Box E: Assumptions for Illustrative Medium-Term Expenditure Scenario

In order to construct a medium-term scenario, government expenditure is split into five headline components: health, education, social payments (including social welfare pensions), national debt interest and other. The assumptions used in generating the scenario are set out below and are in line with those commonly employed for an exercise of this type.

Health and Education

For health and education, pay and non-pay spending are modelled separately. The volumes of both pay and non-pay spending are linked to expected service demand arising from demographic changes. Price changes for pay and non-pay spending are indexed to relevant deflators. For health, service demand is proxied by the change in the number of under-65 equivalents in the population while for education demand is proxied by the change in the population of potential students. The pupil-teacher ratio is assumed to remain unchanged at its current level. Pay rates in both cases are assumed to grow in line with economy-wide per capita nominal wages, the forecasts for which are taken from *SPU 2015.* The volumes of non-pay expenditure in health and education are assumed to grow in line with expected demand linked to demographics. Prices are indexed to the GDP deflator.

Social Payments

This element of expenditure can be split into four broad components:

i. Old age payments: These are assumed to grow in line with the change in the population aged over 65 with payment rates indexed to growth in prices.
ii. Child related payments: The volume is estimated using the change in the population aged under 17. Payment rates are assumed to grow in line with prices.
iii. Unemployment benefits are linked to macro-economic dynamics rather than directly to demographics. The approach used is broadly the same as that applied by the Departments of Public Expenditure and Reform and Social Protection. This approach translated changes in unemployment to movements in the Live Register and then applies an average cost per individual.[1] The average cost term is indexed to price increases over the projection period.
iv. Other payments: these include disability payments, back to education allowance, back to work allowances and other social payments. This category is assumed to grow in line with the change in the total population and prices.

National Debt Interest

The Exchequer deficit is given by the gap between expenditure and revenue. National debt interest is calculated as the difference between the Exchequer balance projected in this scenario and the relevant figure underpinning *SPU 2015*, multiplied by the average interest rate. The gives the additional interest payments for a given year which is added to the interest bill on the outstanding stock of debt for the previous year to arrive at the figure

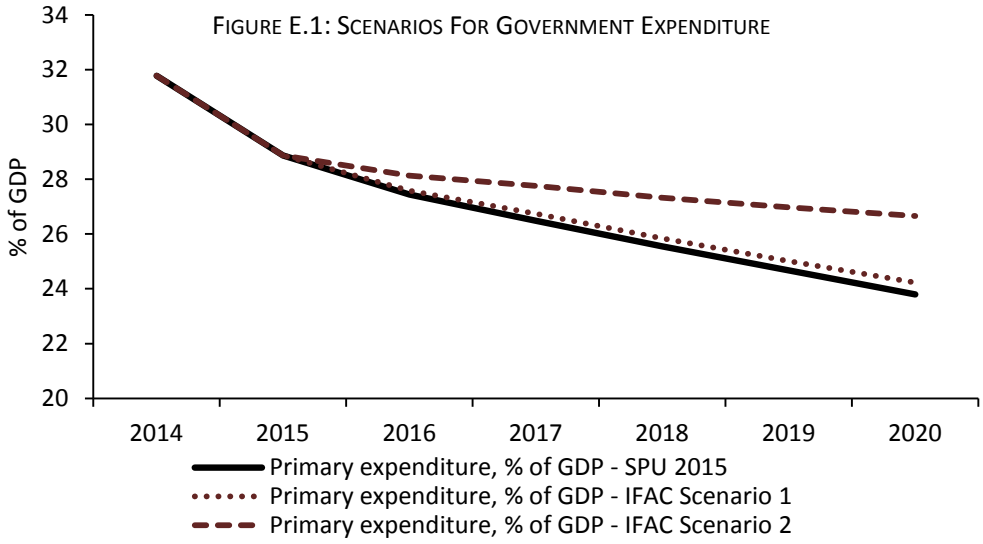
[1] This approach can be summarised as follows:

$$\mathrm{UB}_{t+1} = \mathrm{UB}_t + (\mathrm{LR}_{t+1} - \mathrm{LR}_t) * \mathrm{LRC}_t + (\text{New policy measures}) + \mathrm{J}_{t+1}$$

where, UB is the nominal sum of Jobseeker's Allowance and Jobseeker's benefit, LR is the average annual number of persons on the Live Register, LRC is the average cost per Live Register claimant and N is the net impact of new measures introduced in this area in the budget. The final term is assumed to be zero in the post 2016 period for this exercise.

for total national debt interest.

FIGURE E.1: SCENARIOS FOR GOVERNMENT EXPENDITURE



Note: Scenario 1 allows for demographic change with no indexation. Scenario 2 allows for demographic change plus indexation.
Source: Internal IFAC calculations.

Figure E.1 shows how the illustrative scenario is built up; firstly, adjustments for demographics are included; then provisions for increases in the cost of providing public services are made through indexation. While allowing only for demographics returns a spending profile that is broadly in line with the *SPU 2015* projections (which includes €300 million of spending increases for demographic pressures), accommodating increases in the cost of public services would result in expenditure being significantly higher than projected in *SPU 2015*.