Ireland, Ireland's economic volatility, the government's wider balance sheet,

long-term expenditure pressures and pension commitments might lead one

to conclude that a lower debt level would be more prudent.<sup>14</sup>

## Box B: The Appropriate Size of the Rainy Day Fund

This box examines the design of a Rainy Day Fund in terms of what is proposed in Casey *et al.* (2018). Specifically, it looks at one possible scenario for the potential size of the fund if it were to be operated on an appropriately countercyclical basis.

If the Rainy Day Fund is to be a truly countercyclical fund, it would need to be able to smooth through the changes in allowed spending growth rates over time. As noted in Casey *et al.* (2018), allowed spending growth under the fiscal rules tends to exhibit an excessively procyclical pattern: allowing growth rates that are too fast in good times, and too slow in bad times. If compared to the economy's long-term trend growth, this means that government spending is allowed to increase at an excessive pace in expansions, potentially leading to forced retrenchments in downturns (resulting in, for example, much slower spending growth or cuts to spending and tax increases).

## Illustrative Size of the Rainy Day Fund

The Rainy Day Fund represents a good opportunity to promote a more countercyclical policy in Ireland. If run effectively, its size would primarily depend on the nature of the cycle. A longer or more pronounced expansion phase would – all else equal – imply larger reserves being accumulated in the fund, whereas a shorter or less pronounced expansion phase would mean much lower reserves being accumulated.

Predicting the nature of a future cycle is virtually impossible and it would be wise to remain agnostic about this. In any case, the design of the Rainy Day Fund proposed in Casey *et al* (2018) looks through this issue. Instead of setting policy on the basis of what the cycle is expected to look like, the Rainy Day Fund should be flexible to how the cycle actually evolves. The proposal put forth suggests that a government take some – not necessarily the correct – view on what sustainable growth rates for the economy are likely to be over the long term and grow spending at this "desired" pace. Fluctuations in the "allowed" pace of spending growth can then be smoothed through, with contributions made to the Rainy Day Fund when the allowed pace exceeds the desired pace. Correspondingly, withdrawals can be made from it when the allowed pace falls below the desired pace.

To illustrate this, and to give a relatively realistic sense of the potential size of such a fund, Figure B1 shows how the proposal would look over a potential 12-year cycle for Ireland.<sup>15</sup> An expansion phase is assumed to start in the first year (year t); a recession follows in years 5 and 6 (t+5 and t+6); before an expansion begins again. Spending begins at €80 billion – close to the level currently forecast for 2019 (corrected for the standard adjustments made under the spending

<sup>&</sup>lt;sup>14</sup> Using 2016 data, a 55 per cent debt-to-GDP target is broadly equivalent to 80 per cent of GNI\*. This is still high, compared with pre-crisis levels when debt-to-GNI\* ratios were closer to 20-25 per cent, and compared with international norms. Moreover, it is anchored in terms of *SGP* commitments specified on the basis of GDP. Ireland has a volatile history in terms of its debt dynamics as shown in Box H (IFAC 2017c), which would argue for setting a debt ceiling below *SGP* limits (these are primarily set with larger EU Member States in mind). While larger Member States tend to have interest-growth differentials where half of the observations are within a range of less than two percentage points, Ireland's span over a much wider range of 8 percentage points, implying far more volatile debt dynamics from year-to-year.

<sup>&</sup>lt;sup>15</sup> Durations are broadly similar to standard business cycles as documented in Box A.

rule) and it is assumed that the Rainy Day Fund starts with reserves of €2 billion.<sup>16</sup> The typical range of allowed real growth rates for spending in Ireland over a long time period is quite large. Current estimates show it falling to as low as 1.8 per cent in the recent downturn and rising to as high as 7.4 per cent at the start of the 2000s. These rates were likely distorted by the financial crisis as well as by the convergence and bubble periods pre-crisis. Both phases may have been unusual in an historical context and are unlikely to be repeated again in the medium term. We therefore examine a narrower range of 1.5 per cent to 5.5 per cent. Inflation, given by the GDP deflator, is assumed constant at 1.3 per cent per annum. The desired spending growth rate is assumed as the average of allowed growth rates over the 12 years (3 per cent).

## Figure B.1: Illustrative Scenario for a Countercyclical Rainy Day Fund (RDF)

A. Spending Growth Rates Assumed Percentage change y/y







D. Accumulated Reserves in the RDF

C. RDF Contributions and Withdrawals € billion



€ billion

Sources: Internal IFAC calculations.

*Note:* This is an illustrative exercise. The actual level of reserves that would be accumulated in the Rainy Day Fund under the proposal in Casey *et al* (2018) would vary according to the depth and duration of any cyclical upturn and downturn and according to the pace of desired spending growth set out.

The scenario is summarised in Figure B.1. Panel A shows that allowed growth rates under the rules fluctuate around the assumed desired growth rate: rising above it in the expansion phase, and falling below it during and after the recession. Panel B shows the levels of spending

<sup>&</sup>lt;sup>16</sup> These corrections include one-offs; interest costs; government expenditure on EU programmes which is fully matched by EU funds revenue; the smoothing of public investment spending; and the estimated cyclical cost of unemployment benefits.

consistent with both growth rates. It is possible to see how spending allowed under the rules rises above the desired level during the expansion phase and is forced below it during and after the recession.

Panel C shows how the Rainy Day Fund would operate during this period. As allowed spending growth rises to a higher-than-desired pace, increasing contributions are made to the Rainy Day Fund to offset this. Similarly, as allowed spending growth falls, withdrawals are made to bring spending back up to the desired level. Panel D shows what this means for accumulated reserves in the fund. Starting at a level of €2 billion, the fund expands with the cyclical upturn and rises to €8 billion at the peak of the boom. When the recession hits, withdrawals are made and reserves are run down to €1 billion before additional contributions are made in the ensuing expansion.

It is important to note that this is just one scenario and there are a host of plausible scenarios for any given cycle. The  $\in$ 8 billion of resources at peak in this illustration could rise to levels a lot higher if the cycle is more pronounced and more persistent than assumed. Correspondingly, it could be lower if the next cycle is more muted or short-lived. To deal with the associated uncertainties, the design of the fund should be flexible to how the cycle evolves, as demonstrated in this approach.