



Rialtas na hÉireann
Government of Ireland

Budget 2020

Addressing Fiscal Vulnerabilities

Foreword

The headline budget deficit in Ireland was finally eliminated last year. The scars of the fiscal crisis, however, remain with us as the mismatch between public revenue and expenditure over the past decade or so has left a large debt pile – currently around €206 billion – in its wake.

The most important lesson is that we must never allow such fiscal imbalances to build up again. While we now have a more developed fiscal governance framework to guard against such risks, the improved architecture cannot provide concrete guarantees. This is why I have asked my Department to assess the vulnerability of the public finances to a fall in corporation tax revenues and to publish the results.

At the same time, the suite of fiscal rules themselves represent an additional vulnerability if applied in a mechanical manner: calibrating budgetary policy on the basis of moving targets and a debt ratio that is flattered by an artificially high level of GDP would be a mistake. Put simply, the rules may hinder rather than help in formulating budgetary policy. In the *Summer Economic Statement 2019*, published in June, I outlined that my Department was examining the shortcomings of the rules and that it would publish its findings.

The analysis set out in this document shows that taxation receipts – which are the main source of revenue for Government – amounted to €55.6 billion last year, the highest level ever. Within this, the share arising directly from the corporate sector has increased sharply since 2015: at the end of last year, around €1 in every €5 collected in tax was paid by the corporate sector. Even more striking is the fact that nearly half of all corporate tax receipts are paid by just ten firms.

This, of course, makes our public finances vulnerable to policy changes in other jurisdictions and to sector- and company-specific shocks. By way of illustration, a decline in the share of corporation tax receipts to historical ‘norms’ would imply a revenue loss of just under €2 billion. Alternatively, if corporation tax receipts fell back to 2014 levels, i.e. the level immediately prior to the surge, this would imply a revenue loss of around €6 billion. These are very significant amounts of money and, now that the headline deficit has been eliminated, we need to build on measures already in place to address these potential risks.

In relation to corporation tax policy, the *Corporation Tax Roadmap*, which I published September 2018, takes stock of the changing international tax environment, outlines the measures Ireland has taken to date and the further actions to be taken. It is clear that this is a time of significant global change for business, and my focus is on maintaining a competitive, outward-facing business environment, while ensuring our tax regime is transparent, sustainable and legitimate.

The globalisation model, from which Ireland has benefitted enormously, is increasingly under pressure and, on some measures, has gone into reverse. This, together with the ongoing process of global tax reform, means that it is even more important to reduce the exposure of the public finances in Ireland to the corporate tax revenue stream. Put simply, we cannot use revenue streams which may prove transient to finance permanent increases in public expenditure.

From a policy perspective, the Government is taking action across several strands. Firstly, there is a recognised need to **broaden the taxation base**, a process that is already well in train. Important examples included the introduction of local property and sugar taxes in recent years as well as the return to the 13.5% VAT rate on tourism activities in last year's budget.

Secondly, the **Rainy Day Fund** has been established to create a fiscal safety buffer to help absorb inevitable future shocks to our economy while, at the same time, help to ensure the long-term sustainability of Ireland's public finances.

Thirdly, the Government is prioritising debt reduction and has committed to **using windfall receipts** – including those associated with the financial sector – **for reducing public debt**.

Fourthly, the Government is keeping **current expenditure growth** in line with the potential growth rate of the economy.

Several proposals are set out in this document to address the vulnerabilities in our public finances. It is my intention to give consideration to these – and possibly other suggestions – with a view to making recommendations to Government in due course. To complement the analysis in this document, I have asked my Department to undertake work to assess corporation tax sustainability in the years ahead, in the context of the OECD BEPS process that is due to come to a conclusion next year. My Department will publish this analysis next March.

Paschal Donohoe T.D.

Minister for Finance and Public Expenditure and Reform

Executive Summary

Last year, public expenditure and revenue were aligned for the first time since 2007. Nevertheless, vulnerabilities remain. This document considers two sources of vulnerability. The first relates to the possibility that corporation tax receipts have reached (or will shortly reach) a high watermark. The second relates to the suite of fiscal rules that are ill-equipped to address the idiosyncrasies of the Irish economy.

The recent improvement in the public finances has coincided with a major upward shift in the level of corporation tax receipts, beginning in the mid-part of this decade. This 'level shift' raises legitimate questions regarding the sustainability of such receipts. The concentration of such receipts within a small subset of firms is an additional exposure for the Irish public finances.

If these receipts were to prove transitory, the impact of a correction on the public finances could be significant. Scenario analysis based on extreme, though far from implausible, assumptions suggests that, in the absence of corrective measures, a permanent budgetary gap of the order of €2 – €6 billion could potentially open up.

This paper identifies several ways in which the exposure of the public finances to revenue streams from the corporate sector could be reduced. One option involves ring-fencing a certain portion of 'excess' receipts for investment in the *Rainy Day Fund*. Base-broadening measures could also play a role. Work in this regard is already underway as evident from the widening of the base for the 13½ per cent VAT rate in *Budget 2019*.

An additional source of risk is the fiscal framework – the set of rules, procedures and institutional architecture – that governs budgetary policy in Ireland. In theory, fiscal rules are a vehicle to promote short-term fiscal stabilisation and longer-term sustainability. In practice, a literal application of the rules at present would not be conducive with the achievement of either objective in Ireland.

Accordingly, it would appear appropriate to modify the domestic application of the existing fiscal rules to better reflect the idiosyncrasies of the Irish economy. This would provide greater reassurance that the public finances in Ireland remain on a sustainable trajectory and that budgetary policy contributes to smoothing economic activity. Several options are put forward in this note, many of which are related or interlinked. These include using alternative measures of trend growth and the cyclical position of the economy (the output gap). Re-stating the debt rule as a share of modified GNI could complement this approach.

Contents

	Page
Foreword	i
Executive Summary	iii
Tables, Figures, Boxes and Annexes	iv
1 Introduction	1
2 Corporation Tax Receipts	2
2.1 Recent trends	2
2.2 Sustainability of receipts	2
2.3 Impact of a 'shock'	7
2.3.1 Scenario analysis / fiscal stress test	7
2.4 Summary	9
3 Fiscal Framework	10
3.1 Fiscal rules	10
3.2 Summary	13
4 An Irish-specific fiscal framework	14
4.1 Reducing exposure to CT windfalls	14
4.2 Irish-tailored fiscal rules	15
5 Conclusion	19
Figures	
Figure 1 Corporation tax receipts	2
Figure 2 Corporation tax metrics	3
Figure 3 Corporation tax receipts and corporate profitability 2010-2018	4
Figure 4 Budget 2018 forecasts for taxes and output	5
Figure 5 Corporate tax rates worldwide	6
Figure 6 Scenario analysis – GGB relative to baseline	8
Figure 7 Compliance with debt reduction benchmark	11
Figure 8 Debt-to-GNI*	16
Figure 9 Stance of budgetary policy and the output gap	18
Figure 10 Range between max and minimum long-term interest rates in euro area MS	21
Tables	
Table 1 'New' CT payers	4
Table 2 Summary of elasticity estimates	5
Table 3 Ring-fencing CT receipts	14
Table 4 Structural balance estimates	16
Boxes	
Box 1 Tax elasticities – with and without corporate taxes	5
Box 2 Corporation tax – the international context	6
Box 3 Measurement of the fiscal stance	18
Annexes	
Annex 1 Stability and Growth Pact: a brief history	20

Section 1: Introduction

Notwithstanding the steady improvement in the public finances in recent years, vulnerabilities remain. One source of fiscal vulnerability is the economy: an adverse shock to output and employment would be transmitted to the public finances *inter alia* through lower taxation revenue. As set out in the Department's Spring forecasts,¹ risks to the economic outlook are plentiful at present, with the balance of risk firmly tilted to the downside. Note: figures included in this scoping paper are up to date as of end-August. All projections are based on forecasts from the Stability Programme Update 2019.

Equally important are vulnerabilities more directly related to the public finances. These include, in the first instance, the large (and rising) exposure of the Government's annual revenue stream to corporation tax receipts and, secondly, the one-size-fits-all fiscal framework that is increasingly mis-aligned with domestic policy requirements.²

In relation to the former, the share of corporation tax receipts in total tax receipts is now at its highest level ever. Because of this, the Minister for Finance has committed to publish an analysis setting out how the risks associated with this could be addressed.³ In relation to the latter, all of the fiscal rules set out in the *Stability and Growth Pact* are anchored to GDP. However, the information content and signalling properties embedded in Irish GDP are increasingly limited, with the result that strict application of the rules may not always be optimal in guiding budgetary policy in Ireland, especially at the current juncture.⁴

The purpose of this document is to highlight and report on some of these in-built vulnerabilities, and to identify possible ways of reducing the exposure of the public finances. The document proceeds as follows. Section 2 focuses on recent trends in corporation tax receipts, with a particular emphasis on the level shift recorded since 2015. The analysis attempts to quantify – in so far as is possible – the impact of an adverse, abrupt decline in receipts from the corporate sector. In section 3, attention turns to vulnerabilities associated with fiscal rules that are increasingly detached from the needs of the Irish economy. Without being definitive, several options to minimise Ireland's fiscal vulnerability are presented in section 4 in order to prompt a discussion. While some of these may be radical, it is essential that any re-opening of the structural budgetary deficit is avoided. Section 5 draws some conclusions.

¹ See *Stability Programme, April 2019 Update*. Available at:

<https://assets.gov.ie/8305/88ffede238074f2cb88fc996854a12b3.pdf>

² This document is not exhaustive and, instead, focusses on the more immediate vulnerabilities. Other fiscal vulnerabilities include demographic change, purchase of carbon credits, etc. but these are not documented here.

³ For example see:

Budgetary Oversight Committee, 16/01/2019. Available at:

https://data.oireachtas.ie/ie/oireachtas/debateRecord/committee_on_budgetary_oversight/2019-01-16/debate/mul@/main.pdf

Parliamentary Question number 91 of the 15/05/2019. Available at:

<https://www.kildarestreet.com/wrans/?id=2019-05-15a.236>

⁴ In the *Summer Economic Statement 2018*, the Minister for Finance outlined that the fiscal rules were inappropriate at the current juncture and that minimum compliance would result in pro-cyclical budgetary policy. In the *Summer Economic Statement 2019*, the Minister outlined that the Department would provide an assessment of vulnerabilities associated with inappropriate fiscal rules.

Section 2: Corporation Tax Receipts

2.1: Recent trends

Perhaps the most notable development in the Irish public finances in recent years – at least on the revenue side of the equation – has been the sharp increase in corporate taxation (hereafter ‘CT’) receipts. These receipts, which amounted to €4.6 billion in 2014, increased by €2.3 billion (c. 50 per cent) in 2015, on foot of a surge in corporate profitability that year (figure 1). Receipts have remained on an upward trajectory since then and, this year, CT receipts are projected at around €10 billion. As a result, revenues will have more than doubled since the mid-part of this decade. This raises the important question as to whether receipts at this elevated level are sustainable into the future.

Figure 1: corporation tax receipts, € millions



Figures presented in annualised terms, i.e. 12-month rolling sum.

Last observation is June 2019.

Source: Department of Finance calculations.

2.2: Sustainability of receipts

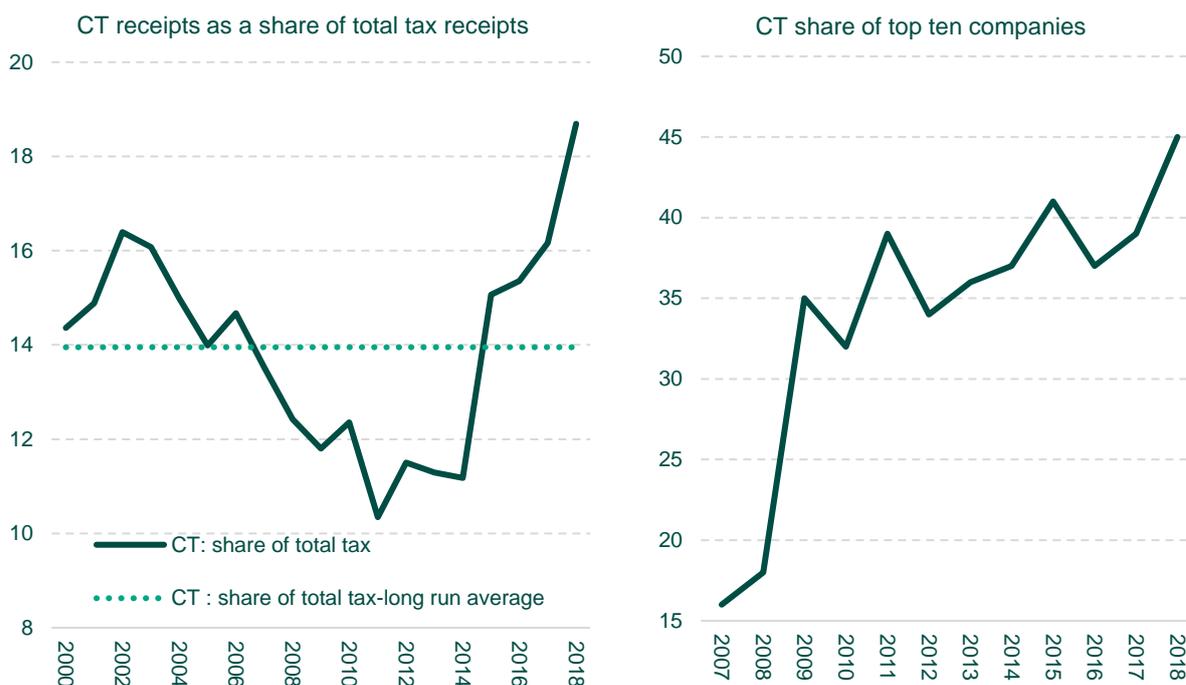
At the outset, it is important to highlight that it is simply not possible to be definitive regarding the sustainability, or otherwise, of recent CT trends at this juncture. This, of course, should not preclude an assessment of the potential exposure of the public finances to this particular revenue stream in order to make an informed judgement about the risks involved.

Turning firstly to statistical analysis, figure 2 shows CT receipts as a share of total receipts since 2000.⁵ This long-run average can, at least in some sense, be seen as a “centre of gravity”, i.e. the level to which *ceteris paribus* CT receipts might gravitate towards in the long-run. Of course, structural changes could potentially lead to a shifting – in either direction – of this centre of gravity over time, and this possibility cannot be ruled out.

⁵ This is the natural starting point as, prior to this, a different corporate tax regime applied.

Over the past two decades, CT receipts have averaged just under 14 per cent of total tax receipts, albeit with significant volatility around this average. Since the mid-part of this decade, the growth in CT receipts has exceeded the growth of other tax heads, so that the share of CT receipts has increased, reaching nearly 19 per cent last year. This is the highest share ever and is well in excess of its long-run 'norm'. *A priori* this would seem to indicate that imbalances are emerging or, alternatively, that a structural change is underway (which, of course, is difficult to test in real-time).

Figure 2: Corporation tax metrics, per cent



Note: figures based on Exchequer data rather than general government data.

Source: Department of Finance calculations and Revenue Commissioners.

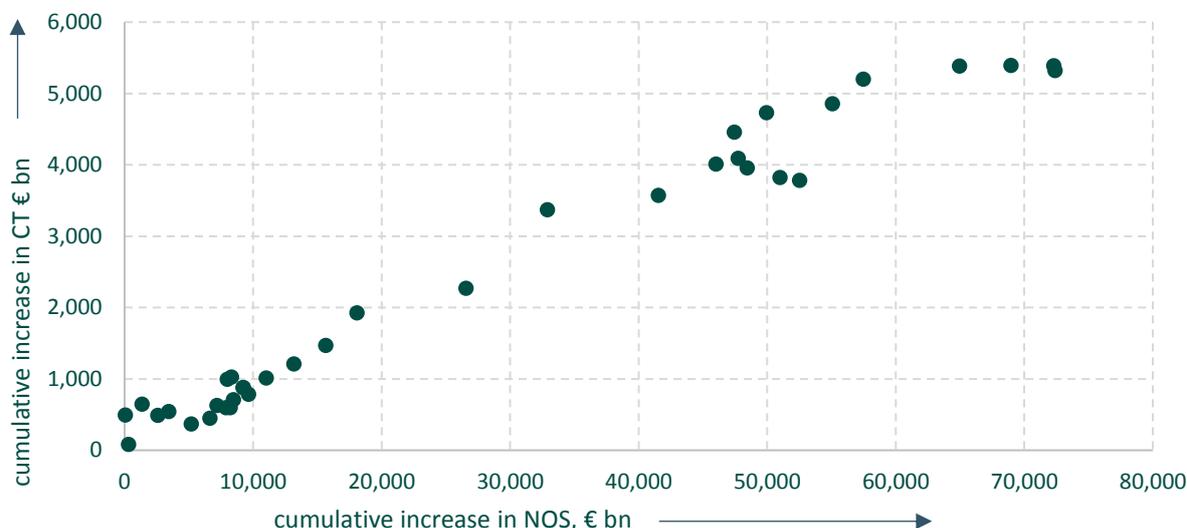
A related issue is the concentration of receipts within a small subset of firms. Data from the Revenue Commissioners show that, last year, around 45 per cent of all CT receipts were sourced from just ten companies, a share that has more than doubled in the past decade (figure 2); put another way, the top ten companies accounted for 8½ per cent of the total tax-take last year. As a result, firm-specific shocks to profitability could potentially make a severe dent in the Government's overall revenue stream. In this regard, it is important to note CSO data⁶ which show that the profitability of large, foreign-owned firms increased three-fold – from €27 billion to €95 billion – over the 2013-2017 period.

In explaining CT developments, it is important to look at the evolution of CT receipts relative to the corporate tax base, i.e. corporate profitability. Figure 3 shows the substantial increase in CT receipts since 2014 (on the vertical axis) has been accompanied by a similar increase in corporate profitability

⁶ See Central Statistics Office, 'Institutional Sector Accounts Non-Financial and Financial 2017'. Available at: <https://cso.ie/en/releasesandpublications/ep/p-isanff/isanff2017/st/>

(on the horizontal axis). In other words, the increase in CT receipts is broadly in line with what would have been expected given the increase in profits recorded during this period.⁷

Figure 3: corporation tax receipts and corporate profitability 2010q1-2019q1, € million



NOS is net operating surplus (gross profits less depreciation) and is the national accounts term for profits. Last observation is 2019Q1.

Source: CSO and Department of Finance calculations.

A related factor behind the increase in CT receipts is that, at least for some companies, losses accumulated during the crisis years are now being exhausted.⁸ This means that a not-insignificant subset of firms are, for the first time since the crisis, incurring a corporate tax liability.⁹ Last year, for instance, nearly one-fifth of the annual increase in CT receipts was due to payments by firms that had no CT liability in the previous year.

Table 1: 'New' CT payers

	2015	2016	2017	2018
No. of 'new' firms paying CT (did not pay in the previous year)	16,000	14,400	19,400	18,700
Value of these payments (€mn)	470	345	594	397
Value of total CT collected (€mn)	6,872	7,351	8,201	10,385
Value of y-o-y increase in total CT (€mn)	2,257	480	850	2,184*

Source: Revenue Commissioners and Department of Finance calculations.

Note that figures are not additive as some companies may have moved into a loss-making scenario on more than one occasion and *vice versa*.

* it should be noted that the 2018 CT performance was flattered in the order of €0.3bn by the once-off adoption of the new International Financial Reporting Standard (IFRS15).

⁷ CT receipts and profits do not necessarily move *in tandem* in the short-run, as firms can use a range of credits and allowances (such as that associated with 'depreciation') to reduce their taxable income.

⁸ See Revenue Commissioners, 'Corporation Tax 2018 Payments and 2017 Returns'. Available at: <https://www.revenue.ie/en/corporate/documents/research/ct-analysis-2018.pdf>

⁹ An important part of the corporate tax code – in Ireland and elsewhere – is that firms can carry-forward their losses.

Box 1: tax elasticities – with and without corporate taxes

The increasing prominence of CT receipts (as well as some exceptionally large increases in GDP) has complicated standard tax-to-output elasticity measures. These are important inputs into policy analysis, notably in the forecasting of revenues.

Tax receipts in Ireland have tended to closely track overall economic activity, with an elasticity of close to unity.¹⁰ In the table below, a series of elasticities were estimated using a range of output measures and time horizons, with and without CT.¹¹ While the overall elasticity of close to unity still holds on the basis of nominal GDP, there has been a notable fall in elasticities over the past decade. At the same time, taxes appear to be more closely aligned with movements in nominal GNI*. This is not altogether surprising given the volatility in both GDP and CT outturns over the past decade, encompassing sizable falls during the crisis and the unprecedented increases of recent years. It is notable that taxes excluding CT appear to track movements in GNI* closely. On a general government basis, the results are similar.[^]

Table 2: Summary of elasticity estimates

	long-run (1970-2018)	past decade
Exchequer taxes		
GDP	0.97	0.70
GNI*	1.06	1.11
Exchequer Taxes excluding CT		
GDP	0.94	0.58
GNI*	1.03	0.94

Source: Department of Finance calculations.

One of the implications of the increasing weight of CT and the fall in elasticity associated with GDP is teased out below. The chart plots forecasts from *Budget 2018* for taxes, taxes excluding CT, and nominal GDP and GNI* for 2018. It highlights both the marked impact of CT on the overall tax forecast error in 2018 but also the closer link between taxes excluding CT and GNI*.

Figure 4: Budget 2018 forecasts for taxes and output – annual growth rates, per cent



Source: Department of Finance calculations.

[^] Further analysis – including modelling of CT receipts – will be published shortly, as part of the Department's ongoing work in this area.

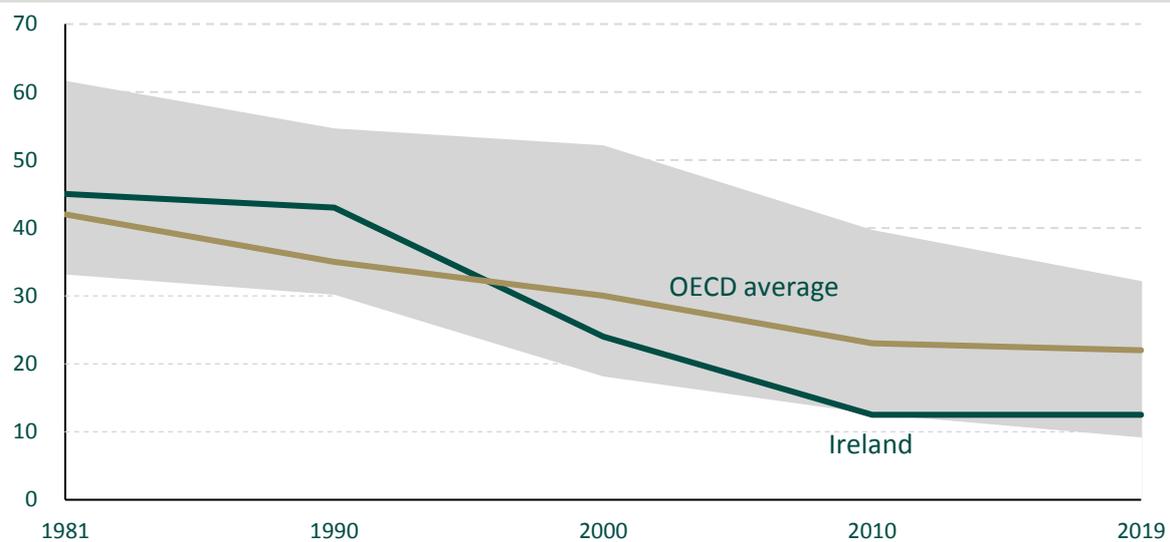
¹⁰ The 2008 report by the Department of Finance 'Tax Forecasting Methodology Review Group' noted a long-run tax to GDP elasticity of 0.9.

¹¹ Regressions were run in logs. No adjustments were made for the impact of budgetary policy.

Box 2: corporation tax – the international context

The average rate of corporation taxation has been falling across advanced economies in recent decades. Broadly speaking, the average rate among OECD countries has halved since the 1980s (figure 5). This is eroding Ireland's relative advantage, although it should be stressed that Ireland's ability to compete for inward investment is influenced by general macroeconomic framework conditions (availability of skilled labour, market access, cost competitiveness, ease of doing business, etc.). Focussing purely on corporation tax rates, the decline in headline rates across the OECD means that since Ireland's move to the headline 12.5 per cent rate, the OECD average has moved 8 pp closer to the Irish rate.

Figure 5: corporate tax rates worldwide, per cent



Range shows the evolution of the highest and lowest rates among various OECD countries for which data are available.

A formal commitment to move to a 12 ½% taxation regime for CT was included in Budget 1998, and introduced in Ireland on a phased basis over the period 2000-2003

Source: OECD.

Globalisation – broadly defined as the fragmentation of production across national borders – as well as the shift in production from manufacturing (tangibles) to services (intangibles) have proved challenging from a policy perspective. Nowhere is this more evident than in the corporate tax policy space.

To address the shortcomings in this area – in particular the capacity of large corporates to aggressively organise their global operations in order to avoid corporate tax liabilities – OECD countries have been working together to re-design the global corporate tax system so that corporations pay their 'fair share'. The first iteration of the base erosion and profit shifting (BEPS) resulted in a large volume of intellectual property assets being moved on-shore.

Work is ongoing on further international tax reform, focussing on addressing tax challenges arising from the digitalisation of the economy. At the present juncture, there is a lack of clarity on the final design features. Broadly speaking, there are two sets of proposals. The first set focuses on a change to the existing balance of taxing rights with a view to ensuring greater taxation in market countries for large global business. As a small exporting economy, any potential changes under this proposal would likely have an impact on Ireland's corporation tax revenue. However, global agreement on new tax rules would provide certainty and stability for the international tax landscape into the medium term.

The second set of proposals is focussed on a global minimum effective taxation regime. The details of this proposal remain under discussion and further clarity will be needed to determine what impact any such regime may have on Ireland. Depending on the design and detail of any measure under this proposal, it may have an impact on Ireland's tax competitiveness into the future.

Discussions remain on a 'without prejudice' basis for now. The intention is to have an agreed set of reforms containing aspects of both pillars finalised by end-2020. It is envisaged that global implementation would take a number of years thereafter. As such, these proposals introduce additional uncertainty and volatility into the forecast horizon.

Notwithstanding that CT receipts have moved in line with corporate profitability, it must be stressed that a shock to the corporate tax base cannot be discounted, particularly in light of uncertainty in the international policy environment (CT developments in the EU / OECD, de-globalisation, etc.). Moreover, sector-specific shocks (examples include the ‘dot-com’ shock in 2001; the pharmaceutical ‘patent cliff’ in 2012) could reduce corporate profitability, with adverse implications for corporate taxation receipts.

2.3: Impact of a ‘shock’

From a fiscal sustainability perspective, the surge in CT receipts and the highly concentrated nature of these receipts highlight the risk of permanently increasing public expenditure (or financing reductions in taxation) on the basis of potentially transient receipts. The Department has, on several occasions, highlighted this exposure¹² and several other institutions (IMF, OECD, IFAC, ESRI, Central Bank) have also warned against ramping up public expenditure on the basis of receipts that may prove transitory. The Coffey Review¹³ of the Irish corporation tax code concluded that while the recent performance can be “*expected to be sustainable over the medium term to 2020 ... it is impossible to be definitive*”. Given that it is not possible to be definitive regarding the sustainability of the recent surge, it is important to undertake scenario analysis. In particular, it is important to quantify the budgetary impact of a sudden decline in CT receipts.

2.3.1: scenario analysis / fiscal stress test

There is, of course, a continuum of possible outcomes in relation to corporation tax developments. Three possible scenarios are considered here, without assigning probability to any of these. While some may be extreme, a key lesson of the crisis is that so-called tail-risks, i.e. low probability but high impact shocks, can, and indeed do, materialise. The scenarios modelled are:

- a reversion of CT receipts to 2014 levels;
- the share of CT receipts falls to the long-run ‘norm’;
- CT receipts move in line with GNI*.

The direct (first round) impact of these shocks on the headline general government balance is set out in figure 6. In each case, the impact is compared with the baseline as set out in the Department’s spring forecasts.

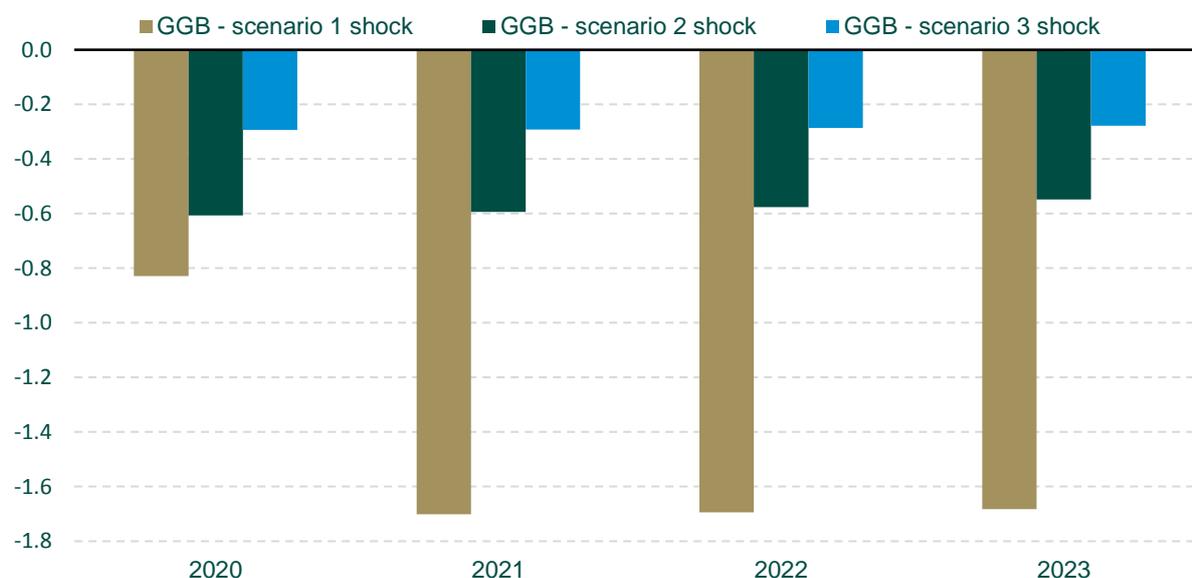
Scenario 1: CT receipts return to 2014 levels

In order to operationalise this, it is assumed that CT receipts revert to 2014 levels over the course of two years, beginning in 2020. This would involve a decline in revenue of c. €6 billion by 2021 relative to current expectations. Post-2021, a resumption in the upward trend in CT receipts is assumed, but with growth in line with modified GNI (GNI*).

¹² See, for example, SPU 2019, *op cit.* and Department of Finance, ‘Annual Taxation Report 2019’, available at: <https://assets.gov.ie/7290/750c0d5c58d840c5a811bbb557684966.pdf>

¹³ Seamus Coffey (2017), ‘Review of the Corporation Tax Code’. Available at: <https://assets.gov.ie/7255/b275ad7f0874433b9d6d0c54c8f84764.pdf>

Figure 6: scenario analysis – GGB relative to baseline, percentage points of GDP



Shock 1 = reversion of CT to 2014 levels (beginning in 2020);
 Shock 2 = share of CT reverts to historical average (beginning in 2020);
 Shock 3 = CT receipts move in line with modified GNI (hypothetically from 2017 onwards).
 Source: Department of Finance calculations, baseline assumption: GGB as set out in SPU 2019.

As evident from figure 6, the impact of a c. €6 billion loss of CT revenue on the public finances is significant, with a deterioration in the GGB (relative to baseline) of c. 1¼ percentage points of GDP. Depending on the source of this shock, other fiscal aggregates could be affected: income tax could be lower if the employment effects were large, VAT receipts could be affected by lower consumption, and unemployment-related expenditure could be higher. The direct budgetary impact, therefore, could be exacerbated by indirect (or second-round) effects. Importantly, the fiscal impact would, in all likelihood, be structural (permanent) as opposed to cyclical (temporary) in nature and, accordingly, would require consolidation measures to address the permanent mismatch between revenue and expenditure.

Scenario 2: the share of CT receipts reverts to the long-run ‘norm’

A less severe scenario involves a decline in CT receipts to 14 per cent of total receipts, from nearly 19 per cent at present. To operationalise this, it is assumed that CT receipts contract to 14 per cent of total forecast receipts, beginning in 2020. This involves a permanent revenue loss of €2 billion per annum, resulting in an c. ½ percentage points of GDP deterioration in the GGB (relative to baseline) over the forecast horizon.

Scenario 3: CT receipts move in line with GNI*

GNI* is an indicator designed to exclude globalisation effects that are disproportionately impacting the measurement of the size of the Irish economy. As it is a better indicator on the underlying performance of the Irish economy, it may be that it is a better proxy for CT developments.

To operationalise this hypothetical scenario, it is assumed that CT receipts had moved in line with GNI* growth from 2017 onwards (the rationale for beginning the shock in 2017 is that this avoids the c. 25

per cent increase in CT receipts in 2018). The impact of this shock is a revenue loss of €1 billion per annum, so that by next year, the GGB would be c.¼ percentage points of GDP below the baseline.

2.4: Summary

There is a possibility that imbalances in the public finances may be accumulating. Corporation tax receipts have more than doubled in just five years and the share of overall revenue now accounted for by this revenue stream is now at historically high levels. A related issue is the concentration of receipts within a small number of firms which is an additional vulnerability.

While it is not possible to be definitive regarding the sustainability of these receipts, simulations suggest that, in the event of a shock to CT receipts, the impact on the public finances could be significant with a structural gap between revenue and expenditure opening up that would necessitate correction. The public finances are now increasingly exposed to a shock to corporation tax receipts, as these revenues have more than doubled in just four years.

Section 3: Fiscal Framework

A second source of fiscal vulnerability relates to the suite of numerical fiscal rules set out in the *Stability and Growth Pact* (SGP). The SGP is, for the most part, a one-size-fits-all governance framework. From an Irish perspective, the fact that the rules are formulated in GDP terms is increasingly problematic. As has been well documented, GDP overstates the ‘true’ size of the Irish economy and, as such, ratios expressed as a share of GDP give a misleading picture.¹⁴ Logically, if GDP is an inappropriate metric, it follows that fiscal rules articulated in GDP terms are ill-equipped to capture Irish-specific factors. If not suitably tailored, therefore, GDP-based fiscal rules could potentially lead to the calibration of inappropriate budgetary policies.

These weaknesses in the fiscal rules are not un-related to CT developments in recent years. GDP is simply the sum of the returns to the factors of production: the return to labour is the wage bill and the return to capital is profits. Parts of the multinational sector distort the profit share in Ireland and, accordingly, distort CT receipts. Hence, the origins of distortions to GDP are not dis-similar to the origins of distortions to CT receipts.

3.1 Fiscal rules

This section does not purport to outline the minutiae of the SGP, which is somewhat complex with a multitude of subtleties and methodologies.¹⁵ Instead, the focus is on the main components of the rules, which are:

- a binding 3 per cent of GDP threshold for the headline deficit;
- a 60 per cent debt-to-GDP threshold (and 1/20th correction rule);
- a balanced budgetary position after adjustment for the economic cycle;
- an expenditure rule (the ‘expenditure benchmark’).

Rule #1: binding 3 per cent of GDP threshold for the headline deficit

The most prominent of the EU fiscal rules is the 3 per cent deficit rule (as set out in the Treaty¹⁶). Of itself, this rule is not particularly problematic for Ireland. However, as outlined in the previous section, the headline general government balance is being boosted – possibly on a transient basis – by strong CT returns. To put this into perspective, if CT receipts had not surged in 2015 but had simply increased in line with the path of nominal GNI* then *ceteris paribus* a deficit of 1 per cent of GDP would be in prospect for this year. In addition, Ireland would have come close to missing the 3 per cent of GDP target in 2015 (under the ‘corrective arm’ of the SGP – the so-called *Excessive Deficit Procedure* – the

¹⁴ See Department of Finance, ‘GDP and Modified GNI – Explanatory Note’. Available at: <https://www.gov.ie/en/publication/498058-gdp-and-modified-gni-explanatory-note-may-2018/>

¹⁵ The *Vade Mecum* sets out the minutiae of the SGP. Available at: https://ec.europa.eu/info/publications/vade-mecum-stability-and-growth-pact-2019-edition_en

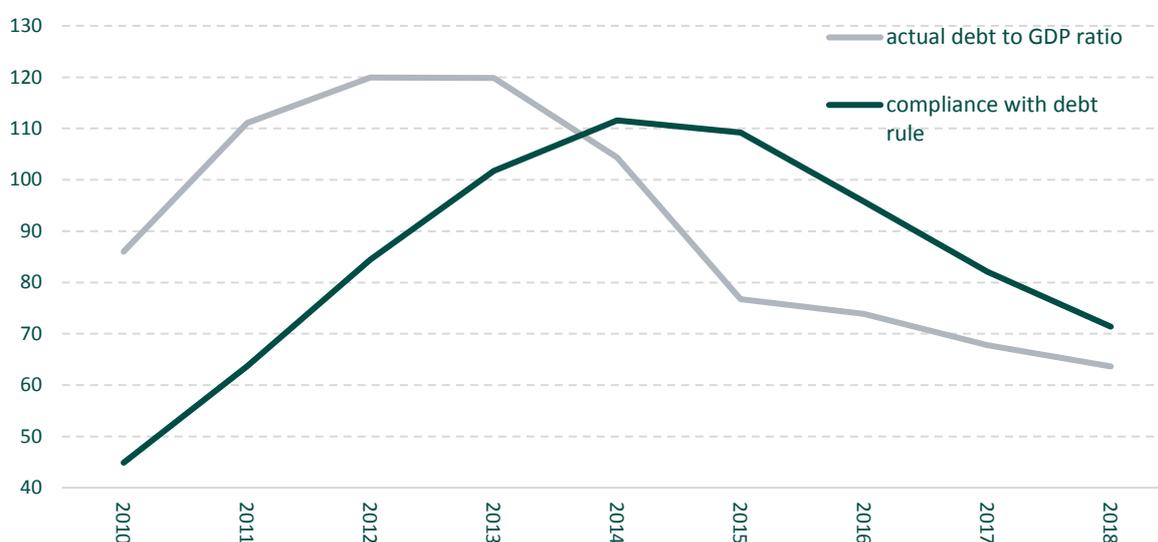
¹⁶ Article 126(1) of the Treaty on the Functioning of the European Union (TFEU) states that Member States shall avoid excessive government deficits, with Protocol 12 further specifying that this requirement will be assessed against a reference value of 3 per cent of GDP.

European Council set a deadline of 2015 for Ireland to bring the headline deficit below 3 per cent of GDP).¹⁷

Rule #2: 60 per cent of GDP threshold for general government debt

The 60 per cent of GDP ‘debt rule’ is problematic from an Irish perspective, as it paints an excessively benign picture of the public debt burden in Ireland, especially given the recent surge in Irish nominal GDP. In 2018, for instance, the debt-to-GDP ratio was just 64 per cent, almost fulfilling the debt criterion set out in the Treaty. However, as highlighted on several occasions by the Department of Finance,¹⁸ public debt per capita in Ireland is amongst the highest in the developed world. Accordingly, an over-reliance on debt-to-GDP for policy purposes would risk jeopardising the sustainability of the public finances.

Figure 7: compliance with the debt reduction benchmark, per cent



Source: Department of Finance calculations based on European Commission (AMECO) data.

More formally, Member States are required to reduce any excess over the 60 per cent of GDP threshold by 1/20th a year, a rule known as the ‘debt reduction benchmark’. Compliance with this rule is set out in figure 7. These thresholds have been easily achieved in recent years due to exceptional rates of GDP growth. The debt ratio has fallen from 120 per cent in 2013 to just over 60 per cent of GDP last year; however, all of this improvement has been achieved via the surge in nominal GDP which has increased by 80 per cent between 2013 and 2018. The numerator – the outstanding money amount of public debt – continues to increase.¹⁹

¹⁷ On December 7th 2010, as part of the EU-IMF financial assistance programme, the European Council adopted revised Council Recommendations to Ireland, requiring Ireland to correct the excessive deficit by 2015.

¹⁸ See Department of Finance (2017, 2018) *Annual Report on Public Debt in Ireland*, available at: <https://assets.gov.ie/4274/111218115438-102376301fd948c2b20e3449111eff54.pdf> and <https://assets.gov.ie/6190/010219151351-f40f3e8eb97c4e3d997222498a4b95bb.pdf>

¹⁹ See Department of Finance (2019) *Annual Report on Public Debt in Ireland*, available at: <https://www.gov.ie/en/publication/d45694-annual-report-on-public-debt-in-ireland-2019/>

Rule #3: achieve the Medium Term (Budgetary) Objective

The country-specific medium term (budgetary) objective (MTO) is the cornerstone of the preventive arm of the SGP, aiming to ensure sustainable public finances as well as compliance with the 3 per cent of GDP deficit criterion in all but the most unusual circumstances.

In terms of process, the European Commission sets minimum MTOs for each Member State every three years, taking account of new information including changes in projected ageing costs. Member States subsequently set their own MTOs, respecting the Commission's 'minimum' anchor. Member States in the euro area (as well as some other EU Member States) are subject to the *Fiscal Compact*, committing themselves to MTOs of at least -0.5 per cent of GDP.²⁰ To comply with the SGP, Member States must achieve their country-specific MTO or be on an appropriate path towards it.

There are two major problems with the MTO in Ireland. The first relates to calculating the structural balance and the second relates to calculating the MTO itself. These are dealt with in turn below.

Computing the Structural Balance

Assessment of the MTO (or progress to the MTO) requires estimates of the structural budget balance. This is the headline balance adjusted for the impact of the economic cycle (cyclical component) and excluding temporary measures. The cyclical component, in turn, requires an estimate of the output gap. Under the SGP, estimates of the output gap are produced using a harmonised, one-size-fits-all approach, hereafter known as the "SGP methodology". This approach, which is tailored to larger economies, does not sit well with the Irish economy and the Department has, on several occasions,²¹ highlighted the limitations of this approach in an Irish context. Changes in the data or in the assumptions underlying this methodology can, at times, lead to large (and often counter-intuitive) changes in the output gap for Ireland, which automatically feeds into estimates of the structural balance. Partly for these reasons, the Department has developed alternative and more realistic measures of the output gap.²² Having said that, compliance with the fiscal rules remains based on the SGP methodology.

A partly related issue is the sensitivity (elasticity) of the headline balance to the economic cycle. Under the current approach, a 1 pp change in the output gap will change the headline balance in the opposing direction by 0.5 pp of GDP. This parameter is constant over time and does not take into account possible windfalls related to *inter alia* asset price developments. During the bubble period, significant revenue windfalls helped paint an overly benign assessment of the structural balance, with the result that the structural balance did not signal emerging fiscal imbalances.

The MTO

Secondly, the MTO itself is calculated to ensure fiscal sustainability over the long-run. A number of inputs are used to calculate the MTO for each Member State, including estimates of the budgetary costs

²⁰ If the debt ratio is significantly below 60 per cent of GDP and the risks in terms of the long-term sustainability of their public finances are low, a Member State can set its MTO at a less stringent -1 per cent of GDP.

²¹ See Department of Finance, SPU 2019 *op cit*.

²² See Department of Finance, 'Estimating Ireland's Output Gap' (2018). Available at: <https://www.gov.ie/en/publication/65c119-estimating-irelands-output-gap/>

of population ageing as well as fiscal efforts needed to stabilise the debt ratio at 60 per cent of GDP. In an Irish context, both of these inputs tend to paint an overly benign picture of the future fiscal challenges for Ireland as they are set relative to GDP.²³

Looking at past performance of these indicators, as highlighted in fiscal ‘heat-maps’ produced by the Department, it is evident that on a real-time basis, the structural balance did not provide clear evidence in the mid- to late-2000s of the impending economic crisis.²⁴ Likewise, in the run-up to the economic crisis, Ireland’s debt-to-GDP ratio was significantly below the 60 per cent target, averaging less than 25 per cent of GDP between 2005 and 2007.

Rule #4: expenditure growth capped at, or below, trend economic growth rate

Partly in response to short-comings associated with the measurement of the output gap, the 2011 reform of the Pact introduced an expenditure rule to complement the structural balance. The rule stipulates that annual expenditure growth should not exceed a reference medium-term rate of potential GDP growth (the ‘expenditure benchmark’), unless the excess is matched by discretionary revenue measures. The potential growth rates are calculated using the SGP methodology which, as outlined above, has proven to be a bad fit for the Irish economy and, if applied in full, would result in pro-cyclical policy at present.²⁵

3.2 Summary

In summary, there is compelling evidence that the current generation of fiscal rules may not be sufficient to ensure the sustainability of the Irish public finances. This suggests that caution must be taken when viewing the sustainability of the public finances through the prism of the fiscal rules alone.

²³ See Department of Finance “*Population Ageing and the Public Finances*”. Available at: <https://www.gov.ie/en/publication/2e8463-population-ageing-and-the-public-finances/>

²⁴ See Department of Finance, SPU 2019 *op cit*.

²⁵ See Barnes and Casey (2019) “*Euro area budget rules on spending must avoid the pro-cyclicality trap*”. Available at: <https://voxeu.org/article/euro-area-budget-rules-spending-must-avoid-pro-cyclicality-trap>

Section 4: An Irish-specific fiscal framework

The analysis heretofore has outlined some of the vulnerabilities facing the public finances in Ireland at present, including difficulties with the fiscal rules. The subsequent analysis identifies potential ways of reducing these exposures and setting more appropriate fiscal targets taking due account of the vagaries of the Irish economy. The objective is to provoke a discussion about how the rules can be tailored to better suit the specificities of the Irish economy. The alternative – namely ensuring minimum compliance with the existing rules – would be self-defeating and could jeopardise both the sustainability and stabilisation roles of budgetary policy.

Generally speaking, the approaches outlined below involve the setting of more demanding targets for the budgetary parameters, i.e. self-imposing a more stringent set of fiscal targets / rules. If adopted, these proposals may need to be adapted over time, or even discontinued at some stage, putting a premium on successful communication, transparency and commitment.

4.1: Reducing exposure to CT windfall

Reducing the exposure to CT receipts ultimately boils down to ring-fencing a certain portion of receipts so that they are not used to finance permanent increases in expenditure or reductions in taxation. While it is impossible to be precise regarding the size of windfalls, a prudent approach would be to treat all CT receipts above the long-run average share as potentially ‘windfall’ in nature and to set these aside in the Rainy Day Fund.²⁶ For illustrative purposes, table 3 below sets out the quantum of money involved if all / half of the excess was ring-fenced for (net) debt reduction.

Table 3: ring-fencing CT receipts

	2018	2019	2020	2021	2022	2023
CT, €mn – baseline*	10,385	9,980	10,465	10,865	11,275	11,705
Total tax, €mn – baseline*	55,557	58,445	61,245	63,870	66,735	70,020
Share, per cent – baseline*	18.7	17.1	17.1	17.0	16.9	16.7
CT receipts if share was 14 per cent	7,751	8,154	8,545	8,911	9,311	9,769
difference (“froth”)	2,634	1,826	1,920	1,954	1,964	1,936
50 per cent of difference	1,317	913	960	977	982	968
per cent of GNI*	0.7	0.5	0.5	0.4	0.4	0.4

* baseline as per Stability Programme Update 2019.

Source: Department calculations.

This approach, consistent with policy advice from a range of commentators such as the IMF and European Commission, would help to ensure that cyclical or potentially windfall CT receipts do not fund permanent, structural increases in spending.

²⁶ Note: were the criteria for activation of the Rainy Day Fund to potentially be triggered, it follows that no transfer to the Fund would be made.

Such an approach could be complemented by base broadening / rate increases elsewhere, with priority being given to measures that are economically welfare-enhancing. An increase in the carbon tax would, for instance, increase its share of overall tax revenue while, at the same time, incentivising a reduction in fossil fuel usage. Eliminating some of the (expensive) tax expenditures could also be an option; such an approach would, in general terms, be progressive given that many tax expenditures are regressive in nature.

4.2: Irish-tailored fiscal rules

In this section, several options – though not an exhaustive list – are presented for tailoring the fiscal rules to reflect the idiosyncrasies of the Irish economy. It should also be borne in mind that irrespective of the economic appropriateness of existing EU rules, there is a legal obligation that must be respected.

Rule #1: 3 per cent of GDP threshold for the headline balance

As highlighted above, Member States must not allow their headline deficit exceed 3 per cent of GDP. The headline balance at present is being flattered by very strong CT receipts.

Possible solution =
define a budget balance figure (GGB*) that excludes some element of the CT ‘froth’

Operationalising this could involve defining a new headline general government balance (GGB*) as the balance excluding excess CT receipts; this new metric could then feed into targets for the headline and structural balances.

Rationale:

It would be prudent to assume that at least some of the ‘excess’ CT in recent years is transitory. Therefore, at least some of the excess should be set aside, possibly in the Rainy Day Fund (note that this is, in effect, very similar to the approach set out in 4.1).

Rule #2: 60 per cent of GDP threshold for the debt

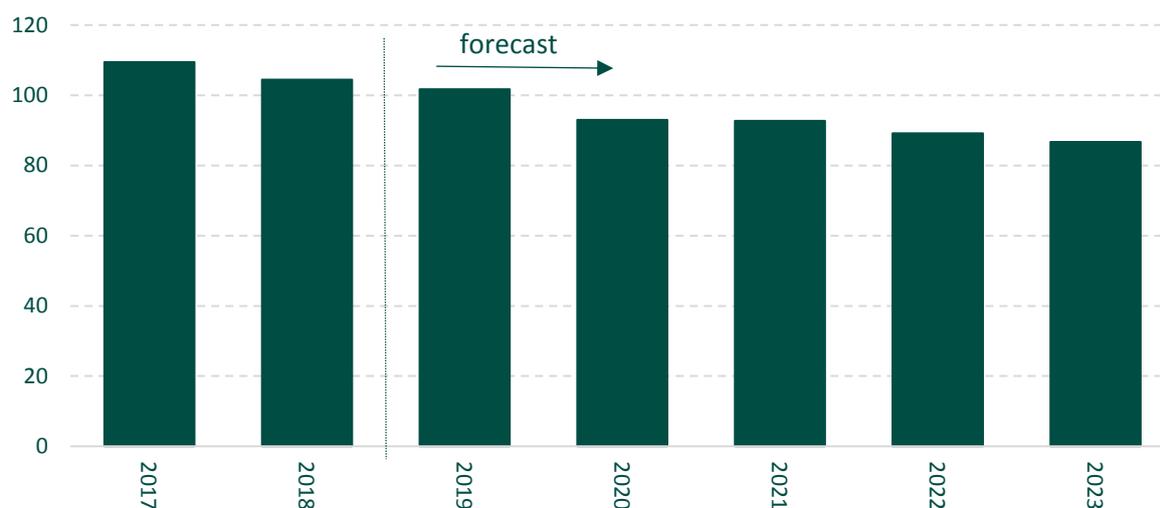
Member States must not allow the debt-to-GDP ratio exceed 60 per cent and if this does occur, it must be brought back to this level at a sufficiently rapid pace. This debt threshold and correction rule imply an overly benign picture for Ireland, given that GDP overstates domestic income levels.

Possible solution =
set the debt rule in GNI* terms

Rationale:

Repayment capacity is, in all likelihood, more closely aligned with GNI* than GDP. The Department of Finance (and most analysts) sees debt-to-GNI* as the most relevant metric. It would also make sense that the 1/20th annual debt reduction rule is set in GNI* terms. A very useful complement to this approach would be to set short- and medium-term debt-to-GNI* targets.

Figure 8: debt-to-GNI*, per cent



Source: Department of Finance calculations as per Stability Programme Update 2019.

Rule #3: achieve the MTO

The anchor of the preventive arm is set in structural terms, and the harmonised approach to calculating the structural balance is ill-equipped to deal with the idiosyncrasies of the Irish economy (box 3 and table 4). Indeed, far from being an anchor, the MTO is very much a moving target.

Possible solution =
calculate the structural balance based on Department's preferred output gap measure

Rationale:

More realistic estimates of the output gap – as published by the Department and endorsed by the IFAC – show a more reasonable and stable profile for the output gap. Using more plausible estimates for the output gap will better help to identify the true underlying position of the economy and, accordingly, a better measure of the structural fiscal balance.

Table 4: structural balance estimates, per cent of GDP

	2017	2018	2019	2020	2021	2022	2023
Autumn 2017	-1.7	-1.1	-0.5	0.2	0.4		
Spring 2018	0.4	-1.0	-0.7	0.0	0.2		
Autumn 2018	0.4	-1.0	-0.7	0.0	0.2	1.0	1.4
Spring 2019	-1.1	-1.6	-1.1	-0.4	0.2	0.7	1.3
Outturn*	-1.1	-1.6					

* as per estimates in the 2019 Stability Programme Update.

Source: Department of Finance calculations.

As outlined in Section 3, the MTO is the cornerstone of the preventive arm of the SGP. Each Member State sets its own MTO while respecting minimum requirements set by the Commission. In essence,

the objective of the MTO is to provide a structural target for Member States that ensures sustainability, taking account of the current and prospective fiscal conditions and implicit liabilities (such as ageing costs). There is a very strong economic argument that the framework in which the MTO is calculated for Ireland does not take sufficient account of the costs of ageing and the need to reduce the debt ratio, given the framework's reliance on ratios scaled by GDP.

For example, adjusting the formula solely for GNI* would imply an Irish MTO of +0.5 per cent as opposed to the current target of -0.5 per cent. This suggests that it would be prudent to reduce the amount of money available to fund expenditure increases / tax cuts for the next few years, to be more conducive with counter-cyclical budgetary policy.

Rule #4: expenditure growth capped at trend economic growth rate

An expenditure rule is relatively economically intuitive: Governments can control expenditure levels and allow automatic stabilisers operate on the revenue side of the fiscal accounts. By capping expenditure growth at the trend growth rate of the economy, the budget will be balanced over the cycle and expenditure sustainable.

Possible solution =
use alternative estimates of potential growth to determine the maximum expenditure growth

Rationale:

Under the harmonised methodology, estimates of the trend growth rate are pro-cyclical, especially for small, open economies. Estimates of the trend growth rate increase endogenously with the very strong actual growth rates being recorded in recent years (in a similar manner, the trend growth rate was endogenously suppressed during the recession years). There is a strong rationale to replace expenditure benchmark growth rates with more plausible (and predictable) estimates of potential growth as developed by the Department of Finance.

Box 3: measurement of the fiscal stance

In the economic literature, the annual change in the structural budget balance (SBB) is often used as a means of measuring the stance of budgetary policy. More precisely, changes in the structural primary balance (SPB) – a variable which removes interest payments from the SBB (as these reflect decisions and actions of previous policy) – can, at least in theory, indicate the budgetary stance. From equation 1 below, a positive change in the SPB points to a tightening (contraction) in the fiscal stance and *vice versa*.

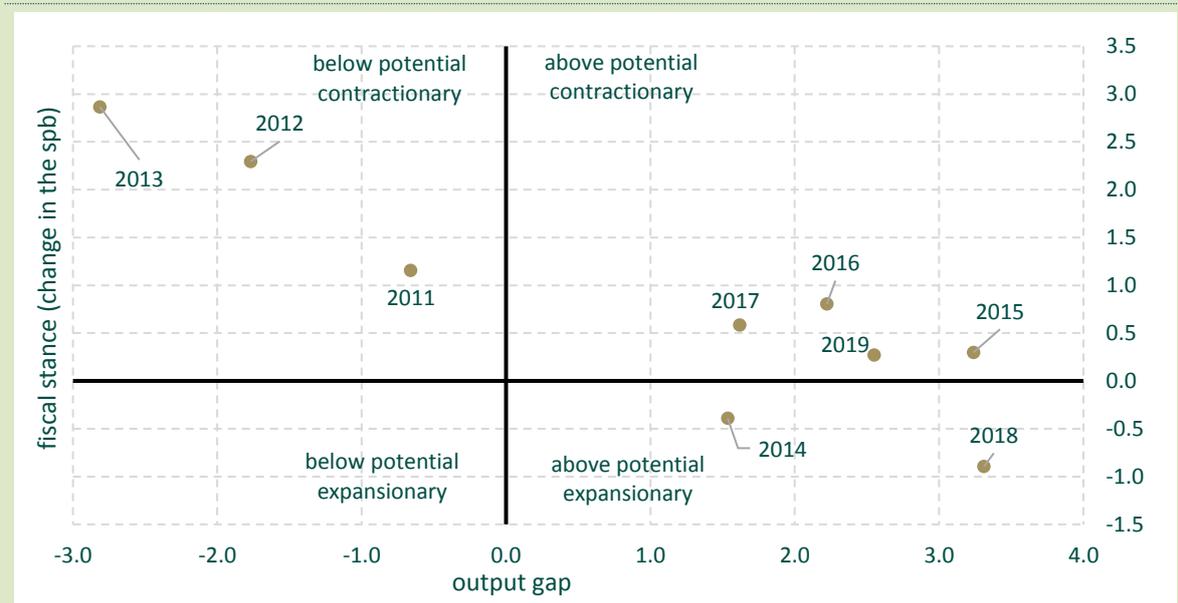
$$\text{Equation 1: } spb_t - spb_{t-1} > 0, \text{ (contractionary); } spb_t - spb_{t-1} < 0, \text{ (expansionary).}$$

When the annual change in the SPB is used in conjunction with an assessment of the economic cycle – the output gap – it is then possible to assess the appropriateness of budgetary policy (again, at least in theory). Figure 9 below plots the change in the SPB (the fiscal stance) on the vertical axis and estimates of the output gap on the horizontal axis over the period 2011-2019. The figures are taken from the Department of Finance spring forecasts, as set out in the most recent Stability Programme Update estimates. The output gap is measured on the horizontal axis with positive values pointing to episodes where output is deemed to be above potential and *vice versa*.

Fiscal policy should be countercyclical (i.e. lean against the wind) in order to smooth the economic cycle. Episodes of counter cyclical policy are depicted in the top right and bottom left quadrants of the chart. *A priori* this would suggest that *ex post* most budgets in the second half of this decade have been counter-cyclical.

Having said that, it must be acknowledged that while this analytical approach may be theoretically sound, there are major shortcomings from a practical perspective. These centre on the one-size-fits-all approach to calculating the structural primary balance and the output gap. Given these shortcomings are particularly relevant for Ireland, there are serious health warnings attached to assessing the stance of budgetary policy using this approach. It is partly for these reasons that the Department is undertaking extensive work on alternative measures of the cycle.

Figure 9: Stance of fiscal policy and the output gap, per cent of GDP



Source: Department of Finance calculations as per Stability Programme Update 2019.

Section 5: Conclusion

Last year, public expenditure and revenue were aligned for the first time since 2007. While undoubtedly a positive development, it is important to be cognisant of the potential vulnerabilities that remain. The recent improvement in the public finances has coincided with significant increases in CT receipts and followed abnormally strong increases in GDP in previous years (that flattered deficit and debt ratios). Much attention has focused on the sustainability of CT receipts and it is clear that concentration of these receipts amongst a small number of firms, allied to the potentially transient nature of these receipts, means a potential shock to this source of revenue must be mitigated against.

This discussion paper considered a number of ways in which excess CT receipts could be treated, such as, for example, through investment in the *Rainy Day Fund* and also how headline fiscal ratios could be amended to better account for this potential risk. Base broadening measures are key to ensuring the continued sustainability of tax receipts. Work in this regard is already underway. For instance, the commercial Stamp Duty rate increased from 2 per cent to 6 per cent in *Budget 2018* and the VAT rate on tourism activities returned to 13.5 per cent in *Budget 2019*.

The fiscal framework is an additional source of risk. A well-designed fiscal framework should have at its core the twin objectives of short-term economic stabilisation and long-term sustainability. Unfortunately, design-flaws mean that a key ingredient of the fiscal framework – namely the fiscal rules – may not be optimal in an Irish context. This primarily relates to Irish-specific issues, most importantly the increasing mis-alignment of GDP with actual economic developments in Ireland.

Consequently, it would appear to be more prudent to modify the domestic application of the existing fiscal rules to better reflect the idiosyncrasies of the Irish economy and, in doing so, to ensure the sound management of the public finances. Several options were put forward in this note, many of which are related or interlinked. These include using alternative measures of trend growth and of the cyclical position of the economy (the output gap). Re-stating the debt rule as a share of modified GNI could complement this approach.

Annex 1: Stability and Growth Pact – a brief history

SGP 1.0

1997-2005

The origins of the *Stability and Growth Pact* lie in the 1992 Maastricht Treaty, where the drafters recognised potential spill-overs to the single, centralised monetary policy from de-centralised fiscal policies. This unique structure necessitated a rules-based framework to address the ‘free-rider’ problem that could arise (namely that the cost, in terms of higher interest rates, of an overly expansionary budgetary policy in one Member State within the monetary union is partly spread across the full currency area rather than confined to the Member State concerned).

Arising from this, a suite of secondary legislation constraining national budgetary policy was adopted by the European Council in 1997, which became known as the *Stability and Growth Pact* (the ‘Pact’; SGP). The objective was to preserve national fiscal autonomy but, at the same time, to constrain the fiscal stance of individual Member States in order to ensure fiscal sustainability and to prevent negative spill-overs to other participants.

Specifically, Member States were required to run fiscal positions which were close to balance or surplus over the medium term (the preventive arm) and to avoid ‘gross policy errors’, i.e. not to run deficits in excess of 3 per cent of national income (the corrective arm). The original SGP also – at least on paper – recognised the importance of stocks (debt) and not just flows (the annual balance); Member States were required to maintain their debt levels below 60 per cent of GDP or reduce them towards this limit at a satisfactory pace.

SGP 2.0

2005-2011

In the run-up to stage III of EMU, the fiscal accounts of many countries improved as Member States sought to meet the qualifying criteria (the ‘Maastricht criteria’). However, the cyclical upswing during 1999-2001 was not used to improve the underlying fiscal position in all countries so that, during the mild downturn from 2002, the headline budgetary position deteriorated in several Member States. This would prove to be the first major bump in the road for the European fiscal rules.

Several Member States resorted to creative accounting (securitisations, transfers from State-related entities, etc.) to avoid an excessive deficit procedure (EDP). More fundamentally, the Pact became unworkable when the Council decided not to launch EDPs for several Member States who had breached the 3 per cent deficit limit, most notably Germany and France.

Instead, the rules of the game were changed with the adoption of revisions to the legislation – SGP 2.0 – in 2005. These changes were intended to counter criticisms that the focus on the headline balance was insufficiently sensitive to the economic environment and, accordingly, could lead to pro-cyclical fiscal adjustments. In order to improve the cyclical properties of the Pact, the so-called structural budget balance moved centre-stage: Member States were required to balance their budgets over the economic cycle.

While undoubtedly more economically intuitive – as it provides for a counter-cyclical budgetary approach via the automatic stabilisers – the structural balance is an unobservable variable and suffers from serious measurement issues. In particular, it relies on estimates of the economic cycle – the output gap – which is notoriously difficult to measure in real-time and, as has been demonstrated, is subject to significant revisions.

SGP 3.0

2011-present

The global financial crisis and subsequent euro area crisis paved the way for the third generation of fiscal rules in 2011. Public deficits soared in the euro area, with EDPs opened for most Member States.

Crucially, the sharp increase in public indebtedness raised market access concerns for many countries, highlighting the need to put the debt ratio on a downward trajectory.

Short-comings of the output gap as a means of taking the temperature of an economy also came to the fore during the crisis. The trend-cycle decomposition of output – which largely relies on filtering (smoothing) time-series data – was hugely complicated by the large downward shift in economic activity at the time.

In response, a major overhaul of both arms of the Pact was adopted by the Council in 2011. To address shortcomings in the preventive arm, the structural balance was complemented by an expenditure rule which tied public expenditure to the trend growth rate of the economy. Equally important, the debt rule – which had been largely ignored – was operationalised, with the possibility of opening an EDP if a Member States with ‘excessive’ debt (greater than 60 per cent of GDP) was not reducing the debt ratio at a sufficiently rapid pace.

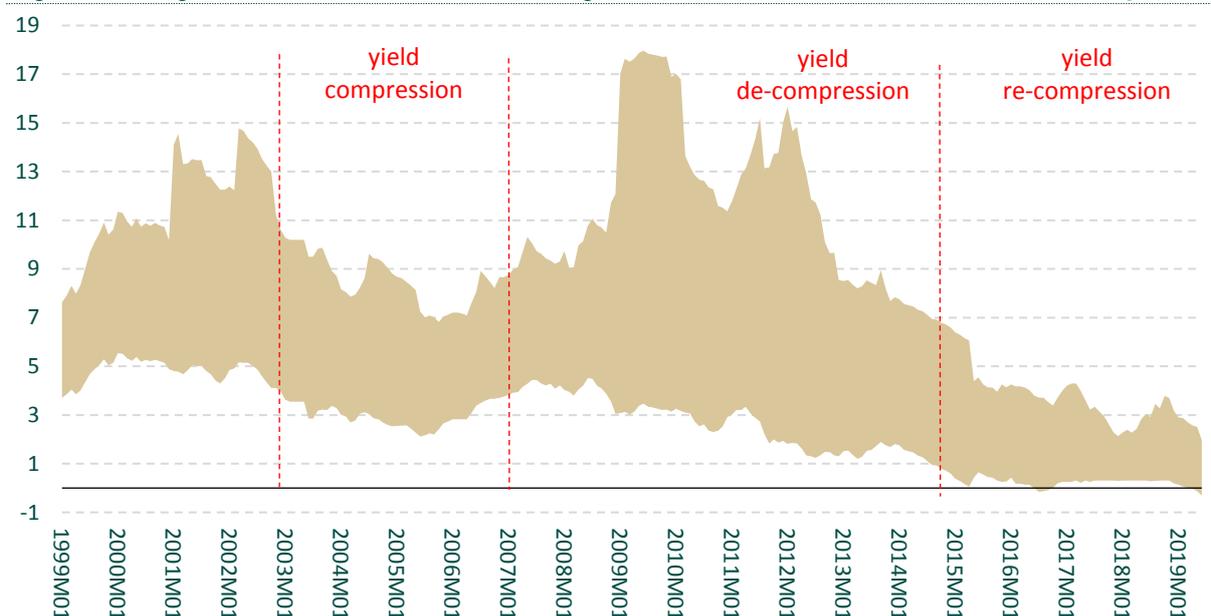
Procedural changes – including providing for greater automaticity in enforcement and, accordingly, less discretion in decision-making – were also adopted.

SGP 4.0

some stage in future

Design-flaws have undoubtedly undermined the credibility of the SGP. In this regard, the literature on fiscal rules (most notably Kopits and Symansky, 1998)²⁷ emphasises simplicity, transparency and enforceability as pre-conditions for effectiveness. However, economists remain sceptical that SGP 3.0 meets these pre-conditions.

Figure 10: range between max and minimum long-term interest rates in euro area MS, percentage points



2003-2007 and 2016- : yield convergence; 2008-2015: yield divergence.

Last observation is end-H1 2019.

Source: DoF calculations based on data from macrobond.

A recurring criticism is the excessive complexity associated with the current generation of rules. Having said that, it must be recognised that there is a clear trade-off between the level of simplicity on the one hand and economic sensibility on the other. Certainly there is evidence of a credibility gap, and the

²⁷ Kopits and Symansky (1998), ‘Fiscal Policy Rules’. Volume 162 of International Monetary Fund Occasional Paper.

commitment of both the Commission and Council to the Pact's full implementation has been questioned. A lack of ownership on the part of national governments is an additional shortcoming regularly cited; the *Fiscal Compact* was an attempt to address this problem.

The legislation provides for a review of the Pact by end-2019. At this stage, it is unclear as to what, if any, changes will be recommended, although a quantum leap appears unlikely given the divergence of views regarding the way forward. A non-exhaustive list of options includes: a debt rule (possibly country-specific), an expenditure rule, a combination of an expenditure and debt rule, a re-focusing towards headline balances.

Finally, it is worth pointing out that some economists have questioned the need for a rules-based approach altogether, arguing that, with the no bail-out clause enshrined in primary legislation (article 125 of the Treaty), markets could play a greater role in ensuring fiscal discipline. In response, others have pointed to the absence of market discipline in the first decade of monetary union, with a compression of yields across all participating Member States (figure 10). While home bias and re-denomination risk were important drivers of subsequent yield de-compression, non-standard monetary policies are a key factor behind the re-compression of yields since the mid-part of this decade.