

warehoused over 2020-2021 and, as is the case with income tax, 75 per cent of the warehoused VAT is expected to be repaid over the period 2021–2023 (€920 million). On an underlying basis, VAT fell less severely in 2020 and is forecast to grow more modestly in 2021 (8.9 per cent).

Table C2: VAT forecasts from SPU 2021

€ millions unless otherwise stated

	2019	2020	2021	2022	2023	2024	2025
Exchequer VAT (cash basis)	15,118	12,425	14,370	15,885	17,280	18,105	19,015
Warehousing	0	776	144	0	0	0	0
Repayments	0	0	138	276	506	0	0
Net warehousing impact	0	776	6	-276	-506	0	0
“Underlying” VAT (accruals basis)	15,118	13,201	14,376	15,609	16,774	18,105	19,015
Exchequer VAT growth (%)	6.2	-17.8	15.7	10.5	8.8	4.8	5.0
“Underlying” VAT growth (%)	6.2	-12.7	8.9	8.6	7.5	7.9	5.0

Sources: SPU 2021.

Note: Of the €1,227 million of VAT receipts that were warehoused in 2020 and 2021, SPU 2021 forecasts assume that 75 per cent are repaid (€920 million, €776 million relating to 2020 warehousing, €144 million relating to 2021 warehousing). As a result, “underlying” VAT receipts for 2020 are €776 million higher than given by the Exchequer presentation. Conversely, “underlying” VAT receipts for 2022 and 2023 here are lower than the Exchequer presentation.

Forecasting income tax presents a number of challenges given the sharp changes in the composition of the forecast, which have changed the standard relationship between income and income tax receipts.

In addition to the complexities of warehousing, Section S.8 outlines some of the difficulties in forecasting income tax at a time of high volatility and with large differences in the situation of different taxpayers using the

Department’s methodology in this round. This has led to large amounts of judgement being applied to income tax forecasts in 2022 (see Figure S.8b).

Box D outlines some of the challenges in forecasting income tax receipts.

Box D: The resilience of income tax in 2020

Income tax was surprisingly resilient in 2020, falling by just 1 per cent. It would have grown by 1.9 per cent if deferred, or “warehoused”, tax receipts were included. This reflects how the total wage bill in Ireland was effectively flat in 2020, despite substantial lost earnings for some sectors. In each case, the performance in 2020 was far more benign than the Department of Finance projected in *SPU 2020* and in *Budget 2021*. This Box analyses the compositional issues affecting income tax as observed in 2020 due to the Covid-19 pandemic.

Figure D1 presents detailed data from recent Revenue analysis of PAYE receipts in 2020 (Collins and O'Rourke, 2021). This demonstrates that the sectors with the largest annual falls in income taxes paid in percentage terms tended to be those sectors that pay a small share of total PAYE receipts. In contrast, the top seven sectors — each with shares of at least 10 per cent of PAYE receipts — saw tax payments increase by 2.3 per cent (in weighted average terms) in 2020.

Overall decreases in PAYE receipts for sectors that declined amounted to approximately €650 million, whereas the increases for sectors that grew totalled €450 million. By far the largest decrease was in accommodation and food services (about €220 million), followed by other

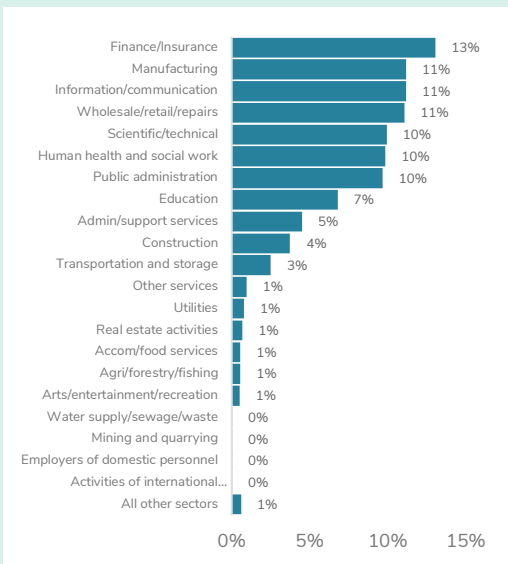
services (close to €120 million). The largest increase was for information and communication (about €130 million), followed by human health and social work (€100 million).

Figure D2 presents recent forecast vintages of income tax (panel A) and the average income tax rate (panel B). As discussed in Section 2.3, income tax (excluding the adjustment for warehousing) is forecast to recover gradually from a modest fall in 2020, with the level of receipts by 2023 back in line with pre-pandemic projections. The eventual reduction in 2020 receipts was far more benign than expected in SPU 2020 or Budget 2021, reflecting the extreme uncertainty brought on by the pandemic.

Figure D1: Incomes held up in sectors paying the most income tax

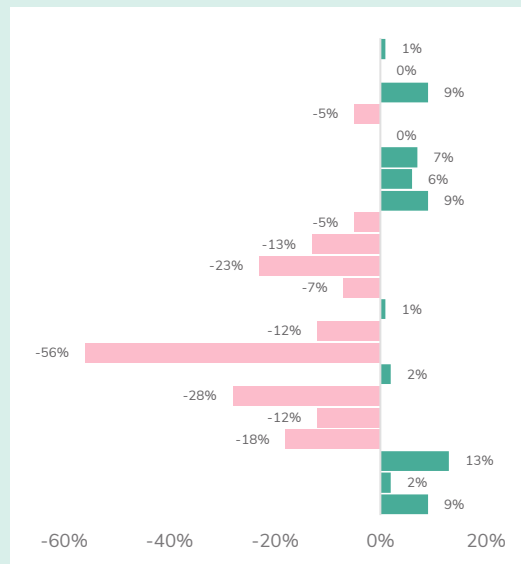
A. PAYE receipts by sector

% total



B. PAYE growth rate by sector

% change year-on-year

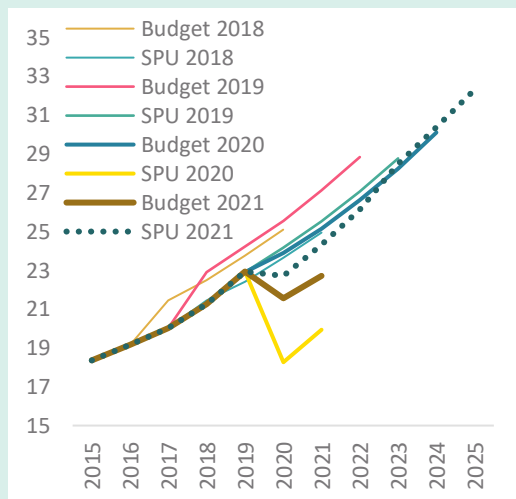


Source: Collins and O'Rourke (2021).

Figure D2: Forecasts of sharp changes in effective income tax rates have proven inaccurate

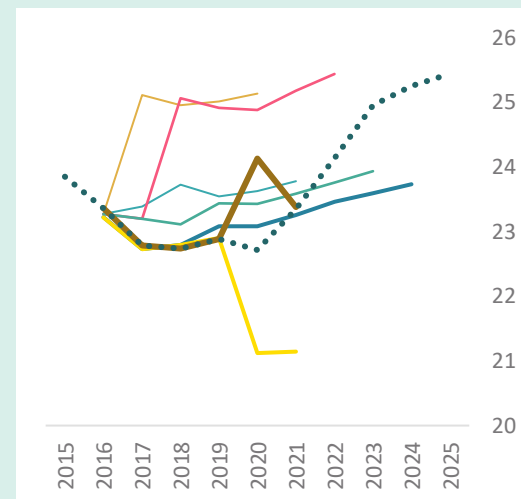
A. Income tax vintages

€ billion



B. Average income tax rate vintages

Percentage of compensation of employees



Sources: Department of Finance (various forecasts); and Fiscal Council workings.