# APPENDIX A: FISCAL COUNCIL BENCHMARK PROJECTIONS 23 MARCH

As part of the endorsement process, the Council's Secretariat produced a set of Benchmark projections in advance of its meetings with the Department of Finance. The Benchmark projections were finalised on 23 March 2015 and are summarised in Appendix Table A.1.

% change in volumes unless otherwise stated	2015	2016	2017
GDP	4.0	3.7	3.4
Consumption	2.2	1.9	2.0
Investment	10.4	11.0	6.3
Government	1.1	1.0	1.0
Stock changes (% of GDP)	0.9	0.9	0.9
Exports	4.3	4.4	5.0
Imports	4.3	4.6	5.0
Net Exports (p.p. contribution)	1.0	0.8	1.2
Domestic Demand (p.p. contribution)	3.0	2.9	2.2
Stock Changes (p.p. contribution)	0.0	0.0	0.0
Current Account (% GDP)	6.4	6.1	5.9
Employment	2.3	2.2	1.7
Unemployment Rate (%)	9.8	8.9	8.2
НІСР	0.2	1.3	1.5
GDP Deflator	2.3	1.8	1.5
Nominal GDP (€ billions)	197.3	208.3	218.5
Nominal GDP	6.4	5.6	4.9

### APPENDIX TABLE A.1: BENCHMARK PROJECTIONS FOR 2015-2017

Source: Internal IFAC calculations.

The Council's "endorsable range" is informed by, but not mechanically linked to, the uncertainty captured in fan chart analysis. The fan chart approach is also applied retrospectively so that uncertainty around outturn revisions can also be graphically represented (Figure 2.10).

The fan chart bands for the historical period effectively show the typical scale of revisions applying to historical estimates of real GDP growth over a five year period.<sup>1</sup> As detailed in Casey and Smyth (2015), typical confidence intervals surrounding estimates for the latest annual outturn are not especially narrower than that for the current forecast year.<sup>2</sup> While this source of uncertainty

<sup>&</sup>lt;sup>1</sup> Quill (2008) notes that in practice CSO data beyond five years rarely changes materially except for methodological reasons.

<sup>&</sup>lt;sup>2</sup> Revisions for the latest full-year of data are typically large, especially when it comes to the first estimate of real GDP growth (i.e., with the release of the fourth quarter QNA results). A typical Root Mean Squared Error (RMSE) value of 1.6 for the previous full year of data compares to a RMSR of 1.8 for the current year's forecast. This means that the uncertainty surrounding the current forecast year can be little less than that of the previous year for which four

narrows after the *NIE* release in summer, large uncertainties around the most recent annual outturns can still remain.<sup>3</sup>

It is important to note that the fan chart for the forecast period is symmetric by construction even though the Council may interpret the balance of risks to be weighted in a certain direction at a given point in time.

quarters of data are available. The RMSR for the previous year narrows to 0.9 after the release of the *National Income and Expenditure* accounts in the summer of each year, but remains relatively large.

<sup>&</sup>lt;sup>3</sup> The fan chart is based on the typical scale of revisions that can be expected after the NIE release (i.e., after the second vintage of estimates for the previous annual outturn) and is, therefore, more aligned with the information available at the time of the budgetary endorsement exercise.

## APPENDIX B: HOUSE PRICE RISKS UPDATE

The Council continues to monitor various indicators with respect to housing market trends given the attendant risks to both economic activity and to the public finances. This section updates previous analyses using the latest available data.

Appendix Figure B.1 gives a summary analysis highlighting the rise in housing valuations from their recent trough. Taking simple ratios of prices to disposable incomes and rents would suggest valuations were similar to those observed in the late-1990s/early-2000s.<sup>4</sup> User costs appear to have reduced substantially, but actual price expectations may be overstated when using recent historical price changes.<sup>5</sup> Indeed, survey expectations appear to have moderated following the introduction of new macroprudential regulations that limit mortgage lending. All else being equal, the lower survey-based price rise expectations would suggest more neutral user costs of capital in housing.

Supply pressures seem likely to contribute to upward price pressure in the near term, however. Overall completions of new housing have begun to rise, yet remain shy of estimated demand in regions like Dublin city and its suburbs.

More sustainable solutions to shortages might seek to address barriers to construction responses in the form of regulations and associated costs as highlighted by Lyons (2014). Weak early-2014 data on planning permissions appear to confirm some lags to supply responses and representative groups indicate concerns that this could be linked to policy delays (SCSI, 2015).

As noted in previous *FARs*, risk assessment of the housing market would be well served if more frequent regional analyses were produced as migration and other assumptions evolve. Data availability with respect to regional household numbers and current and projected housing stocks could also be improved on. This would help to ensure that the risks of price growth expectations becoming dislodged from fundamentals are limited in future.

<sup>&</sup>lt;sup>4</sup> McQuinn (2014) uses a variety of models to estimate the percentage difference between actual and fundamental Irish house prices based on quarterly data for 1981-2013. As of their last estimate (for Q4 2013), prices were estimated to be 12-27 per cent below fundamental values.

<sup>&</sup>lt;sup>5</sup> The recent four-quarter average is used here and implies price growth of 14.3 per cent over the next twelve months. However, survey price expectations from Daft.ie taken in December 2014 showed twelve-month expectations fell back to less than 4 per cent following the introduction of the macroprudential regulations.

Even with recent increases, real prices average close to 40 per cent below peak levels.

#### **Real Residential Property Prices (HICP adj.)**



Valuations have risen slightly from low levels in part due to the localised supply pressures.

# **Housing Valuation Ratios**



adjusted personal disposable income per capita.

Loan volumes continue to show a steady rise from their low base.

#### **Annualised Residential Mortgage Lending**

First-time buyer and mover purchaser loans



... and supply pressures remain evident, most notably in Dublin.

APPENDIX FIGURE B.1: IRELAND: HOUSING

### **Estimated housing requirements/completions** Units (000s)



cover urban settlements of 1,000+ persons

User costs derived from recent price rises appear negative, but survey expectations have moderated. User Cost of Capital for Housing (UCCH)



Sources: Central Bank of Ireland; CSO; ESRI/PTSB.

\* New mortgage rates less annual price change for past 4Qs.

\*\*Includes first-time buyer taxes/subsidies; down-payments; depreciation / maintenance.

...although - in net terms - negative loan growth continues to reflect household deleveraging.

## Loans to Irish Households for House Purchase



Note: Stock is proxied by Long-term loans; ESA-95 basis pre-2012.

# APPENDIX C: TIMELINE FOR ENDORSEMENT OF SPU 2015 PROJECTIONS

Date			
23 January	Department of Finance officials attend IFAC Council meeting for discussion regarding their approach to the production of medium-term forecasts and changes to the methodology for estimating potential output.		
12 March	CSO release Quarterly National Accounts estimates for Q2 2014.		
13 March	The Secretariat and Department of Finance met the CSO to clarify technical details of latest <i>Quarterly National Accounts</i> estimates.		
16 March	The Secretariat received Department of Finance technical assumptions underpinning <i>SPU 2015</i> forecasts. <sup>6</sup>		
23 March	After consideration by the Council, Benchmark projections are finalised by the Secretariat prior to receiving preliminary forecasts from the Department of Finance.		
24 March	The Council received preliminary forecasts from the Department in line with <i>Memorandum of Understanding</i> requirements.		
26 March	The first endorsement meeting took place with the Department of Finance presenting their forecasts to the Secretariat. A number of clarifications of a factual nature were requested.		
	relation to the forecast set. <sup>7</sup>		
27 March	The Department of Finance provided more details to IFAC in response to the queries received.		
30 March	The Council met to discuss the Department of Finance forecasts. Following this, Department of Finance staff met with the full Council and Secretariat to present their latest forecasts and to answer questions. The Council sought information regarding a number of forecast components. <sup>8</sup>		
31 March	The Council met to discuss the Department of Finance forecasts in detail and to finalise a decision on the endorsement.		
1 April	The Chair of the Council wrote a letter to the Secretary General of the Department of Finance endorsing the set of macroeconomic forecasts underlying <i>SPU 2015</i> .		
28 April	The endorsement decision is published together with the Department's forecasts in the Draft <i>SPU 2015</i> . This is formally submitted to the EC and the endorsement letter is published.		

<sup>&</sup>lt;sup>6</sup> These included assumptions related to oil prices, interest rates, exchange rates, Net expenditure by central and local government on current goods and services and sources of forecasts for major trading partners.

<sup>&</sup>lt;sup>7</sup> Mainly covering quarterly profiles, income assumptions and the breakdown of investment forecasts.

<sup>&</sup>lt;sup>8</sup> Primarily concerning expectations of medium-term expenditure growth and supply-side estimates, but also assumptions for incomes, savings rates, investment, credit conditions, the budgetary assumptions underpinning the forecasts and risks related to external assumptions.