2021 period is envisaged, resulting in implied labour productivity growth of 1.3 per cent. Aggregate labour supply is projected to continue to expand over the medium-term supported by a resumption in positive net migration and a pick-up in participation rates. As a result, the unemployment rate is expected to fall 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. The Department's forecast for GDP this year is the lowest of public sector organisations; for next year, the GDP projection is in line with the median forecast.

Table 7: Range of forecasts

2016	annual % change			
	GDP	GNP	HICP	Employment
Department of Finance	4.2	7.5	-0.1	2.6
Central Bank of Ireland	4.5	4.5	0.0	2.6
IMF	4.9	n.a.	0.3	2.5
ESRI	4.3	4.1	0.8	2.3
European Commission	4.9	n.a.	0.3	1.7
OECD	5.0	n.a.	0.3	n.a.
2017	**annual % change**			
	GDP	GNP	HICP	Employment
Department of Finance	3.5	3.3	1.3	2.1
Central Bank of Ireland	3.6	3.1	1.0	1.5
IMF	3.2	n.a.	1.2	1.7
ESRI	3.8	3.5	1.0	1.6
European Commission	3.7	n.a.	1.3	1.4
OECD	3.4	n.a.	2.2	n.a.

Source: Central Bank, Quarterly Bulletin, October 2016; IMF, World Economic Outlook, October 2016; ESRI, Quarterly Economic Commentary, September 2016; European Commission, Spring Forecasts, May 2016; OECD, Economic Outlook, June 2016.

2.8 Comparison with 2016 Stability Programme Update

Table 8 compares the headline macroeconomic and fiscal figures with the projections set out in the April 2016 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 over-performance of both domestic demand and in particular net exports.

Table 8: Comparison with previous forecast

	2015	2016	2017	2018	2019	2020	2021
Real GDP growth (per cent)							
- Previous forecast	7.8*	4.9	3.9	3.9	3.3	3.1	2.9
- Current update	26.3**	4.2	3.5	3.4	3.2	2.8	2.6
- Difference	+18.5	-0.7	-0.4	-0.5	-0.1	-0.3	-0.3
Net lending of general government (per cent of GDP)							
- Previous forecast	-2.3	-1.1	-0.4	0.4	1.2	2.0	2.8
- Current update	-1.9	-0.9	-0.5	-0.3	0.2	0.7	1.1
- Difference	0.4	+0.2	-0.1	-0.7	-1.0	-1.3	-1.7
General government gross debt (per cent of GDP)							
- Previous forecast	93.8	88.2	85.5	81.3	77.7	73.3	68.9
- Current update	78.6	76.0	74.3	72.7	70.2	65.8	63.0
- Difference	-15.2	-12.2	-11.1	-8.6	-7.4	-7.5	5.9

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

* From CSO Quarterly National Accounts, Fourth Quarter 2015, released 10 March 2016.
**From CSO National Income and Expenditure Annual Results 2015, released 12 July 2016.

Chapter 3
Fiscal Outlook

3.1 Fiscal Outturn 2016

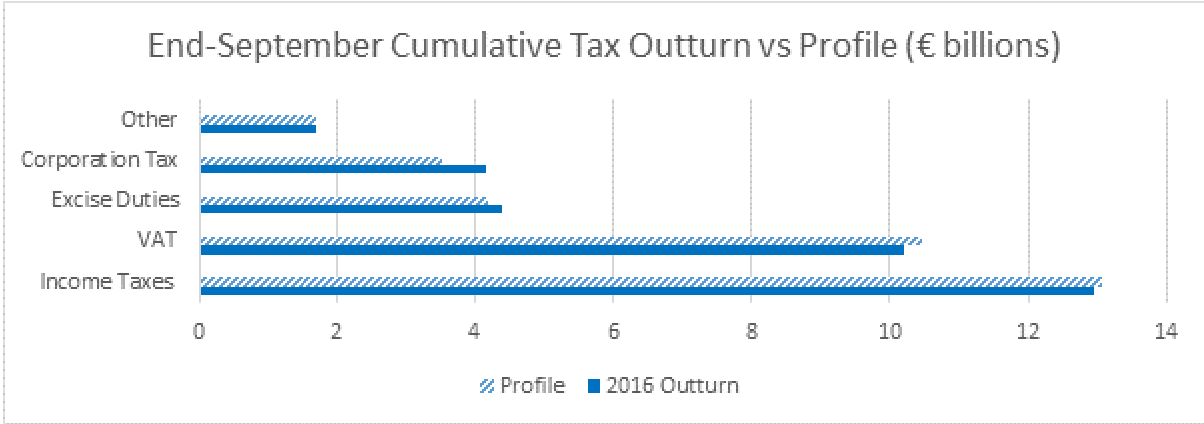
A general government deficit of 0.9 per cent of GDP is projected for this year, unchanged from the Summer Economic Statement (SES).

Exchequer tax receipts are projected at €48.1 billion, as forecast in the SES. This represents a 5.6 per cent or €2.5 billion year-on year improvement. Expenditure developments to end-September are broadly in-line with expectations.

A tangible indication of the improving fiscal position was the formal abrogation of the Excessive Deficit Procedure this summer, with the 'excessive deficit' being corrected in a durable manner. Accordingly, Ireland is now subject to the requirements of the preventive arm of the Stability and Growth Pact (SGP).

Taxation

At end-September 2016, Exchequer tax revenues were up 1.5 per cent or €484 million against the Budget 2016 profile, representing a 5.7 per annual increase. Encouragingly, all of the major tax heads have grown significantly in annual terms and with the exception of VAT, are broadly in line with, or are ahead of target.



Looking at the performance of the individual components to the end of Quarter 3, receipts from income tax, the largest element, have been reasonably strong, with receipts up 4.1 per cent in year-on-year terms. However, a small shortfall against profile of €114 million or 0.9 per cent arose due to an underperformance of DIRT and a technical costing issue, which now allocates a greater weighting to the first year impact of new income tax measures, has been reflected in USC receipts this year. However, in terms of the end-year forecast, strong receipts are expected from the self-employed returns in October / November and these should support the end-year target.

Cumulative VAT receipts at-end September were down €278 million or 2.7 per cent against profile. As an *ad valorem* tax, VAT returns have been affected by the current low inflation environment prevailing across the economy. Encouragingly, VAT in September, in respect of the July and August trading period was up €7 million or 0.4 per cent against a challenging €1,910 million target. An overall 1.8 per cent shortfall of €230 million on the 2016 Budget day target is now expected.

Excise duties are €211 million or 5.1 per cent up against profile at end-September. This equates to an annual increase of 16.3 per cent with robust growth across the majority of excise components, with new car sales up 19 per cent year-to-date. However, tobacco excise receipts were flattered in the first half of the year in advance of the anticipated introduction of plain packaging. This front-loading of receipts has ceased and is now starting to reverse, a trend expected to continue in the coming months, reversing these earlier gains. As a result it is expected that excise duties receipts will finish the year on profile.

For the second consecutive year, corporation tax has performed very strongly with receipts up €644 million or 18.3 per cent against profile at end-Quarter 3. Based on the most up-to-date information, it is expected that there will be further upside to this performance in the coming months.

There has also been an over-performance relative to forecast in some of the other revenue headings, with capital taxes performing particularly well. At end-September, both Capital Gains and Capital Acquisition Taxes were up c. 36 per cent and 43 per cent respectively against profile.

The 2016 Exchequer tax revenue forecast was revised upwards by €900 million to €48.1 billion in the SES. Taking account of the overall position after nine months, the Department of Finance is still of the view that taxes are on track to meet this target.

Non-tax revenue

Exchequer non-tax revenues for 2016 are expected to be about €0.6 billion below the SES estimate. The bulk of this is due to lower-than-projected dividends from the semi-state sector and reduced transfers from the Local Government Fund arising, *inter alia,* from lower motor tax receipts.

Offsetting this, Exchequer capital receipts are projected to be €0.3 billion higher-than-expected in the SES. Most of this relates to an anticipated loan repayment from the IBRC special liquidators. Other proceeds arising from the State’s support to the banking sector during the year included €1.6 billion realised from the redemption of contingent capital notes in AIB. These resources returning to the Exchequer are treated as a financial transaction in statistical terms. While these receipts do not impact the general government balance, they directly lower the Exchequer Borrowing Requirement and ultimately feed through to a reduced general government debt.

An alternative illustration of the 2016 and 2017 Exchequer forecasts is set out in Table 13. This separates Exchequer revenue and expenditure into further detail on a gross basis, showing the non-general government impacting transactions separately.

Voted Expenditure

Total 2016 voted expenditure, as provided under the Government Expenditure Ceiling (GEC) is €56.1 billion. This is 0.6 per cent higher than the level set out in the SES. This sees €51.9 billion allocated to current spending and €4.2 billion provided to capital.

This additional expenditure reflects an additional €200 million of capital funding for necessary repair work to transport infrastructure arising from flood damage at the start of the year and payments for school building works. This was signalled in the Mid-Year Expenditure Report. Separately, a further €110 million is provided for current expenditure.

Non-Voted Expenditure

Non-voted expenditure from the Central Fund is broadly unchanged in aggregate terms. Increased EU Budget contributions for this year will be largely offset through debt service savings, which are arising from a supportive interest rate environment. Some additional expenditure savings are expected to emerge from within the non-voted capital pillar.

Exchequer and General Government Balances

The effect of these factors now implies that the expected 2016 Exchequer Borrowing Requirement of €1.4 billion will be €300 million worse than expected in the SES.

A general government deficit of 0.9 per cent of GDP is projected for this year. This is an improvement of 1 per cent since 2015, supported by a strengthening Exchequer position and denominator effects arising from a stronger nominal GDP level. A primary surplus – that is the general government position before debt interest payments are accounted for, amounting to 1.4 per cent of GDP is forecast.

3.2 Fiscal Outlook 2017

Overview

Looking to 2017, our central expectation is that the general government deficit will continue on a downward trajectory reaching 0.4 per cent of GDP next year.

For the second consecutive year, our public finances will be assessed under the fiscal rules of the preventive arm of the SGP. The objective of these rules is to ensure the sustainability of the public finances, with the structural balance measure now our principal fiscal anchor. The key requirement of this framework is to be on or at the adjustment path towards our MTO of a structural deficit of 0.5 per cent of GDP. Under our current forecasts the rules require an annual improvement in the structural balance of 0.6 per cent until our MTO is achieved. The forecast year-on-year improvement in Ireland’s structural balance will be 0.8 per cent of GDP.

The second complementary pillar is the expenditure benchmark, which is designed to ensure that spending (net of discretionary revenue measures) increases in-line with the economy’s trend growth rate. For countries not yet at their MTO, this increase is calibrated to allow expenditure grow at less than our potential growth rate, ensuring the minimum structural adjustment is made each year until the MTO is achieved.

Box 1 – Evolution of 'fiscal space' in 2017

The Summer Economic Statement estimated fiscal space of €1 billion for 2017. This figure was consistent with compliance with the expenditure benchmark (EB) pillar of the preventive arm.
Fiscal space projections are based on a number of moving parts, including:

- estimates of the GDP deflator;
- reference rates, i.e. ten-year average of the trend growth rate;
- the convergence margin (a gap vis-à-vis reference rate to ensure sufficient convergence);
- general government expenditure values.

For 2017, the reference rates and convergence margins were set by the European Commission in its Spring forecast published in May. However, the GDP deflator used is an average of the Commission's Spring and Autumn deflators. As the Commission's Autumn forecasts will not be published until after Budget 2017, this necessitates using the forecast for the deflator from the Department of Finance. Given, *inter alia,* exchange rate developments, the Department's forecast of the GDP deflator for next year has been revised downwards, resulting in a reduction in net fiscal space of €75m.

In a similar vein, the final outturn for government expenditure in 2016 is not yet available. However, revisions to the 2015 outturn in the CSO's Autumn EDP return have resulted in an update to the Department's estimate of the 2016 and 2017 expenditure base. Notably, the estimates of Gross Fixed Capital Formation (GFCF) were revised for the period 2012 to 2015. To avoid penalising spikes in government investment in GFCF the European Commission allows this investment to be averaged over a four year period so any changes to the levels of this investment will impact on available fiscal space in forecast years. As well as data from the CSO, revenue and expenditure surveys of the Local Authorities and other general government bodies are returned as part of the budgetary process, these also included updated forecasts of GFCF expenditure for 2016 and 2017, updating further the Department's estimates of the expenditure bases used. The combined effect of these changes to the estimates of GFCF expenditure in 2016 and 2017 has increased available fiscal space in 2017 by approximately €120m.

It is also a feature of the fiscal space calculations that additional revenue arising from discretionary measures (DRMs) increases the overall fiscal space (the converse in relation to revenue reductions also applies). Changes to the DRMs will consequently impact on the estimate of fiscal space. The Revenue Commissioners have revised their methodology regarding the calculation of first year and full year costs of potential tax packages with effect from June 2016. This revised methodology had the effect of increasing the cost of the Budget 2016 tax package in 2016 but reducing its carryover effect on the 2017 fiscal space calculation increasing the available fiscal space by €155m.

Fiscal Space at SES 2016	€1,000m
GDP deflator	-€75m
CSO Revision to GFCF	€120m
Revised Carryover	€155m
Fiscal Space at Budget 2017	€1,200m

Impact of budget measures on the fiscal position in 2017

Budget 2017 utilises approximately €1.2 billion in fiscal space upon an expenditure and taxation package, distributed on a 3:1 basis. The nominal Budget 2017 package is €1.3 billion. This is larger than the fiscal space used because of capital smoothing[12]. However, capital smoothing is also responsible for a €200 million capital increase in 2016 using €50 million of the €1.2 billion fiscal space. The nominal €1.3 billion package is consistent with €1 billion in expenditure increases and nearly €300 million in net tax reductions.

Box 2 – Application of fiscal space (all figures rounded to nearest €5 million)

Available fiscal space (see box 1)	€1,200
Taxation reductions	- €490
Taxation increases	+ €195
Net taxation package	- €295
Current expenditure	+€805
Capital expenditure^	+€100
Total expenditure package	+€905

^the actual capital increase is €200m but because of 'capital smoothing', this increase only absorbs ¼ of the available fiscal space. It should be noted that the additional €200m capital in 2016 is using €50m of fiscal space in 2017.

Taxation

Exchequer tax revenue is projected to grow by 5.2 per cent in 2017. This forecast is based on expected nominal GDP growth of 4.5 per cent and the implementation of new tax measures, as well as the carryover effect of previous tax measures. In addition, the forecast also encompasses the buoyancy generated from the package of measures introduced in this Budget. Buoyancy is created from the additional economic activity that arises as a result of the increased spending and the reduce burden of taxation, which in turn can boost tax receipts.

Table 9 sets out the year-on-year growth rate for 2017 of the individual tax heads based on the estimated outturn for 2016. In relation to the specific tax heads, of particular note is the significant increase in income tax of 5.5 per cent. This is driven by a combination of a resilient labour market, wage growth and continuing expansion of employment. With regards to consumption taxes the projected increase in personal consumption is expected to improve VAT and excise receipts, by an estimated 5.9 per cent and 6.0 per cent respectively in year-on-year terms. Corporation tax is estimated to grow by under 3.0 per cent next year. The forecast does allow for a number of specific one-off adjustments which may impact the tax base in 2017.

[12] Expenditure on capital formation is averaged over a four year period meaning an increase in spending will only use ¼ of the fiscal space an equivalent increase in current spending will use in the first year.

Table 9: Exchequer Tax Revenues 2016 -2017

Exchequer Tax Receipts	Estimated Outturn 2016	Forecast Y-o-Y Change	Budget Forecast 2017	Forecast Y-o-Y Change
	€m	%	€m	%
Customs	330	0.9	355	7.7
Excise	5,645	6.7	5,985	6.0
Capital Gains Tax	695	3.9	710	1.8
Capital Acquisitions Tax	455	13.8	440	-3.1
Stamps	1,220	-3.8	1,335	9.5
Income Tax	19,185	4.5	20,245	5.5
Corporation Tax	7,515	9.4	7,715	2.7
VAT	12,630	5.7	13,375	5.9
Local Property Tax	460	-1.9	460	0.0
Total	48,135	5.6	50,620	5.2

Source: Department of Finance.
Figures are rounded to the nearest €5 million. Year-on-year changes reflect actual figures.

Non-tax revenue

Combined non-tax revenues and capital resources are expected to be €0.7 billion higher in 2017 than projected in the SES. This arises from assumptions of higher Central Bank surplus income and other receipts, which more than offset reductions to other non-tax incomes.

Voted expenditure

The Government Expenditure Ceiling (GEC) for 2017 gross voted expenditure is €58.0 billion, a 3.3 per cent year-on-year increase. Gross voted current spending will see a 2.9 per cent annual increase to €53.5 billion. Gross voted capital will be €4.5 billion in 2017 up €0.4 bn on 2016.

Continuing economic growth and careful management of the public finances means that targeted expenditure increases for improvements in public services can be facilitated, including a particular focus on health, housing, education, disability, child care and development. In addition, capital investment in key physical and social infrastructure can help support growth and continued job creation.

Non-voted expenditure

Debt servicing costs represents just over two thirds of overall non-voted expenditure. Since the SES increased savings from lower interest costs will help offset a larger EU Budget contribution. This increased payment follows from upward revisions to our Gross National Income (GNI) level. Expectations on non-voted capital spending remain broadly unchanged from the SES.

Exchequer and general government balances

For 2017 the Exchequer budget deficit will be of the order of €2.2 billion. The general government deficit will be 0.4 per cent of GDP which represents a 0.5 per cent improvement on 2016.

Table 10: The Impact of *Budget 2017* on the Fiscal Position in 2017

	€m	€m
New Tax Package:		**-424**
Income tax		-450
Capital Taxes		-38
Excise		64
Other measures provided for in Budget 2016		-15
Other Tax Policy Decisions:		**130**
Tackling Offshore tax evasion		30
Compliance measures		50
Section 110 and Fund Changes		50
New Expenditure Measures:		**1,011**
Current		804
Capital		207
Impact of New Measures on Budget 2017 Tax Forecast		285
	WHITE PAPER	**BUDGET 2017**
Current Revenue	€m	€m
Tax Revenue	50,630	50,620
Non-Tax Revenue	2,615	2,615
Current Revenue	**53,245**	**53,235**
Current Expenditure		
Net Voted	40,995	41,655
Non-Voted	9,555	9,555
Net Current Expenditure	**50,550**	**51,210**
CURRENT BUDGET BALANCE	**2,700**	**2,025**
Capital Receipts	**1,185**	**1,185**
Capital Expenditure		
Net Voted	4,055	4,265
Non-Voted	1,095	1,095
Net Capital Expenditure	**5,155**	**5,360**
CAPITAL BUDGET BALANCE	**-3,970**	**-4,175**
EXCHEQUER BALANCE	**-1,270**	**-2,150**
GENERAL GOVERNMENT BALANCE	**-240**	**-1,235***
% of GDP	**-0.1**	**-0.4**
-€10 million Adjustment to the Social Fund Balance	-250	-1,235
% of GDP	**-0.1**	**-0.4**

*This takes account of overall revenue buoyancy of €316 million.

Sources: Department of Finance & Department of Public Expenditure and Reform.

3.3 Fiscal Outlook 2018-2021

Box 3 – Medium term budgetary forecasts

In previous publications, economic and fiscal projections beyond the following year were presented on a no-policy change basis. The rationale for such a presentation is that the allocation of fiscal space beyond 'T+1' required a policy decision. A shortcoming of such a presentation, however, is that the medium term fiscal projections are somewhat unrealistic. Indeed, this has been a source of criticism from the Irish Fiscal Advisory Council which held the view that the resulting expenditure forecasts, in particular, were not realistic as they did not include probable future spending resulting from inflation, social welfare increases and public pay and pensions.

In order to further enhance the budgetary framework, the Department of Finance is now publishing its medium term economic and fiscal forecasts on an *ex post* basis. This is facilitated by the publication of the 'fiscal space' in the SES as well as the Government's stated intention regarding the allocation of this fiscal space. Estimates presented in the appendix show that the quantum of fiscal space over the period 2018-2021 is broadly similar to that published in the SES.

The medium term revenue and expenditure forecasts include the allocation of fiscal space as set out in the SES in addition to the pre-committed expenditure in respect of demographics, the Lansdowne Road Agreement and the Public Capital Programme. The fiscal space to be used for expenditure has been allocated to aggregate current and aggregate capital expenditure in line with Table 2 in the SES. Beyond 2017, specific allocation by Vote will take place as decided on an annual basis to reflect policy decisions yet to be taken.

The aggregate expenditure forecasts now include the planned level of Government expenditure out to 2021. This is, of course, based on the current economic forecasts and the existing estimates of available fiscal space. As we move forward, the economic forecasts will vary and estimates of fiscal space will change as the relevant economic indicators used in the calculation change. As this happens, the fiscal forecasts for both revenue and expenditure will change too. With regard to the aggregate tax revenue forecasts, these take full account of the reductions to be funded from the €2.5 billion fiscal space.

The overall result is that the fiscal forecasts now reflect the most likely macro-fiscal scenario over the medium term. This improvement in the presentation is also consistent with the requirements of both Article 4(1) of the Council Directive 2011/85/EU on requirements for budgetary frameworks of the Member States and Article 1(6)(c) of Regulation (EU) No 1174/2011 of the European Parliament and of the Council amending Council Regulation (EC) No 1466/97 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies (both the Directive and the Regulation were part of the so called "six-pack").

Table A7 in Annex 2 shows the application of the Expenditure Benchmark on a no-policy-change basis from 2018 onwards. This table shows the forecast net fiscal space for future years and it is, therefore, an update of Table A2 in Annex 1 to the Summer Economic Statement. Projected net fiscal space is effectively unchanged in 2018 at c.€1.2 billion. While some declines are indicated thereafter, comparison of the final line in both vintages gives broad confirmation of the orders of magnitude of net fiscal space forecasts for 2018 out to 2021. The outer year declines can be attributed to forecasts of lower reference rates (trend growth rates) for those years. This would be consistent with lower GDP forecasts due to Brexit, however these may be subject to further downside risk beyond what is considered here.

It should be borne in mind that these are Department of Finance forecasts. The definitive forecasts used to set the reference rate for 2018 are the European Commission Spring forecasts that should be published in May 2017.

Revenue developments

Taxes are expected to grow at an average of 5.4 per cent over the 2018 – 2021 forecast horizon. This is broadly in line with nominal GDP growth of 4.7 per cent over the corresponding period. Due to the correction of a technical, bank payment timing issue, previously profiled 2018 tax receipts will decline by approximately €1 billion. These end-2017 receipts are now expected to be booked to the Exchequer within the same calendar year. While this will dis-improve the projected 2018 Exchequer balance it will not impact the General Government measure as key tax receipts for January and February are accrued back to the previous year.

No assumptions are made about banking-related transactions over this period. As it is the stated intention of Government to divest its shareholding in these companies over time, these would all represent upside to the revenue forecasts.

Expenditure developments

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.

Table 11: Comparison of Budgetary Forecasts

% of GDP 2016		GG debt	GG Balance	Structural Balance
Department of Finance	Oct-16	76.0	-0.9	-1.9
IMF	Oct-16	74.6	-0.7	-0.7
ESRI	Sep-16	73.6	0.1	n/a
European Commission	May-16	89.1	-1.1	-2.0
OECD	Jun-16	88.9	-0.7	n/a

% of GDP 2017		GG debt	GG Balance	Structural Balance
Department of Finance	Oct-16	74.3	-0.4	-1.1
IMF	Oct-16	72.6	-0.5	-0.7
ESRI	Sept-16	68.7	0.5	n/a
European Commission	May-16	86.1	-0.6	-1.0
OECD	Jun-16	86.6	-0.3	n/a

Source: Institutions cited.

The Table above illustrates a range of fiscal forecasts. Differences with the European Commission and OECD's forecasts, particularly in relation to general government debt, can be attributed primarily to timing.

Table 12: Budgetary Projections 2016-2021

€ million	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
CURRENT BUDGET						
Expenditure						
Gross Voted Current Expenditure	51,980	53,495	54,715	56,070	57,520	58,960
Non-Voted (Central Fund) Expenditure	9,755	9,550	9,640	9,530	9,290	8,595
Gross Current Expenditure	**61,735**	**63,045**	**64,355**	**65,600**	**66,805**	**67,550**
less Expenditure Receipts and Balances	11,550	11,840	11,880	11,945	12,040	12,130
Net Current Expenditure	**50,185**	**51,210**	**52,475**	**53,650**	**54,770**	**55,425**
Receipts						
Tax Revenue	48,135	50,620	53,570	56,535	59,395	62,445
Non-Tax Revenue	2,740	2,615	1,820	1,985	1,900	1,740
Net Current Revenue	**50,870**	**53,235**	**55,385**	**58,525**	**61,295**	**64,185**
CURRENT BUDGET BALANCE	**685**	**2,025**	**2,910**	**4,870**	**6,525**	**8,760**
CAPITAL BUDGET						
Expenditure						
Gross Voted Capital	4,165	4,535	5,295	6,070	6,675	7,285
Non-Voted Expenditure	1,010	1,095	1,100	1,090	1,090	1,090
Gross Capital Expenditure	**5,175**	**5,630**	**6,395**	**7,160**	**7,765**	**8,375**
less Capital Receipts	285	270	270	270	270	270
Net Capital Expenditure	**4,890**	**5,360**	**6,125**	**6,890**	**7,495**	**8,105**
Capital Resources	**2,760**	**1,185**	**950**	**1,235**	**945**	**955**
CAPITAL BUDGET BALANCE	**-2,130**	**-4,175**	**-5,175**	**-5,660**	**-6,550**	**-7,150**
Contingency Reserve	**0**	**0**	**0**	**1,000**	**1,000**	**1,000**
EXCHEQUER BALANCE	**-1,445**	**-2,150**	**-2,260**	**-1,785**	**-1,020**	**610**
GENERAL GOVERNMENT BALANCE	**-2,400**	**-1,235**	**-820**	**540**	**2,135**	**3,720**
% of GDP	**-0.9%**	**-0.4%**	**-0.3%**	**0.2%**	**0.7%**	**1.1%**
Government Expenditure Ceiling	**56,145**	**58,030**	**60,010**	**62,140**	**64,195**	**66,245**
Ex post Real GDP %	**4.2**	**3.5**	**3.8**	**3.6**	**3.0**	**2.8**
Ex post GDP nominal €bn	**263.1**	**275.1**	**288.7**	**302.9**	**316.6**	**330.8**
Structural Balance % GDP	*-1.9*	*-1.1*	*-0.5*	*0.0*	*0.6*	*1.1*
Structural Effort (pp)	0.3	0.8	0.6	0.5	0.6	0.5

Source: Department of Finance
Figures are rounded to the nearest €5 million.

Table 13: Budget 2017 Exchequer Forecast (Alternative Format)

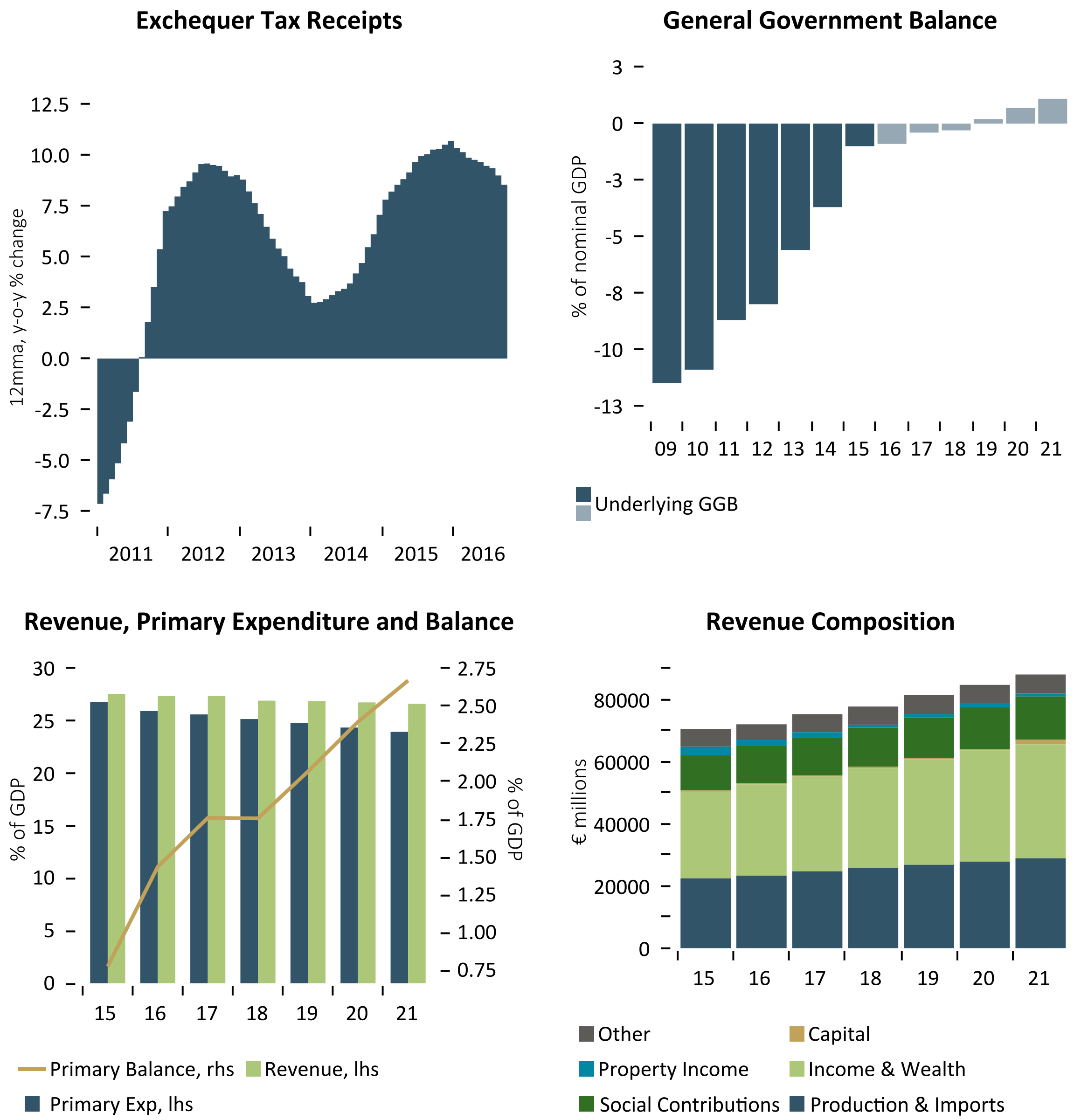
	2016 €m	2017 €m	Y-on-Y €m	Y-on-Y %
(A) REVENUE	**61,903**	**64,450**	**2,547**	**4.1%**
Tax Revenue	**48,135**	**50,620**	**2,485**	**5.2%**
Income tax	19,185	20,245	1,060	5.5%
VAT	12,630	13,375	745	5.9%
Corporation tax	7,515	7,715	200	2.7%
Excise duties	5,645	5,985	340	6.0%
Stamp duties	1,220	1,335	115	9.4%
Local property tax	460	460	0	0.0%
Customs	330	355	25	7.7%
Capital gains tax	695	710	15	1.8%
Capital acquisitions tax	455	440	-15	-3.1%
A-in-A's (Includes PRSI, NTF and balances)*	**11,836**	**12,109**	**273**	**2.3%**
Non-Tax Revenue	**1,814**	**1697**	**-118**	**-6.5%**
Central Bank surplus income	1,173	952	-221	-18.8%
Dividends	375	348	-27	-7.1%
Other	267	397	130	48.8%
Capital Resources	**118**	**24**	**-94**	**-79.7%**
Other	118	24	-94	-79.7%
(B) EXPENDITURE	**65,431**	**67,115**	**1,684**	**2.6%**
Gross Voted Current Expenditure	**51,982**	**53,493**	**1,511**	**2.9%**
Non-Voted Current Expenditure	**9,282**	**9087**	**-194**	**-2.1%**
Interest on National debt	6,762	6,296	-466	-6.9%
Debt management expenses	121	144	23	19.0%
Oireachtas Commission	125	120	-5	-4.2%
EU Budget Contribution	2,145	2,400	255	11.9%
Other	129	127	-1	-1.0%
Gross Voted Capital Expenditure	**4,167**	**4,535**	**368**	**8.8%**
(C) = (A-B) BALANCE EXCLUDING TRANSACTIONS WITH NO GENERAL GOVERNMENT IMPACT	**-3,528**	**-2,666**	**863**	**-24.4%**
NON GENERAL GOVERNMENT IMPACTING TRANSACTIONS				
(D) REVENUE	**3,567**	**2,079**	**-1,488**	**-41.7%**
Non-Tax Revenue	**924**	**917**	**-7**	**-0.8%**
Central Bank surplus income (No GG impact)	622	687	65	10.5%
Transfer from Local Government Fund	302	230	-72	-23.8%
Capital Resources	**2,643**	**1,162**	**-1,481**	**-56.0%**
Sale of Contingent Capital notes	1,600	0	-1,600	-100.0%
FEOGA	599	800	201	33.6%
Loan Repayments	443	360	-83	-18.7%
Other	0	1	1	n/a
(E) EXPENDITURE	**1,482**	**1,562**	**80**	**5.4%**
Non-Voted Current Expenditure	**473**	**465**	**-8**	**-1.7%**
Transfer of LPT to Local Government Fund	460	460	0	0.0%
Other	13	5	-8	-61.7%
Non-Voted Capital Expenditure	**1,009**	**1,097**	**88**	**8.7%**
FEOGA	800	800	0	0.0%
Capital Contribution to Irish Water	184	270	86	46.7%
Other	25	27	2	8.3%
(F) = (D-E) TRANSACTIONS WITH NO GENERAL GOVERNMENT IMPACT	**2,085**	**517**	**-1,568**	**-75.2%**
(G) = (C + F) EXCHEQUER BALANCE	**-1,443**	**-2,149**	**-706**	**48.9%**

Rounding may affect totals. This is for illustrative purposes only.

Additional information:				
Exchequer Primary Balance	**5,319**	**4,147**	**-1,172**	**-22.0%**

* A surplus of circa €665 million is estimated for the Social Insurance Fund and the National Training Fund in 2017

Figure 2: Fiscal trends

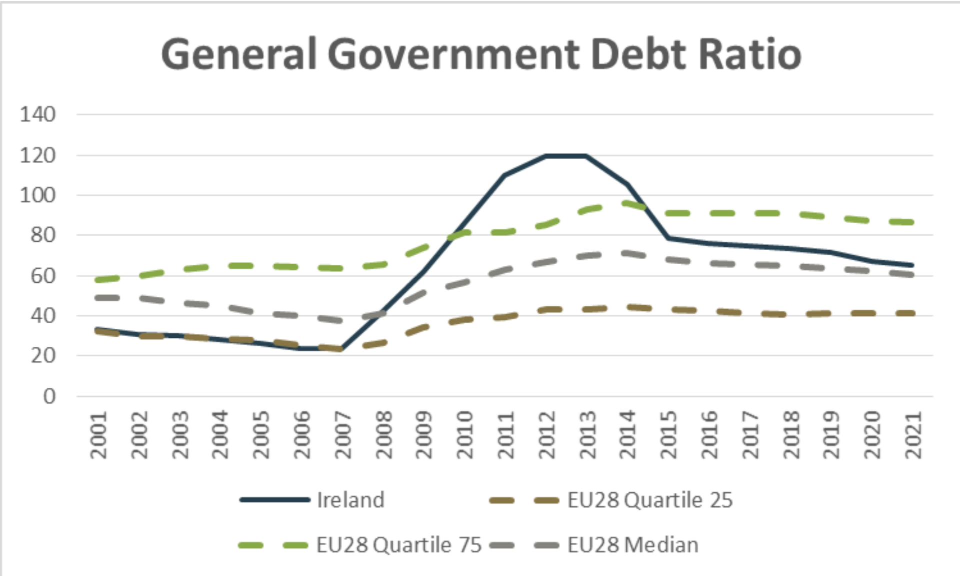


Source: Department of Finance

3.4 Debt Analysis and Funding Position

At end-2015 Ireland's general government debt to GDP ratio stood at 78.6 per cent. This is well below the euro area average of 92 per cent. The ratio has fallen considerably since the peak of just below 120 per cent in 2012 and 2013, particularly so in 2015 (see further detail below). Ireland is on track to meet the 60 per cent GDP ratio as mandated by the Stability and Growth Pact early in the next decade.

Figure 3: General Government Debt Ratio



Source: 2015, CSO; 2016-2021, Department of Finance, IMF

However the unexpected upwards revision to 32 per cent to the value of GDP for 2015 in the national accounts last July clearly shows that, while compiled in line with international standards, the information content in key macro-economic aggregates – particularly for GDP and GNP – is less relevant for Ireland than for elsewhere. This reflects the increasing impact of globalisation on the Irish economy. It also reflects how changes to international statistical classifications, introduced some years ago, can have a disproportionate impact on measures of economic activity in Ireland (examples include the classification within national accounts of aircraft leasing activity as well as corporate restructuring and so-called 'contract manufacturing' activity). Box 4 sets out these alternative debt metrics.

In view of the evident distortion to the GDP figures, it would be inappropriate to place too much reliance on the debt to GDP metric. The issue of alternative or complementary indicators therefore arises. In addition the Minister for Finance announced in Budget 2017 a lower debt target of 45 per cent to be reached through prudent macroeconomic and fiscal policies by the middle to late part of the next decade. While this is dependent on economic growth, the projected timing down does not factor in proceeds from the sale of banking assets, which will be used to lower debt.

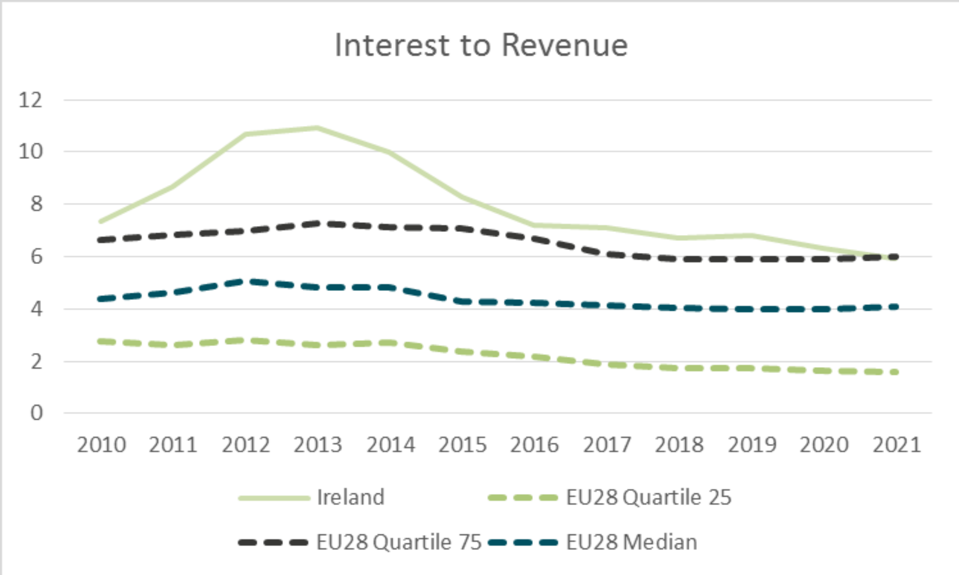
Box 4 – Debt Sustainability – Alternative metrics for Ireland

Debt sustainability can be assessed on the basis of different debt and debt-service indicators relative to measures of repayment capacity. As well as GDP, repayment capacity can be measured in terms of fiscal revenue.

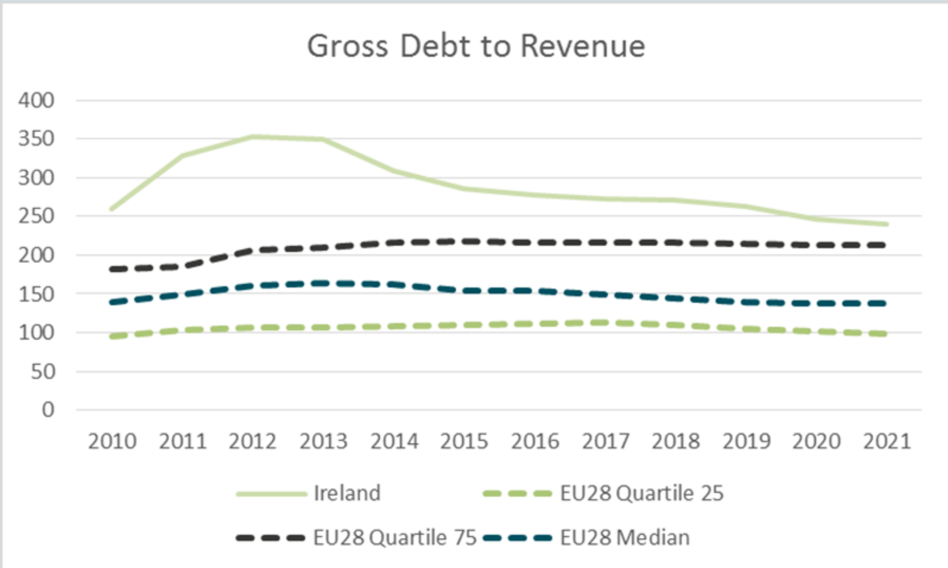
Revenue based ratios such as debt as % of government revenue and debt interest as percentage of government revenue measure are more reflective of the State's ability to generate the resources to service its debts. As these measures relate more to domestic revenues they are less prone to distortion by the effects of Globalisation on the Irish economy.

Assessment of the alternative metrics:

The tables and charts below set out Ireland's performance using Revenue ratios along with appropriate international comparators.



Source: 2010-2015, CSO, IMF; 2016-2021, Department of Finance, IMF



Source: 2010-2015, CSO, IMF; 2016-2021, Department of Finance, IMF

The charts in Box 4 show Ireland is outside the interquartile range for debt performance using Revenue ratios. This reflects the significant increase in Ireland's debt during the financial crises. However prudent management of the public finances mean that these metrics have peaked and are now falling, a positive development in the context of our debt sustainability.

In addition, Debt Sustainability Analysis undertaken by the IMF shows that Ireland's debt dynamics are relatively favourable.

Current Debt Position and Outlook

The improvement in the forecast debt to GDP ratio for end-2016 compared with that from the Summer Economic Statement (SES) is 12 percentage points. This is primarily due to the large revision to 2015 GDP in the July 2016 National Accounts.

Aided by a primary budget surplus forecast at 1.4 per cent of GDP for this year, end-2016 debt is now forecast at €200 billion or 76 per cent of GDP. The debt stock at end-2016 is forecast to be just over €1 billion lower than at end-2015, [the third successive year of decline]. This can be largely explained by lower Government bond balances outstanding.

The forecast movement of debt levels and debt dynamics can be seen in Table 14. The debt ratio is expected to continue its decline over the forecast horizon due to favourable debt dynamics including robust economic growth.

An increase in surplus of the Social Insurance Fund (SIF) in the medium term and the creation of a "Rainy Day" fund in 2019 are reflected in the "Other" category. The change in liquid assets in 2020 reflects a much reduced 2021 funding requirement.

Table 14: General Government Debt Developments

	2015	2016	2017	2018	2019	2020	2021
Gross debt (€bn)	201.1	200.0	204.5	209.8	212.8	208.2	208.4
(% of GDP)							
Gross debt	78.6	76.0	74.3	72.7	70.2	65.8	63.0
Change in gross debt (=1+2+3)	-28.9	-2.6	-1.7	-1.7	-2.4	-4.5	-2.7
Contributions to change in gross debt ratio:							
1. General Government Deficit	1.9	0.9	0.4	0.3	-0.2	-0.7	-1.1
2. Stock-flow adjustment	-2.7	-1.4	1.2	1.5	1.2	-0.8	1.2
3. Nominal GDP contribution to Δ in debt ratio	-28.1	-2.2	-3.3	-3.5	-3.4	-3.0	-2.8
Composition of GGB							
4. General Government Balance	-1.9	-0.9	-0.4	-0.3	0.2	0.7	1.1
5. Interest expenditure	-2.6	-2.4	-2.2	-2.1	-1.9	-1.7	-1.5
6. Primary balance (= 4 - 5)	0.7	1.4	1.8	1.8	2.1	2.4	2.7
Composition of stock-flow adjustment							
7. Change in liquid assets	-0.5	-1.2	0.7	0.9	0.3	-1.8	0.1
8. Interest adjustments	0.0	0.2	0.1	0.1	0.1	0.1	0.0
9. Equity transactions	-1.6	-1.0	-0.4	-0.3	-0.4	-0.3	-0.3
10. Accrual adjustments	0.2	0.2	0.2	0.2	0.2	0.2	0.1
11. Impact of NPRF	-0.6	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	-0.2	0.0	0.0	0.0	0.0	0.0
15. Other	0.1	0.5	0.4	0.6	0.9	0.9	1.2
Memorandum item:							
Average interest rate (%)	3.3	3.1	3.0	2.9	2.7	2.5	2.5

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 liabilities which comprise Gross Debt) is reported in table 15. 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.

Table 15 General Government Debt and Net General Government Debt

End-year	**2015**	**2016**
% of GDP		
General government debt (gross)	78.6%	76.0%
EDP debt instrument assets	11.7%	10.0%
Net debt position	66.9%	66.0%

Source: Department of Finance, NTMA , and CSO

Credit ratings

Ireland has investment grade status with all of the main rating agencies.

In February 2016, Fitch upgraded Ireland's long-term sovereign credit rating to A (from A-) with a stable outlook, citing improving debt dynamics and an expanding economy.

In May, Moody's upgraded the sovereign's long-term credit rating to A3, thereby placing Ireland in the A ratings category with all of the major credit rating agencies. Moody's noted Ireland's strong economic growth and a reduction in general government debt as contributory factors.

The current ratings with the three main rating agencies are outlined in Table 16 below

Table 16: Irish Sovereign Credit Ratings*

Rating Agency	**Long-term rating**	**Short-term rating**	**Outlook**
Standard & Poor's	A+	A-1	Stable
Moody's	A3	P-2	Positive
Fitch Ratings	A	F1	Stable

*As at mid-October 2016

Funding Developments

The NTMA announced in December 2015 that it planned to issue €6 to €10 billion of Government bonds in 2016.

As of end-September, €6.5 billion had been raised at a weighted average yield of 0.85 per cent and with a weighted average maturity of close to 10 years.

The issue, in January 2016, of a new 10-year benchmark bond via syndication raised €3 billion at a yield of 1.156%. There have also been four separate bond auctions, of the 2022 and 2026 bonds, raising €3.5 billion in total. Yields ranged from 1% in the February auction of the 2026 bond down to 0.157% in the May auction of the 2022 bond.

These transactions help to improve debt sustainability by locking in low interest rates and longer maturities.

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 2016.

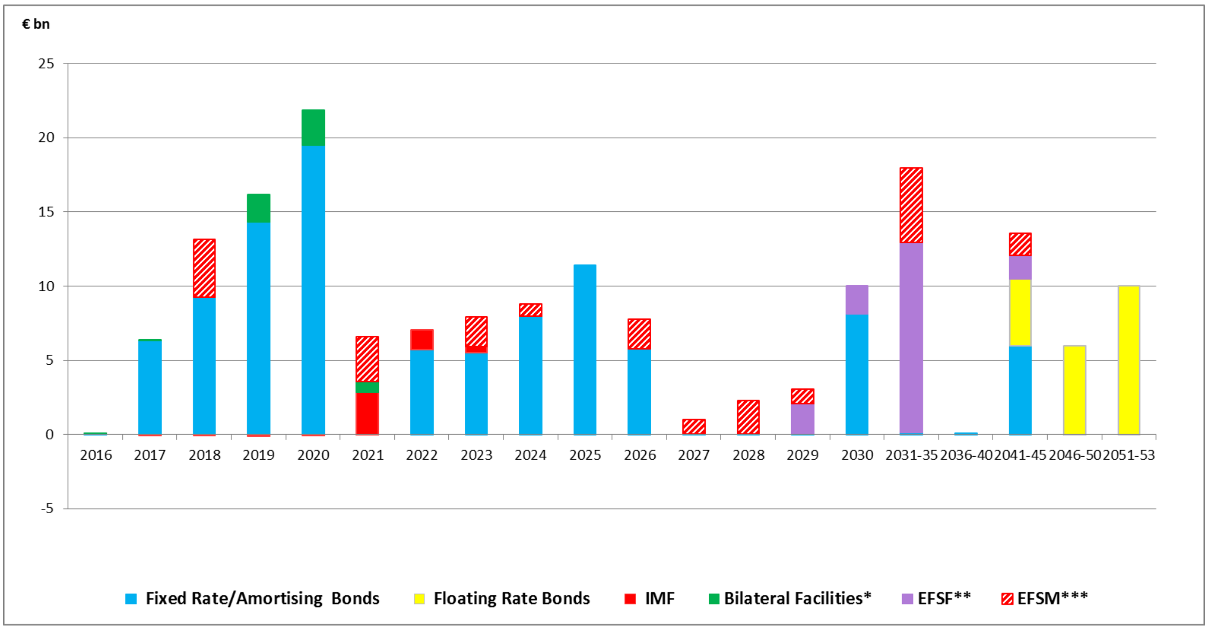
Yields generally continue to trend downward, reflecting Ireland's continuing economic and fiscal improvements but also ongoing ECB bond purchasing under its Quantitative Easing (QE) programme. At present, Irish Government bonds maturing out to 2023 are trading at negative yields.

The NTMA expects to hold year-end 2016 cash and liquid asset balances of approximately €8 billion. The next significant bond maturity is in the fourth quarter of 2017; the current balance outstanding is €6.3 billion.

Looking further ahead of the forecast horizon, there are significant bond redemptions to fund, particularly in 2019 and 2020 when four separate Government bonds mature. The current aggregate outstanding balance on these bonds is just under €34 billion. Bilateral loans from the UK, Denmark and Sweden also begin to mature in 2019. The next IMF maturity is in 2021.

Figure 4 below 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-September 2016.

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



Figures reflect the effect of currency hedging transactions, where applicable.
**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 outturn figures for actual GDP growth, the actual deficit and decisions on how any available 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 and revisions to Irish GDP data (the 26 per cent growth rate in 2015 being a case in point).

The medium-term fiscal projections outlined here reflect the Government's stated policy intention to use of available fiscal space (as set out in Annex Table A7). On the basis of the Department's projections, this will result in compliance with the provisions of the fiscal rules as set out in the preventive arm of the Stability and Growth Pact.

On the basis of these projections, the use of permitted net fiscal space of €1.2 billion in 2018 (an amount previously articulated in the SES), is consistent with delivery of a structural budgetary effort of 0.8 percentage points in 2017, followed by the further structural improvement in 2018 of 0.6 percentage points. These projections demonstrate that the MTO of a balanced budget in structural terms is met in 2018 and sustained thereafter.

Table 17: Cyclical developments

% of GDP (unless stated)	2015	2016	2017	2018	2019	2020	2021
1. Real GDP growth	26.3	4.2	3.5	3.8	3.6	3.0	2.8
Nominal GDP € billions	255.8	263.1	275.1	288.7	302.9	316.6	330.8
2. General government balance	-1.9	-0.9	-0.4	-0.3	0.2	0.7	1.1
3. Interest as % of GDP	2.6	2.4	2.2	2.1	1.9	1.7	1.5
4. One-off / temporary measures	-0.5	0.0	0.0	0.0	0.0	0.0	0.0
5. Potential GDP growth (%)	24.6	4.0	4.2	4.5	3.7	3.2	3.0
Contributions to potential growth							
- labour	1.4	1.7	1.7	1.8	1.2	0.6	0.4
- capital	16.2	0.1	0.4	0.6	0.4	0.5	0.5
- total factor productivity	5.8	2.1	2.1	2.0	2.0	2.0	2.0
6. Output Gap	**1.6**	**1.8**	**1.1**	**0.5**	**0.3**	**0.2**	**0.0**
7. Cyclical budgetary component	0.8	1.0	0.6	0.2	0.2	0.1	0.0
8. Structural budget balance [2-4-7]	-2.2	-1.9	-1.1	-0.5	0.0	0.6	1.1
9. Structural primary balance [2+3-4-7]	0.4	0.5	1.1	1.5	1.9	2.3	2.7

Source: Department of Finance. Estimates of output gap based on harmonised methodology and assume mechanical closure of output gap from 2019 onwards. For consistency with the Commission approach that will be used in the forthcoming *Autumn 2016* forecast (against which Budget 2017 projections will be assessed), statistical filers are run to 2018 with existing mechanical closure rules applied thereafter. Cyclical budgetary component based on estimated elasticity of 0.53 (EC-OECD 2015).

Local government parameters

The material in table 18 below represents a current best estimate of local government 2017 financing. These figures will be updated for the publication of the Revised Estimates Volume, which take into account further key elements in this process.

This table is published in line with the requirements of Regulation (EU) 473/2013, on common provisions for monitoring and assessing draft budgetary plans and ensuring the correction of excessive deficit of the euro-area Member States, which requires the main parameters of sub-sectors of general government to be included in the Budget.

Table 18: Preliminary estimate of local government capital and current income and expenditure for the forthcoming financial year

	€
Overall balance (1-2)	**1,098,530**
1. Total Revenues/Inflows	**6,048,290,653**
Rates/NPPR (net of bad debt provision for rates)	1,480,065,874
Property Income	1,312,670,435
Other Receipts	393,807,714
Inflows from Central Government[1]	2,799,311,591
Inflows from Operations in Financial Instruments[2]	62,435,038
2. Total Expenditure/Outflows	**6,047,192,122**
Compensation of Employees[3]	1,783,726,795
Interest Paid to Non-Government[4]	7,148,727
Social Benefits (Transfers in kind to households)	362,632,634
Capital Transfers (Capital grants paid)	1,790,633,235
Other Expenditure (Net of bad debt provision for rates)	1,985,408,684
Outflows to Central Government[5]	71,671,757
Outflows from Operations in Financial Instruments[6]	45,970,290

Figures may not sum due to rounding.
Source: Department of Environment, Community and Local Government
Notes

1. *Grants and subsidies*
2. *Loans*
3. *Including pensions*
4. *Interest paid other than to the HFA, OPW or NTMA*
5. *Interest and principal paid to the HFA, OPW and NTMA*
6. *Principal repaid, other than to the HFA, OPW or NTMA*

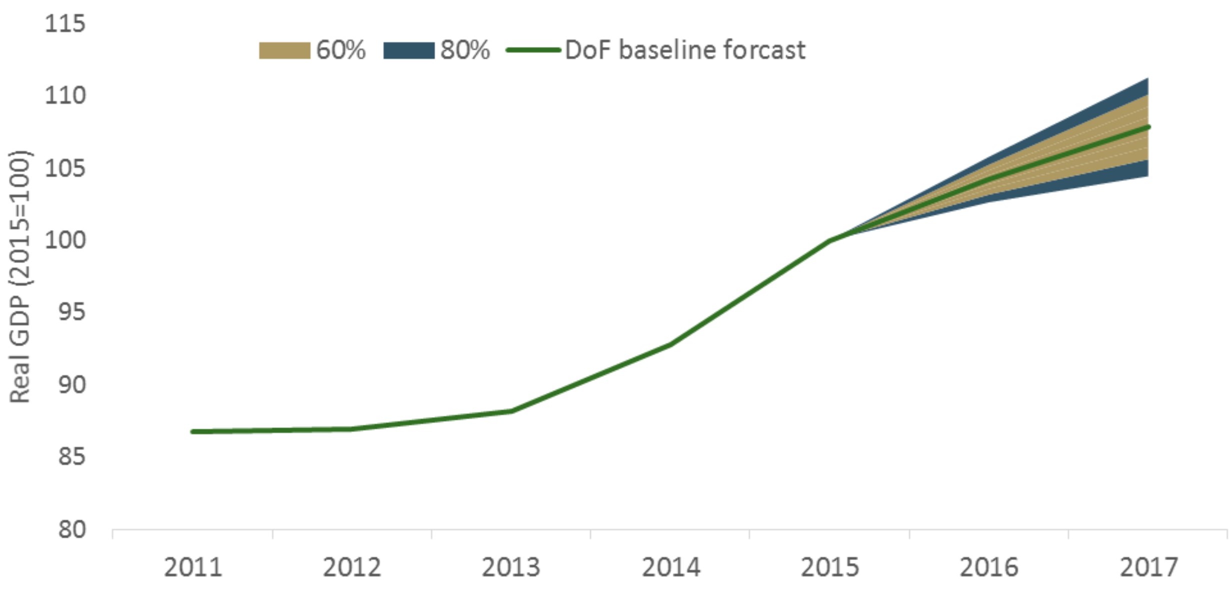
Chapter 4
Statement of Risks and Sensitivity Analysis

4.1 Summary

The central scenario is for GDP growth of 3.5 per cent next year. As is the norm, this is a contingent forecast – it is based on assumptions for key inputs such as demand in key export markets, exchange rate developments, 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. Using the ESRI's new COSMO model,[13] quantitative estimates of the impact of particular shocks on the Irish economy and on the public finances are also provided.

The balance of risk to the baseline forecast are firmly tilted to the downside, with the main risks on the external front. The heightened international uncertainty and Ireland's deep links with the global economy – which means that external shocks can rapidly pass-through to the domestic economy – and means that confidence bands around the central scenario are wide (see chart below).

Figure 5: Fan chart of Real GDP



The National Risk Assessment is an annual horizon scanning exercise in which broader risks to Ireland's well-being are assessed. It takes into account risks from an economic, environmental, geo-political, social and technological perspective to take a holistic view of all potential areas of risk. The NRA finds that the main risks in Ireland in 2016 pertain to

[13] Core Structural Model.

Brexit/uncertainty over the UK's relationship with the EU, weakening global economic growth, infrastructural deficits, international terrorism and expenditure pressures. The Department of Finance inputs into this national exercise in respect of economic risks.

4.2 Risks to the Economic and Fiscal Forecasts

A macroeconomic 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 19. The principal downside risks in the short-term relate to trading partner growth and euro-sterling bilateral exchange rate developments. Over the medium term, key risks include the concentrated nature of Ireland’s industrial base and competitiveness developments.

Similarly, a fiscal risk assessment matrix is set out in Table 20. This outlines the main identifiable risks impacting upon the fiscal position. These include downside domestic risks arising from the tax revenue forecasts, developments in the financial sector and the EU budget contribution channel. Externally-driven risks include bond market developments and changes to the macroeconomic drivers which underpin the tax forecasts.

Table 19: Macro-economic Risk Assessment Matrix

Risk	*Likelihood*	*Impact and main transmission channel*
External		
External demand shocks	**Medium**	**High** – growth prospects remain relatively subdued in many advanced economies (with evidence that part of the slowdown is structural rather than cyclical) while imbalances remain a feature of some Emerging Market Economies.
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	**High**	**High** – the euro-sterling rate has appreciated significantly over the past year, and further appreciation remains a distinct possibility with adverse implications for 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.
"hard-Brexit"	**High**	**High** – post-Brexit, a WTO-type arrangement between the EU and UK would have a detrimental impact on Irish-UK trade.
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 export-led 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 *inter alia* restricting the mobility of labour.

Table 20: Fiscal Risk Assessment Matrix

Risk	*Likelihood*	*Impact and main transmission channel*
Domestic		
Tax forecast and payment timeline asymmetry	**Medium**	**Medium** – the asymmetry between the 'two pack' requirement for an October budget and the strong distribution of certain receipts (self-employed or corporation tax) to later in the year increases risks to the forecast and means they contain an in-built potential for volatility.
Corporation tax concentration risks	**High**	**Medium** – corporation tax's share of overall revenues has averaged just about 12½% over the past decade with the 'Top 10' payers contributing about 40% share of this tax head. In turn this represents a potential concentration risk arising from idiosyncratic developments
Financial sector developments	**Low**	**Medium** – risks exist in relation to the non-payment (or lower- than-expected receipts) arising from the States stake in a number of banks. Distributions from the banks to their shareholders (including the State) are a function of ongoing business performance and outlook, regulatory requirements and are subject to bank board and supervisory approval over which the State has no control.
Receipts from resolution of financial sector crisis	**Low**	**Medium** – budgetary projections prudently exclude any assumptions around the States disposal of shareholding in a number of financial institutions. Also receipts from the termination of NAMA or wind-up of the Credit Union Restructuring Board are excluded. This is due to the difficulty in projecting the timing, prevailing market conditions or the final realised surplus funds around these. All of these represent a likely upside risk to the baseline scenario
EU Budget Contributions	**High**	**Low** – NIE data which is subject to frequent revision in normal times, can be revised significantly when the statistical rules change e.g. the introduction of ESA 2010. This has a significant fiscal impact through the EU Budget channel and represents a specific fiscal exposure.
Contingent liabilities	**Low**	**Medium** – A large but declining exposure remains in relation to the guarantees relating to NAMA and the Eligible Liabilities Guarantee (ELG) Scheme. NAMA's senior debt is less than a [1/5^{th}] of its peak level, with the ELG scheme to wind-up by March 2018. Table 21 sets out more detail.
External		
Bond market conditions	**Low**	**Medium** – government financing has benefitted from supportive bond market conditions. Any change this environment could lead to an unanticipated rise in debt interest. However, as the bulk of outstanding public debt is at fixed rates, this helps to mitigate this risk.
Changes to tax 'drivers'	**Medium**	**Medium** – macroeconomic 'drivers' are used to forecast taxation receipts. As an economy evolves in response to emerging developments, changing the assumptions which underpin the tax forecasts, these point-in-time fiscal estimates can vary.
EU-level climate change and energy developments	**High**	**High** – Ireland is obliged to reduce greenhouse gas emissions by 20% on 2005 levels by 2020. EPA projections indicate that will not be met without the purchase of additional emissions allowances, the cost of which cannot be quantified at present. Proposals for Ireland's share of the EU commitment to reduce emissions by at least 40% by 2030 are currently being examined across relevant sectors in terms of cost-effectiveness and feasibility.

Contingent liabilities

A contingent arises in a situation where past or current actions or events create the risk of a call on the Exchequer funds in the future. The 2015 Appropriation Accounts for the year ended 31 December 2015[14] were published in September. While the amounts are not all quantifiable, notes on the contingent liabilities are listed in the Appropriation Accounts of the various votes.

The Other[14] category in Table 21 relates to entities such as CIE, Insurance Acts, Housing Finance Agency and the Credit Guarantee Act. Additional details on most of these can be accessed in the 2015 Finance Accounts (Statement 1.11).

Table 21: Contingent Liabilities (at end-year)

% of GDP	**2013**	**2014**	**2015**
Public guarantees	31.1	13.1	5.0
of which linked to the financial sector			
Eligible Liabilities Guarantee	11.1	5.3	1.3
National Asset Management Agency	19.2	7.0	3.2
Other[15]	0.8	0.8	0.5

Source: Department of Finance, CSO

The National Asset Management Agency (NAMA) recently announced that it has redeemed another €1 billion of Senior bonds, a cumulative redemption of €4.5 billion in the year-to-date. This brings to €26.6 billion the amount of total NAMA Senior Debt that has been redeemed, or 88%, of €30.2 billion senior debt, leaving €3.6 billion outstanding.

Other liabilities

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 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).

The Department of Public Expenditure and Reform publishes information on the PPP programme including the level of estimated outstanding future financial commitments in nominal terms arising under existing PPP contracts. The calculation of the contractual capital value of all Irish PPPs as at 31st December 2015 is €0.5 billion on the government balance sheet, and €4.1 billion off-balance sheet. In total, this is €4.6 billion.

The Department of Public Expenditure and Reform measures the accrued liability of the pension promises the State has made to its serving and former employees[16]. The most recent estimate was in 2012 for €98 billion. The separate liability for State pensions is assessed as part of the

[14] http://audgen.gov.ie/documents/annualreports/2015/appacc/en/appaccs2015.pdf
[15] http://www.finance.gov.ie/what-we-do/public-finances/annual-finance-accounts/finance-accounts/finance-accounts-2015
[16] http://www.per.gov.ie/en/public-service-pensions-accrued-liability/

actuarial reviews of the Social Insurance Fund (SIF) which are carried out at 5 yearly intervals. An actuarial review of the SIF is being carried out for completion in 2017[17]. 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.

Ireland is committed to providing capital to international organisations of which it is a member. This can take the form of paid-in capital and callable capital. Paid-in capital is funding which has already been contributed to organisations, whereas callable capital is funding which may be called on only as and when required by the organisations[18]. 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.

4.3 Sensitivity Analysis

In order to assess the vulnerability of the Irish economy to changes in the baseline inputs, results of simulations using the new ESRI COSMO macroeconomic model are reported in Table 22 below. Results of three stylised shocks are presented:

- A 1 percentage point deterioration in world demand;
- A 1 per cent loss in domestic competitiveness;
- A 10 per cent increase in domestic house prices.

In each case the 'shock' is assumed to occur in year 't' and results in each of the simulations give the full impact of the shocks, i.e. no policy response is assumed.

[17] http://www.welfare.ie/en/downloads/2010actuarialreview.pdf
[18] http://www.finance.gov.ie/sites/default/files/FINANCE%20ACCOUNTS%202015%20-%20To%20PrintRoom%2009.08.2016.pdf

Table 22: Sensitivity analysis

	t	t+1	t+2	t+3	t+4	t+5
	1% decrease in World Demand					
Percent deviation from baseline:						
GDP	-0.8	-1.0	-1.0	-1.1	-1.1	-1.1
Employment	-0.5	-0.5	-0.6	-0.6	-0.7	-0.7
Percentage point deviation from baseline:						
General Government Balance, % GDP	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3
General Government Gross Debt, % GDP	1.3	1.6	2.0	2.3	2.7	3.0
Unemployment Rate, %	0.4	0.5	0.6	0.6	0.6	0.6
	1% decrease in Competitor Prices					
Percent deviation from baseline:						
GDP	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3
Employment	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2
Percentage point deviation from baseline:						
General Government Balance, % GDP	0.0	0.0	-0.1	-0.1	-0.1	-0.1
General Government Gross Debt, % GDP	0.4	0.5	0.5	0.6	0.7	0.8
Unemployment Rate, %	0.1	0.1	0.2	0.2	0.2	0.2
	10% increase in House Prices					
Percent deviation from baseline:						
GDP	0.2	0.2	0.1	0.1	0.1	0.1
Employment	0.2	0.2	0.1	0.1	0.1	0.1
Percentage point deviation from baseline:						
General Government Balance, % GDP	0.1	0.1	0.0	0.0	0.0	0.0
General Government Gross Debt, % GDP	-0.6	-0.7	-0.7	-0.7	-0.7	-0.6
Unemployment Rate, %	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1

Source: Department of Finance analysis using the ESRI's COSMO macroeconomic model.

Chapter 5
Budgetary Reform

5.1 Summary

Recent years have seen significant reforms implemented to the budgetary framework to facilitate a more transparent, inclusive and effective budgetary process. The Programme for a Partnership Government contains a number of commitments concerning reform of the budgetary process to facilitate more participation in and scrutiny of budgetary proposals by the Oireachtas, including the establishment of an independent Budget Office within the Oireachtas.

The annual budget process now involves a number of elements, starting with publication of the Spring/Summer Economic Statement which sets out the broad parameters for macroeconomic growth and the fiscal outlook and constraints over the medium term. This is followed by the National Economic Dialogue in June/July, the objective of which is to facilitate an open and inclusive exchange on the competing economic and social priorities facing the Government. In July 2016, the Government published a Mid-Year Expenditure Report for the first time. This Report presents the baseline for Departmental expenditure and provides the starting point for examination of budgetary priorities by the Oireachtas. A further development in the reformed Budget process is the circulation in July by the Department of Finance of Tax Strategy Papers to the relevant sectoral Oireachtas Committees. The Tax Strategy Papers set out existing measures across all tax heads, contain issues for discussion and costed options for tax changes, taking Programme for Government commitments into account.

The Committee on Budgetary Oversight was established in July 2016 to enhance the role of the Oireachtas in the budgetary formation process. The Committee will review the macroeconomic and fiscal issues that form part of budget considerations, and will be supported in its work by the independent Oireachtas Budget Office. The Committee may make recommendations to the Government suggesting changes to revenue raising or expenditure.

5.2 Social Impact and Equality Analysis

The Programme for a Partnership Government published in May 2016 set out a commitment to developing a process of budget and policy proofing as a means of advancing equality, reducing poverty and strengthening economic and social rights. The following paragraphs set out the stages in the budget process at which equality and distributional issues are explicitly addressed and recent developments in these areas.

Each year, the Department of Finance, independently and in conjunction with other Departments, conducts a number of analyses to examine the distributional impact of possible Budget options and of the final Budget package. These provide an evidence base on equality issues which can be integrated alongside other budgetary considerations.

The Tax Strategy Group (TSG) meets annually in advance of the Budget. Its membership comprises senior officials and advisors from the Departments of Finance, Public Expenditure & Reform, An Taoiseach, Jobs Enterprise & Innovation, Social Protection and the Revenue Commissioners. In line with the TSG's terms of reference – which include assessing the interaction of tax and social welfare proposals and the impact of this interaction on the income distribution – the Department of Finance and the Department of Social Protection prepare papers which examine each of the main taxation areas as well as the distributional impacts of a range of tax and social welfare options. Included in the 2016 TSG Income Tax and USC paper are details of the distribution of the burden of these taxes, international comparisons, and analysis of potential impacts on different groups of a range of possible reforms.

As part of the reformed Budget Process in 2016, papers were brought to the TSG much earlier than was the case in previous years. The TSG papers were circulated to the Oireachtas Committees in July, well in advance of the Budget and facilitating the Committees in considering distributional issues. They were subsequently published on the Department of Finance website.

Two sections of the TSG papers in particular examine the potential distributional impact of possible tax and welfare measures by income group and family type using the ESRI's "SWITCH" model. The model is used before and after the Budget to establish the overall impact of policy changes in a manner which is as representative as possible of all households. The distributional impact by family type in the SWITCH model facilitates comparisons of policy impacts on families with and without children, by employment or retirement status and for lone parents. Developments in the SWITCH model have facilitated analysis of new measures and more comprehensive examination of existing measures, for example, capturing the impact of the Early Childhood Care and Education scheme. A full Social Impact Assessment (SIA) detailing the overall budgetary impact will be published by the Department of Social Protection in a timely manner after the Budget in order to inform the debates on the Finance Bill and the Social Welfare Bill.

Like previous Budgets, Annex A of the Taxation Annex to the Summary of 2017 Budget Measures contains information relating to the distributional effects of the Budget measures. Distribution tables show the impact of Budget measures for different categories of married/civil partners and single income earners across a range of incomes. There are also tables showing the average effective tax rate for different categories of income earners for 2017 and the previous number of years.

Information is also provided on the distribution of income earners in terms of numbers exempt from Income Tax, numbers paying Income Tax at the standard rate and at the higher rate for both the current year and the following year. A number of illustrative cases are also provided to demonstrate the impact of the Budget changes.

Also included as part of the Taxation Annex is a comparative examination of income tax and progressivity issues. Annex B looks at the role of the tax and welfare system in narrowing the initial income distribution and how the progressivity of the income tax system contributes to this outcome.

As part of progressing the commitments set out in the Programme for Government, the Department of Public Expenditure and Reform has recently developed a new SIA framework. The aim of the framework is to broaden the scope of the current SIA practice to take account of not only tax and social welfare measures, but also assess how changes in public expenditure policy can impact on household outcomes and living standards. By doing so it may, in the future, be possible to compare the distributional impact of changes to various types of public service spending and the implications for household outcomes. Depending on the available data, the impacts of expenditure in certain policy areas may also be examined with regard to certain group characteristics e.g. age, gender, regional spread. In the future, the aim will be to expand the assessment, in so far as is possible within the available data constraints, to encapsulate the impact of a particular policy measure on other identified groups. For further details on the new SIA Framework, please refer to the Expenditure Report.

Annex 1

Irish Fiscal Advisory Council's Endorsement of the Macroeconomic Forecast

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Cearnóg Whitaker
Cé Sir John Rogerson
Baile Átha Cliath 2

Whitaker Square
Sir John Rogerson's Quay
Dublin 2

06 October 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 *Budget 2017* will be based.[1] The *Budget 2017* forecasts were provided to the Council on 22 September 2016 and discussed by the Council with Department of Finance staff on 04 October 2016, ahead of the Council's endorsement meeting.

The Council's approach to endorsement of the macroeconomic forecasts has three elements: a comparison of the Department of Finance's macroeconomic 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 (IFAC) endorses as within the range of appropriate projections the set of macroeconomic forecasts prepared by the Department of Finance for *Budget 2017* for the years 2016 and 2017.

The Council's endorsement refers only to the actual demand-side projections. The data published by the CSO in the 2015 National Accounts create particular challenges for the estimation of supply-side variables such as potential output and the output gap. These measures have a major influence on the operation of the fiscal rules. A mechanical application of the Commonly Agreed Methodology (CAM) could have seriously distorted the measures used to assess compliance with the fiscal rules, thereby potentially also distorting budgetary policy over the medium term. The Council has reviewed the technical adjustments to the CAM applied by the Department of Finance following engagement with the European Commission. The Council is satisfied that they reflect an appropriate response to the challenges caused by the revised National Accounts data.

In a number of recent reports, the Council has argued that it is essential that the Department of Finance develops a fuller picture of the supply side complementary to the Commonly Agreed Methodology, which is used primarily for fiscal surveillance by the European Commission. While the Council recognises that the scale of the challenges created by the revised National Accounts data has interrupted this work, 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 November.

Yours sincerely,

John M. Hale

John McHale, Chair.

[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".

IFAC-endorsed macroeconomic forecasts

Endorsed and final forecasts

The following tables set out the forecast which have been endorsed by IFAC and the final forecasts which underpin the Budget.

Both endorsed and final forecasts are based on external assumptions which were finalised in mid-September. Whilst the final macroeconomic forecasts underpinning the Budget incorporate a Budget package of €1.3 billion, the fiscal assumptions underpinning the endorsed forecast assumed a Budget package in the order of €1.2 billion in 2017 as the precise measures in Budget 2017 had not been finalised.

A reconciliation between the final and endorsed forecasts is included in the tables below (forecasts covering the period 2018-2021 are not subject to endorsement by IFAC).

Table B1: Macroeconomic developments

	2016 *final*	**2017** *final*	**2017** *endorsed*	**Difference (pp)**
	year-on-year % rate of change (unless otherwise stated)			
Real GDP	4.2	3.5	3.5	-
Nominal GDP	2.8	4.5	4.5	-
Components of real GDP				
Personal consumption	3.3	2.9	2.8	+0.1
Government consumption	5.9	2.4	2.4	-
Gross fixed capital formation	15.8	6.0	6.0	-
Stock changes (% of GDP)	0.6	0.6	0.6	-
Exports of goods and services	3.6	4.5	4.5	-
Imports of goods and services	5.9	5.1	5.1	-

Source: Department of Finance forecasts.
Note: Rounding may affect totals.

Table B2: Price developments

	2016 *final*	**2017** *final*	**2017** *endorsed*	**Difference (pp)**
	year-on-year % rate of change			
GDP deflator	-1.3	1.0	1.0	-
Personal consumption deflator	1.1	2.0	1.9	+0.1
HICP	-0.1	1.3	1.2	+0.1
Export price deflator	-2.4	0.5	0.5	-
Import price deflator	-1.1	1.1	1.1	-

Source: Department of Finance forecasts
Note: Rounding may affect totals

Table B3: Labour market developments

	2016 *final*	2017 *final*	2017 *endorsed*	Difference (pp)
	year-on-year % rate of change			
Employment, persons	2015	2059	2058	-
Unemployment rate (%)	8.3	7.7	7.8	-0.1
Labour productivity, persons	1.6	1.4	1.4	-
Compensation of employees	5.7	4.9	4.9	-
Compensation per employee	2.9	2.7	2.7	-

Source: Department of Finance forecasts
Note: Rounding may affect totals.

Table B4: Sectoral balances

	2016 *final*	2017 *final*	2017 *endorsed*	Difference (pp)
	% GDP			
Current account (% of GDP)	9.4	8.2	8.3	-0.1

Source: Department of Finance forecasts

Annex 2

Additional Fiscal Statistics and Tables

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
	outturn			projected			
(a) Exchequer balance	-60	-1,445	-2,150	-2,185	-1,785	-1,020	610
(b) Exclude equity and loan transactions	-4,600	-2,635	-1,025	-980	-1,260	-1,025	-1,055
(c) Adjust for interest accrual	520	575	230	265	260	320	-50
(d) Adjust for tax accruals	245	370	420	375	345	340	310
(e) Adjust for other accruals	180	265	165	145	180	175	160
(f) Net lending/borrowing of non-commercial State bodies	-400	-75	135	140	0	190	215
(g) Impact of ISIF/NPRF	-1,460	205	335	350	355	365	365
(h) Net Surplus of the Social Insurance Fund	30	370	665	1,050	1,425	1,780	2,150
(i) Net Surplus of other EBF's	60	-25	-15	25	20	15	15
(j) Net (Borrowing)/Surplus of Local Government	695	0	0	0	0	0	0
(k) Rainy Day Fund	0	0	0	0	1,000	1,000	1,000
(l) General government balance (=a to l)	-4,785	-2,400	-1,235	-820	540	2,135	3,720
(m) Financial sector measures	2,115	15	0	0	0	0	0
(n) Underlying balance	-2,670	-2,385	-1,235	-820	540	2,135	3,720
(o) General government balance as % of GDP	-1.9%	-0.9%	-0.4%	-0.3%	0.2%	0.7%	1.1%
(p) Underlying balance as % of GDP	-1.0%	-0.9%	-0.4%	-0.3%	0.2%	0.7%	1.1%
(q) Nominal GDP	255,815	263,085	275,050	288,710	302,915	316,610	330,845

Sources: Department of Finance, Department of Public Expenditure and Reform, Central Statistics Office (CSO) and National Treasury Management Agency (NTMA) 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. 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 Transfers between units within the general government sector do not affect the general government balance.
k. As announced in the Summer Economic Statement 2016, once the MTO is achieved it is proposed to retain within the Exchequer a contingency reserve which, if not deployed in the event of an unanticipated adverse shock to the economy, will be remitted to the rainy day fund towards the end of each year in order to provide a counter-cyclical buffer.
g. This is the net lending/borrowing of the ISIF. This fund is within the general government sector and transactions within the sector do not have an impact on the general government balance.
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	-4,785	-1.9	-0.9	-0.4	-0.3	0.2	0.7	1.1
p.m.: Indicative balance		-2,670	-1.9	-0.9	-0.4	-0.3	0.2	0.7	1.1
2. Central government	S.1311	-5,480	-2.1	-0.9	-0.4	-0.3	0.2	0.7	1.1
3. State government	S.1312								
4. Local government	S.1313	695	0.3	0.0	0.0	0.0	0.0	0.0	0.0
5. Social security funds	S.1314	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
General government (S.13)									
6. Total Revenue	TR	70,535	27.6	27.4	27.4	27.0	26.9	26.7	26.6
7. Total Expenditure	TE	75,320	29.4	28.3	27.8	27.2	26.7	26.1	25.5
8. Net lending/borrowing (=6-7)	B.9	-4,785	-1.9	-0.9	-0.4	-0.3	0.2	0.7	1.1
9. Interest expenditure	D.41	6,695	2.6	2.4	2.2	2.1	1.9	1.7	1.5
10. Primary balance (= 1 + 9)		1,910	0.7	1.4	1.8	1.8	2.1	2.4	2.6
11. One-off and other temporary measures		-1,356	-0.5	0.0	0.0	0.0	0.0	0.0	0.0
Selected components of revenue									
12. Total taxes (12=12a+12b+12c)		50,735	19.8	20.2	20.2	20.2	20.2	20.2	20.2
12a. Taxes on production and imports	D.2	22,455	8.8	8.9	9.0	8.9	8.9	8.8	8.7
12b. Current taxes on income, wealth etc.	D.5	27,880	10.9	11.1	11.1	11.1	11.2	11.3	11.1
12c. Capital taxes	D.91	400	0.2	0.2	0.1	0.2	0.2	0.2	0.4
13. Social contributions	D.61	11,390	4.5	4.5	4.5	4.5	4.4	4.3	4.3
14. Property Income	D.4	2,660	1.0	0.7	0.7	0.3	0.4	0.3	0.3
15. Other		5,755	2.2	1.9	2.0	2.0	1.9	1.8	1.8
16. (=6) Total revenue (=12+13+14+15)	TR	70,535	27.6	27.4	27.4	27.0	26.9	26.7	26.6
p.m.: Tax burden		62,660	24.5	25.0	24.9	24.9	24.8	24.8	24.8

Selected Components of Expenditure									
17a. Compensation of employees	D.1	18,875	7.4	7.5	7.5	7.3	7.0	6.7	6.4
17b Intermediate consumption	P.2	9,270	3.6	3.8	3.5	3.5	3.4	3.4	3.3
18. Social payments (18 = 18a+18b)		28,250	11.0	10.7	10.5	10.0	9.6	9.2	8.9
18a. Social transfers in kind supplied via market producers	D.63	4,015	1.6	1.5	1.5	1.4	1.3	1.3	1.3
18b. Social transfers other than in kind	D.62	24,235	9.5	9.2	9.0	8.6	8.2	7.9	7.7
19=9 Interest expenditure	D.41	6,695	2.6	2.4	2.2	2.1	1.9	1.7	1.5
20. Subsidies	D.3	1,785	0.7	0.6	0.6	0.6	0.6	0.5	0.5
21. Gross fixed capital formation	P.51	4,345	1.7	1.7	1.8	2.0	2.2	2.2	2.2
22. Capital transfers	D.9	3,480	1.4	0.5	0.5	0.5	0.5	0.5	0.5
23. Other		2,630	1.0	1.1	1.2	1.1	1.1	1.1	1.1
24. Resources to be allocated		0	0.0	0.0	0.0	0.2	0.5	0.8	1.1
24=7 Total expenditure (= 17+18+19+20+21+22)	TE	75,320	29.4	28.3	27.8	27.2	26.7	26.1	25.5
p.m. : Government consumption (nominal)	P.3	32,100	12.5	12.8	12.5	12.3	12.1	11.9	11.4
Gross domestic product at current market prices	B.1*g	255,815	255,815	263,085	275,050	288,710	302,915	316,610	330,845

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

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.

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 excludes 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 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 and capital grants. It also includes acquisitions less disposals of non-produced assets such as royalties, mobile phone licences and the licence to operate the National Lottery.
- Item 24: Resources to be allocated is an estimate of current resources available to be allocated to departments during subsequent budgets.

Memo items:

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

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 Receipts and Expenditures (Nominal)

Description	ESA code	2015	2016	2017	2018	2019	2020	2021
Revenue								
Taxes on production and imports	D.2	22,455	23,430	24,740	25,760	26,835	27,860	28,900
Current taxes on income, wealth	D.5	27,880	29,305	30,460	32,160	33,915	35,660	36,605
Capital taxes	D.91	400	440	360	440	475	500	1,475
Social contributions	D.61	11,390	11,940	12,385	12,880	13,300	13,745	14,185
Property Income	D.4	2,660	1,930	1,830	895	1,095	1,080	940
Other		5,755	5,105	5,545	5,705	5,820	5,840	5,925
Total revenue	TR	70,535	72,150	75,320	77,840	81,440	84,680	88,035
Expenditure								
Compensation of employees	D.1	18,875	19,700	20,550	20,935	21,075	21,200	21,330
Intermediate consumption	P.2	9,270	9,885	9,720	10,100	10,360	10,630	10,930
Social payments	D.6	28,250	28,105	28,780	28,830	28,985	29,205	29,460
Interest expenditure	EDP_D.41	6,695	6,205	6,085	5,960	5,735	5,380	5,035
Subsidies	D.3	1,785	1,660	1,650	1,670	1,685	1,695	1,705
Gross fixed capital formation	P.51	4,345	4,585	5,075	5,755	6,580	6,830	7,210
Capital transfers	D.9	3,480	1,440	1,510	1,520	1,525	1,565	1,580
Other		2,630	2,970	3,185	3,295	3,405	3,465	3,515
Resources not allocated		0	0	0	600	1,550	2,570	3,550
Total expenditure	TE	75,320	74,550	76,555	78,660	80,900	82,545	84,315
General government balance	B.9=TR-TE	-4,785	-2,400	-1,235	-820	540	2,135	3,720

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.

Table A2.3: Comparison of Vintages of Receipts and Expenditures for 2016

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

Document		SPU 2016	Budget 2017	Total Δ	Methodology Δ	New Data Δ	Other Δ	notes
Revenue								
Taxes on production and imports	D.2	23,785	23,430	-355		-355	0	1
Current taxes on income, wealth	D.5	28,195	29,305	1,110		1,110	0	1
Capital taxes	D.91	345	440	95		95	0	1
Social contributions	D.61	11,735	11,940	205		205	0	1
Property Income	D.4	1,995	1,930	-65			-65	5
Other		5,345	5,105	-250			-240	3,4
Total revenue	TR	71,400	72,150	745		1,055	-305	
Expenditure								
Compensation of employees	D.1	20,010	19,700	-315	-595	280	0	6
Intermediate consumption	P.2	9,815	9,885	65		11	59	2
Social payments	D.631, D62	27,685	28,105	420		18	402	2,3
Interest expenditure	EDP_D.41	6,290	6,205	-85		-85	0	
Subsidies	D.3	1,695	1,660	-35		-185	150	3
Gross fixed capital formation	P.51	3,985	4,585	600		600	0	2
Capital transfers	D.9	1,545	1,440	-105			-105	3
Other		2,860	2,970	110			110	3
Total expenditure	TE	73,880	74,550	665		639	31	
General government balance	B.9=TR-TE	-2,480	-2,400	80				

Source: Department of Finance

Notes- Rounding may affect totals.

-Table A2.3 compares the forecast of receipts and expenditures for 2016 as set out in SPU 2016 with the current forecast (October 2016).

The new layout of this table presents the changes in vintages of 2016 data since the Stability Programme Update 2016, April 2016.

The differences (Δ) are set out under the following categories:

1. The difference in tax is due to revisions to the tax forecasts as published in the budget 2017
2. Expenditure increases reflect the increased expenditure included in the 2016 estimates published by the Department of Public Expenditure and Reform in the Expenditure Report 2017

3. Data is benchmarked to most recent Government Finance Statistics as published by the Central Statistics Office
4. Suspension of Irish Water
5. Revision to dividend income
4. In the July GIE publication, to improve the quality of COE, CSO utilised the P35 data which is a reliable and consistent data source and utilised right across National accounts

Table A3: General Government interest expenditure 2015-2021

€ millions	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
National Debt Cash Interest	6,979.1	6,762.0	6,296.0	6,230.0	6,011.0	5,708.0	4,963.0
% tax revenue	*15.3%*	*14.0%*	*12.4%*	*11.6%*	*10.6%*	*9.6%*	*7.9%*
% of GDP	*2.7%*	*2.6%*	*2.3%*	*2.2%*	*2.0%*	*1.8%*	*1.5%*
National Debt Cash Interest Accruals	-45.7	-295.7	5.2	-92.1	-142.6	-260.1	60.3
Consolidation and Grossing Adjustments	-48.4	-44.8	-69.3	-87.2	-115.3	-104.3	-71.1
accrued promissory note interest	-11.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	-181.0	-218.2	-146.8	-90.4	-18.9	34.7	83.5
Total Interest on ESA2010 basis	6,693.0	6,203.3	6,085.1	5,960.3	5,734.2	5,378.3	5,035.7
% total general government revenue	*9.5%*	*8.6%*	*8.1%*	*7.7%*	*7.0%*	*6.4%*	*5.7%*
% of GDP	*2.6%*	*2.4%*	*2.2%*	*2.1%*	*1.9%*	*1.7%*	*1.5%*

Sources: CSO, Department of Finance and NTMA
Notes: Rounding may affect totals

Table A4: Projected movement in General Government Debt 2015-2021

€ billion	2015	2016	2017	2018	2019	2020	2021
Opening general government debt	203.3	201.1	200.0	204.5	209.8	212.8	208.2
Exchequer borrowing requirement	0.1	1.4	2.1	2.2	1.8	1.0	-0.6
Change in Exchequer Deposits	-1.2	-3.2	2.1	2.6	0.8	-5.6	0.2
Net lending of NCSSBs	0.2	0.1	0.1	0.4	0.0	-0.5	0.1
Net lending of local government	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Change in collateral held	-0.2	-0.4	0.0	0.0	-0.1	0.0	-0.1
Other	-0.8	0.9	0.3	0.2	0.5	0.5	0.5
Closing general government debt	201.1	200.0	204.5	209.8	212.8	208.2	208.4
General government debt to GDP ratio	78.6%	76.0%	74.3%	72.7%	70.2%	65.8%	63.0%

Sources: CSO, Department of Finance and NTMA

Notes: Rounding may affect totals

Table A.5: Breakdown of revenue

	2016	2016	2017	2018	2019	2020	2021
	€ billion	% of GDP					
Total Revenue at unchanged policies	72.1	27.4	27.4	27.0	26.9	26.8	26.6
Discretionary revenue#	-0.7	-0.3	-0.1	0.0	0.0	0.0	0.0

Source: Department of Finance.

This only includes discretionary revenue measures (DRMs) that further modify the revenue forecasts. It does not include DRMs where these have already been included in the baseline forecasts.

Table A6: Budgetary Plans

% of GDP	2015	2016	2017	2018	2019	2020	2021
1. General government balance	-1.9	-0.9	-0.4	-0.3	0.2	0.7	1.1
2. Structural balance	-2.2	-1.9	-1.1	-0.5	0.0	0.6	1.1
3. Cyclical budgetary component	0.8	1.0	0.6	0.2	0.2	0.1	0.0
4. One-offs and other temporary measures	-0.5	0.0	0.0	0.0	0.0	0.0	0.0
5. General government balance	-1.9	-0.9	-0.4	-0.3	0.2	0.7	1.1
6. Total revenues	27.6	27.4	27.4	27.0	26.9	26.8	26.6
7. Total expenditure	29.4	28.3	27.8	27.2	26.7	26.1	25.5
Amounts to be excluded from the expenditure benchmark							
7a. Interest expenditure	2.6	2.4	2.2	2.1	1.9	1.7	1.5
7b. Expenditure on EU programmes fully matched by EU funds revenue	0.1	0.2	0.2	0.2	0.2	0.2	0.2
7c. Cyclical unemployment benefit expenditure***	-0.1	-0.1	0.0	0.0	0.0	-0.1	-0.2
7d. Effect of discretionary revenue measures	-0.1	-0.4	-0.1	0.0	0.0	0.0	0.0
7e. Revenue increases mandated by law							
8. Tax burden*	24.5	25.0	24.9	24.9	24.8	24.8	24.8
9. Gross debt**	78.6	76.0	74.3	72.7	70.2	65.8	63.0

Sources: CSO, Department of Finance and NTMA

Notes: Rounding may affect totals

Table A7: Application of Expenditure Benchmark on a no policy change from 2018 onwards

€ billions unless otherwise stated	2015	2016	2017	2018	2019	2020	2021
1. General government expenditure (a)	75.2	74.5	76.6	77.3	78.2	78.6	79.2
2. Interest expenditure	6.7	6.2	6.1	6.0	5.7	5.4	5.0
3 Government expenditure co-financing EU expenditure	0.4	0.4	0.5	0.5	0.5	0.6	0.6
4. Gross fixed capital formation (GFCF)	4.3	4.6	5.1	5.0	5.6	5.8	6.2
5. Smoothed 4-year GFCF	3.9	4.2	4.5	4.8	5.1	5.4	5.7
6. Cyclical unemployment expenditure	-0.3	-0.4	- 0.2	- 0.2	-0.3	-0.6	-1.0
7. Corrected expenditure aggregate [1-2-3-(4-5)-6]	68.0	67.8	69.7	70.8	71.7	72.8	74.0
8. Net discretionary revenue measures (DRM)(b)		-0.9	-0.0	0.5	0.4	0.4	0.4
9. Corrected expenditure agg. net of DRM [7-8]		68.7	69.7	70.3	71.3	72.4	73.6
Macroeconomic developments (c)							
Reference rate of potential growth (RR)		1.9	3.3	3.1	3.3	3.4	3.3
GDP deflator (PVGD)		1.7	1.1	1.1	1.2	1.4	1.5
Convergence margin (CM)		1.8	2.0	1.7	-	-	-
Benchmark growth rate applied (RR-CM)		0.0	1.3	1.4	3.3	3.4	3.3
Real expenditure growth rate		-0.7	1.6	-0.2	-0.5	- 0.4	-0.4
10. Permitted nominal expenditure growth [1+(RR-CM)*(1+PVGD)-1)*100]		1.8	2.4	2.6	4.6	4.8	4.9
11. Permitted expenditure ceiling [7t-1*10]		69.2	69.4	71.5	74.0	75.2	76.4
12. Gross fiscal space available [11t-7t-1]		1.2	1.6	1.8	3.2	3.5	3.6
13. Total pre-committed expenditure (d)			1.9	0.6	0.6	0.7	0.8
Net fiscal space available [12+8-13]			-0.2	1.2	2.7	2.7	2.7
Deviation in year t from benchmark ceiling € bns)		0.5	-0.2	1.2	2.7	2.7	2.7
Deviation as % GDP (negative indicates breach of benchmark)		0.3	-0.1	0.4	0.9	0.9	0.8

Source: Department of Finance

Notes: (a) General government expenditure takes account of the €300m increase in expenditure profiled for 2016 in line with the revised estimates process. This amount has a permanent impact on the spending base in each year from 2016 onwards. The 2017 figure includes €200m in respect of EU budget contribution which may not be met within the benchmark ceiling.

(b)Relative to SES 2016, DRMs exclude dividend revenues and reflect changes in estimated first year-full year tax measure effects.

(c) Reference rate and convergence margin values for 2017 frozen based on European Commission *Spring 2016* forecasts. Without this freezing, the 2017 RR would be 0.4 lower using *Budget 2017* estimated paths for potential GDP and would reduce 2017 net space available by 280m. RR values for 2018 onwards calculated using interpolated linear average value of 3.7 per cent for 2015 not the 25 per cent potential growth figure for 2015. CM for 2018 calibrated based on required effort to reduce the 2017 structural deficit within the margin of MTO compliance in 2018 on an ex-ante basis. This leaves estimated net fiscal space for 2018 of €1.2 billion broadly unchanged relative to SES 2016.
All values for 2018 onwards are estimates and remain subject to change until the Spring forecast of the preceding year. Net fiscal space available at time of SES was €300m higher per annum over 2019 to 2021. The now lower reference rates over 2018-21 reflect lower actual and potential GDP growth relative to SPU 2016.
(d) Pre-committed spending covering voted expenditure including demographics, capital commitments, central fund, general government elements and non-voted expenditure. Adjustment for DRM's is also included.

Annex 3

Macro-Economic aggregates to 2021 on a no policy change from 2018

	2015	2016	2017	2018	2019	2020	2021
% change unless specified				year-on-year change			
Real GNP	18.7	7.5	3.3	3.2	3.0	2.6	2.4
Real GDP	26.3	4.2	3.5	3.4	3.2	2.8	2.6
Nominal GDP (rounded to nearest €25m)	255,825	263,075	275,050	287,700	300,575	313,100	326,050
Components of GDP				year-on-year real percentage change			
Personal consumption	4.5	3.3	2.9	2.2	1.8	1.5	1.3
Government consumption	1.1	5.9	2.4	1.3	1.0	0.9	0.9
Investment	32.7	15.8	6.0	4.7	4.3	3.5	3.4
Stock changes (% of GDP)	0.5	0.6	0.6	0.6	0.5	0.5	0.5
Exports	34.4	3.6	4.5	4.8	4.7	4.2	4.0
Imports	21.7	5.9	5.1	4.8	4.5	4.1	3.9
Contributions to real GDP growth				Annual percentage point contribution			
Domestic demand	8.9	5.1	2.8	2.1	1.9	1.6	1.5
Stock changes	-0.8	0.1	0.0	0.0	0.0	0.0	0.0
Net exports	18.3	-1.0	0.7	1.3	1.4	1.2	1.1
Price developments							
HICP	0.0	-0.1	1.3	1.8	1.9	1.9	1.9
GDP deflator	4.9	-1.3	1.0	1.1	1.2	1.4	1.5
Personal Consumption Deflator	0.7	1.1	2.0	2.1	2.1	2.1	2.1
Labour market				year-on-year real percentage change			
Employment	2.6	2.6	2.1	2.1	1.8	1.6	1.4
Unemployment (QNHS basis)	9.5	8.3	7.7	7.3	6.9	6.5	6.1
Labour Productivity (GDP per person employed)	23.1	1.6	1.4	1.4	1.4	1.2	1.1
Compensation of Employees	5.7	5.7	4.9	4.8	4.6	4.3	4.1
Compensation per Employee	2.8	2.9	2.7	2.7	2.7	2.7	2.6
External				Per cent of GDP			
Current Account (% of GDP)	10.2	9.4	8.2	7.8	7.7	7.6	7.5
Cyclical Developments				Annual percentage point contribution			
Potential GDP Growth	24.5	3.9	4.2	4.3	3.4	2.9	2.8
Contribution to potential Growth							
- Labour	1.3	1.6	1.7	1.7	1.2	0.6	0.4
- Capital	16.2	0.1	0.4	0.5	0.2	0.3	0.3
- Total factor productivity	5.8	2.1	2.1	2.0	2.0	2.0	2.0

Annex 4
Changes to the EU harmonised methodology to reflect national accounts revisions

Methodological issues

Significant revisions to the pattern of Irish growth seen in the July 2016 national accounts data create difficulties for estimation of the cyclical position of the economy using the commonly agreed methodology (CAM) also called the harmonised methodology. Sharp increases in the level of both GDP and the measured capital stock distort estimates of potential GDP.

Given the important policy implications of this, the Department initiated consultations with both the Fiscal Advisory Council and the European Commission with a view to adjusting the methodology to eliminate these distortions. Three elements of the methodology have been changed for Ireland. The net result is to significantly boost the level of estimated potential GDP in 2015 and leave the estimated output gap broadly unchanged from previous estimates.

Potential GDP is estimated by measuring contributions from capital and extracting the trend component (i.e. the part not related to the economic cycle) from both labour and total factor productivity (TFP).

Capital

Starting with capital, changes to the level of measured capital stock in 2015 as a result of NIE revisions were especially pronounced, with preliminary estimates suggesting a real increase in net stock of over 50 per cent in annual terms. As a result, the contribution from capital to the level of potential GDP growth has also increased sharply to over 16 per cent. As the increase in investment in 2015 was significantly outweighed by balance sheet relocation impacts, the rate of implied depreciation following the standard (perpetual inventory method or PIM) method reaches an implausible -43 per cent in 2015. This is likely to reflect the strong appreciation in capital stock levels. For 2016 onwards, the adjusted rate of real depreciation consistent with the harmonised methodology is now in the region of 7-7 ½ per cent.

Productivity

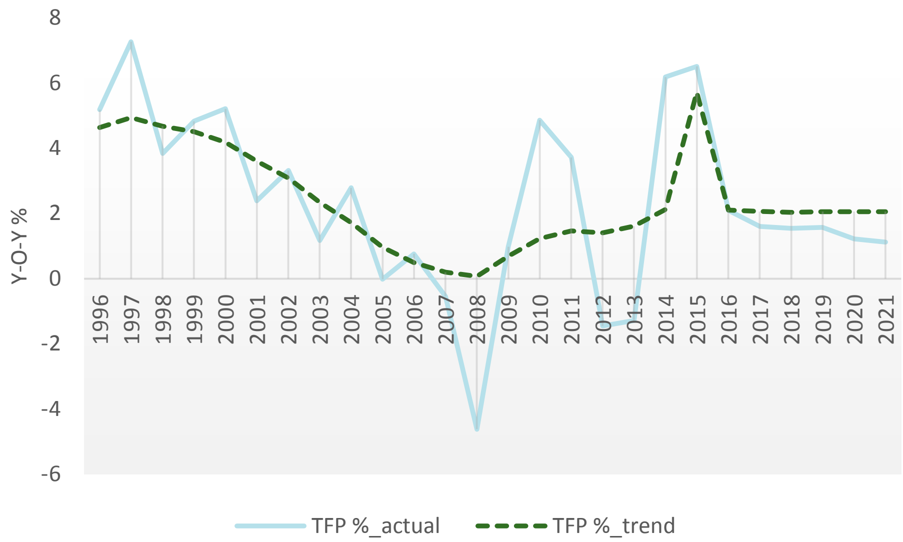
Whilst the on-shoring of intellectual property and the associated balance sheet relocations in 2015 lead to a very sharp upward revision to the level of measured capital stock, this increase alone does not fully explain the upward revision in actual GDP growth to 26 per cent. This suggests there has been an upward shift in the level of total factor productivity (TFP), possibly reflecting the higher capital productivity associated with these new on-shored assets. This discrete shift in the level of TFP for Ireland is now captured within the methodology by incorporating a dummy into the Kalman filter used to extract the trend from actual TFP. Specifically, a dummy is included for all years beyond 2015 to reflect this break in TFP, with this shift considered to be part of trend TFP (i.e. p_t^*)

$$tfp_t = p*_t + c_t$$

$$u_t = \mu_u + \beta c_1 + \varepsilon_{ut}$$

$$p_t^* = p_t + \gamma d_t$$

where d_t= 0 if t< 2015, 1 otherwise; p denotes trend; c denotes cycle; and u denotes capacity utilisation.



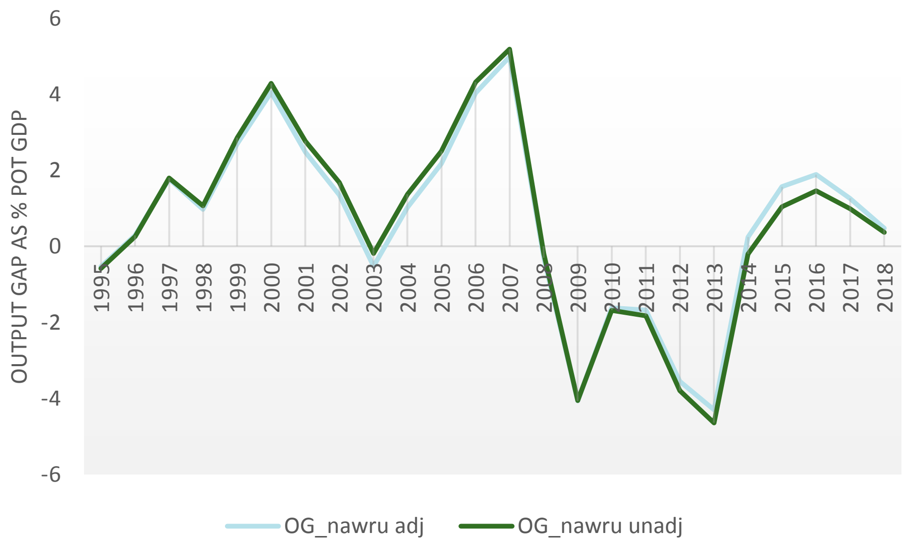
Labour

On the labour side, the Philips Curve is used to link the change in inflation to the gap between observed and structural levels of unemployment. Revisions to national accounts have led to a distortion in measured real unit labour costs, with change in the latter not reflective of wage dynamics in the Irish labour market. This one-off disturbance is handled by including a dummy within the Philips Curve specification as follows:

$$\Delta rulc_t = \Delta rulc_{t-1} - \left[\, \beta_1(U_t - U_t^*) + \beta_2(U_{t-1} + U_{t-1}^*) + D_1 + D_2 \right]$$

where D1 = 1 for 2015 and D2 = 1 for 2016 (since Δrulc enters with a lag). Rulc = real unit labour costs, u* = structural rate of unemployment or NAWRU; u = actual unemployment rate.

This inclusion serves to re-establish the fit of the overall Philips Curve for Ireland, without which wage inflation could not correctly identify the unemployment gap. The chart below demonstrates the impact of incorporating these dummies on the path for the output gap.



Summary impacts

Without the combined impact of the changes in how the trend element of labour and TFP are calibrated, the output gap in 2015 would have been a full percentage point higher, and the corresponding level of potential GDP growth some 3 ½ percentage points lower. If this higher output gap were used, it would worsen the 2015 structural budgetary position by some 0.5 percentage points, leaving greater distance to travel in terms of returning the economy towards the budgetary objective or MTO of a balanced budget in structural terms.

Policy implications

Notwithstanding these changes, harmonised estimates of potential output growth suggest the underlying capacity of the economy has undergone a discrete jump of over 20 percentage points in 2015 alone. The Department does not share this view and strongly maintains that it would not be appropriate for the government to undertake policy commitments based on an inflated sense of the economy's ability to grow. For this reason, the smoothed reference rates indicated in Annex Table A7 as part of the expenditure benchmark pillar of the fiscal rules are calculated using an interpolated linear average value of 3.7 per cent for 2015, rather than the 25 per cent potential growth figure for 2015 implied by the harmonised methodology.