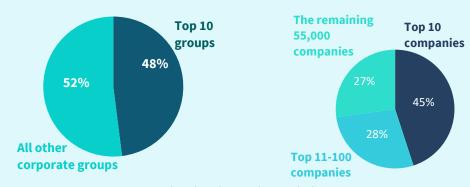
## Box H: Corporation Tax Concentration and Volatility

Corporation tax revenue in Ireland is characterised by its high volatility and strong concentration in a few firms. These factors contribute to make it the most challenging of the main tax heads to forecast (Casey and Hannon, 2016). This Box provides new insights into the concentrated and volatile nature of corporation tax in Ireland drawing on the latest data from the Revenue Commissioners (2019).

## How concentrated are corporation tax receipts among firms?

A large share of the corporation tax revenue in Ireland is paid by relatively few companies. In 2018, corporation tax receipts amounted to €10.4 billion. Of this, the top ten largest corporate groups paid €5 billion, virtually a half of all receipts (Figure H.1). This concentration is evident over the last five years for which data are available, with the largest top ten companies contributing 37–45 per cent of receipts each year since 2014. The following top 11–100 companies have contributed to total corporation tax even more than the remaining 101–55,000 companies, with a share close to 25 per cent of total receipts.

Figure H.1: Only 10 Groups Paid Almost Half of Corporation Tax (2018)
Percentage of total corporation tax receipts



Sources: Revenue Commissioners (2019); and internal IFAC calculations.

When thinking of concentration risks, it is important to identify whether the top ten companies vary over time. If the top ten companies tend to be made up of the same ten firms every year, and their payments are significantly larger than the following top 11–100, then the concentration risk might be said to be greater. The risks might be lower if firms in the top ten vary regularly and do not account for a much greater share than firms just outside the top ten.

Recent analysis from the Revenue Commissioners (2019) suggests that the composition of the top ten companies varies somewhat. Figure H.2 shows that the top ten companies in 2014 paid 37 per cent of total corporation tax in 2014, while those same ten companies paid 33 per cent of total revenue in 2018. By contrast, the top ten companies in 2018 paid 45 per cent in 2018, while their 2014 share was only 24 per cent. This kind of movement might lead one to conclude that concentration risks are less severe. In other words, part of what is happening from year to year may simply be that some firms do well in a given year, with others taking their place the next year. Yet some top ten companies for 2014 might also reside in the top ten for 2018. It is not possible to tell from the Revenue analysis how stable the composition of the top ten is and, hence, how severe the concentration risk is.

Figure H.2: Top Ten Companies Can Change Over Time



Sources: Revenue Commissioners (2019); and internal IFAC calculations.

## How volatile are corporation tax receipts?

A feature of corporation tax receipts in Ireland is that they have tended to be volatile. A way to quantify this is examining how the data deviates from its mean for a given period (i.e., the standard deviation). When analysing the annual growth over 1990–2018, it is evident that corporation tax has the highest degree of volatility of all the tax heads. This is the case both when using actual revenue collected (standard deviation of 17.6 per cent) and when adjusting that revenue for policy measures (15.8 per cent).<sup>49</sup>

Another relevant issue is whether the volatile nature of corporation tax is related to the cycle. Figure H.3 explores the correlation of corporation tax revenue and the cyclical position, with a relatively procyclical pattern emerging over the last decades. During 1995–2007, when the output increased somewhat above its potential, corporation tax revenue increased steadily. After reaching the peak of the boom period, the advent of the crisis triggered a sharp decline in nominal corporation tax, which has followed a strongly increasing trend again as the economy has recovered. The corporation tax increase in recent years could also be a result of hypercyclicality, where the elasticity of the Irish corporation tax to the global business cycle has become particularly large in the last decade.

Figure H.3: Procyclicality of Corporation Tax Receipts

Corporation tax revenue, in € billion (RHS); output gap, share of potential output 6 11 Output Gap 10 CT Revenue (RHS) 4 9 8 2 7 6 0 5 4 -2 3 2 -4 1 -6 0  $1990\,1992\,1994\,1996\,1998\,2000\,2002\,2004\,2006\,2008\,2010\,2012\,2014\,2016\,2018$ 

Sources: Department of Finance; and internal IFAC calculations. Note: IFAC's output gap estimates are based on Casey (2018).

 $<sup>^{49}</sup>$  By way of contrast, this is substantially higher than the volatility of VAT, with a standard deviation of 8.3 per cent on a headline basis, and 8.5 per cent in the policy-adjusted measure.