Box C: The Disproportionate Impact of Corporation Taxes

Corporation tax receipts average close to one in every eight Euro of Exchequer tax revenues each year (Table C1). This Box highlights how Corporation Tax (CT) receipts have also had a disproportionately large impact on recent developments in overall Exchequer tax revenues.

Table C1: The Share of Exchequer Tax and General Government (GG) Revenues accounted for by Main Tax Heads, 2001-2015

	% Total Exchequer Tax (2001-2015)	% Total GG Revenue (2001-2015)
Customs	0.6	0.4
Excise Duty	13.3	8.4
Capital Taxes	3.9	2.4
Stamps	4.7	3.0
Income Tax	34.4	21.8
Corporation Tax	13.3	8.5
Valued Added Tax	29.5	18.8
Other	0.2	0.2
Total Exchequer Tax	100.0	63.5
Total GG Revenue	-	100.0

Sources: *Department of Finance; CSO; and internal IFAC calculations.*

Variance Decomposition

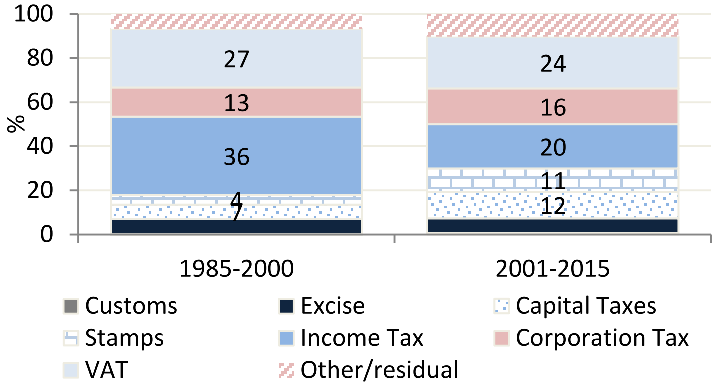
A simple decomposition of tax revenues shows that the volatility of CT receipts has resulted in large contributions to the variability of total Exchequer tax receipts in recent years. In order to examine the influence of individual tax heads on the variability of total tax returns, we consider a simple portfolio variance decomposition of the form:

$$PCV_{ip} = \frac{x_i C_{ip}}{V_p}$$

where PCV_{ip} is the Percentage Contribution to the Variance of total tax changes (or portfolio "p" returns) attributable to a given tax head "i"; x_i is the share of the tax head of interest; C_{ip} is the Covariance of tax head i changes with total tax changes; and V_p is the Variance of total tax changes.[1]

[1] Changes refer to year-on-year percentage changes of annual tax receipts.

FIGURE C1: SHARE OF TOTAL TAX VARIATION FROM INDIVIDUAL TAX HEADS, SELECTED PERIODS (%)



Sources: *Department of Finance; and internal IFAC calculations.*

Figure C1 shows the decomposition of the variance of total annual Exchequer tax changes. Notwithstanding their relatively smaller size, CT receipts have tended to account for relatively larger shares of annual variance in tax revenues over the past three decades. For the most recent period assessed here, 2001-2015, CT accounted for 16 per cent of total tax variation, whereas VAT and income tax (the largest tax heads) accounted for 24 per cent and 20 per cent, respectively. Capital taxes and stamps represented a combined 23 per cent of the variance of tax returns during the same period reflecting the impact of the property bubble.

FORECAST ERROR DECOMPOSITION

It is not just the scale of the variation in CT receipts that causes difficulties, but the unpredictability of these changes. The typical errors on tax forecasts for CT receipts are disproportionately large.

Figure C2 decomposes total tax forecast errors one year ahead (comparing forecasts from Budget day of the previous year to final outturns) since 1981. Excluding the crisis years 2008-2009 when unusually large forecast errors were seen across most tax heads, CT represents the largest mean absolute error on forecast revenues at €246 million on average as compared to €234 million for income tax and €193 million for VAT. The two latter tax heads, however, have accounted for typically 2-3 times more of the share of annual revenues when compared to CT over the past three decades. Even if the 2015 outturn is also excluded, the typical error observed is still as large as that evident for VAT.

FIGURE C2: MEAN ABSOLUTE FORECAST ERRORS
(1985-2015 EXCL. 2008-09, €M)