Scottish Fiscal Commission

Scotland's Economic and Fiscal Forecasts Supplementary Publication Updated Income Tax Forecasts February 2018

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Introduction

1 During Stage 1 of the Budget (Scotland) (No.2) Bill debate on 31 January 2018 the Cabinet Secretary for Finance and the Constitution announced a number of changes to the Draft Budget that had been published in December 2017.[1] These included a change to the income tax higher rate threshold, an extension of the Government's public sector pay policy and a number of additional expenditure commitments totalling £137.8 million in 2018-19.[2]

2 The Scottish Government published their provisional estimate of the additional revenue of around £220 million in 2018-19 from the revised income tax policy of which £55 million was associated with the reduction in the higher rate threshold. Their factsheet noted that the Commission would provide the official revenue estimate.[3]

3 This supplement to our December forecast provides an updated forecast for income tax revenue from 2018-19 to 2022-23 that reflects the reduction in the higher rate threshold and the extension of the public sector pay policy.[4] This timing was agreed with Parliament and the Government before Christmas and the written agreement was published on our website.[5]

4 The Government has informed the Commission the Cabinet Secretary intends to put on the record at Stage 2 that the additional spending will be funded from tax revenues plus a combination of Scotland Reserve drawdown and underspends. We noted in our December report that our role on borrowing assesses any borrowing which Ministers can project in advance, and considered the Scottish Government's capital borrowing plans. The Government does not intend that the additional expenditure announced by the Cabinet Secretary will require additional borrowing or impact on the position of the Non-Domestic Rates Rating Account, also known as the NDR pool.

5 In light of this the Commission sees no need to change its December assessment of the reasonableness of the Government's borrowing projections. Our next forecasts will be published in the spring to accompany the proposed Medium Term Financial Strategy focussing on the longer-term sustainability of Scotland's public finances. We will review our assessment of

[1] Scottish Parliament (2018) Budget (Scotland) (No.2) Bill (link)

[2] Scottish Parliament (2018) Meeting of the Parliament Wednesday 31 January 2018 (link)

[3] Scottish Government (2018) Income tax Policy proposals in Budget Bill: Fact Sheet (link)

[4] Scottish Fiscal Commission (2017) Scotland's Economic and Fiscal Forecasts December 2017 (link)

[5] Scottish Fiscal Commission (2017) Supplement to the Protocol for Engagement Between the Scottish Fiscal Commission and the Scottish Government (link)

the reasonableness of the Government's borrowing projections, and its scope, at that time.

6 Table 1 sets out the Commission's final forecast of Scottish Non-Savings Non-Dividend (NSND) income tax liabilities.

Table 1: Scottish NSND income tax outturn & forecast

£ million	2014-15 Outturn*	2015 -16	2016 -17	2017 -18	2018 -19	2019 -20	2020 -21	2021 -22	2022 -23
NSND liabilities	10,887	10,932	11,214	11,584	12,177	12,647	13,152	13,733	14,372

Source: Scottish Fiscal Commission. *Outturn refers to HMRC (2017) Survey of Personal Incomes (SPI) Personal Use Tape (PUT) (link)

Income tax measure description

7 In December 2017 the Scottish Government announced a new five band income tax system. This would divide the existing basic rate band into three separate bands. The Government also announced one percentage point increases in the tax rates applying in the existing higher rate and additional rate bands and the new intermediate rate band. A one percentage point reduction applies to the tax rate for the new starter rate band.

8 The higher rate threshold was set at £43,000 in 2017-18. In the absence of any policy change, the Commission assumes it would have increased in line with inflation to £44,273 for 2018-19 and this level was proposed by the Government in its Draft Budget 2018-19. In the final policy agreement, there will be a smaller increase in the higher rate threshold to £43,430. As this is less than the expected increase in the baseline, this will raise additional revenues in 2018-19.

9 The final income tax policy for 2018-19 is shown in Table 2.

Table 2: Final income tax policy measure description (2018-19)

Gross Income (£)	New Bands	New Tax rate (%)	Previous Bands	Previous Tax Rate (%)
11,850 - 13,850	Starter Rate	19	Basic Rate	20
13,851 - 24,000	Basic Rate	20		
24,001 - 43,430	Intermediate Rate	21		
43,431 - 150,000	Higher Rate	41	Higher Rate	40
Above 150,000	Top Rate	46	Additional Rate	45

Source: Scottish Government

10 Table 3 sets out our baseline assumption for the higher rate threshold under no policy change, the values assumed for the December 2017 policy – which

are the same as our baseline assumption, and under the final income tax policy. The higher rate threshold is expected to increase in line with inflation from 2019-20 onwards in each case.

Table 3: Higher rate threshold, baseline forecast and after policy change (£)

	2018-19	2019-20	2020-21	2021-22	2022-23
Baseline no policy change assumption	44,273	45,237	46,062	46,985	47,923
December 2017 policy costing	44,273	45,237	46,062	46,985	47,923
Final policy	43,430	44,375	45,184	46,089	47,010

Source: Scottish Fiscal Commission

11 The policy parameters provided by the Scottish Government apply only to 2018-19. We are required to produce a forecast up to 2022-23. The years beyond 2018-19 are based on a no further policy change assumption. Therefore, while not a policy, the Scottish Government suggested a set of assumptions for future years:

- An annual inflation uplift of the Personal Allowance using the OBR September CPI inflation forecast. This method of uplift is the same approach used by the OBR. This may change if the UK Government commits to increase the Personal Allowance by a different amount.
- All thresholds increase in line with OBR September CPI inflation assumptions; the only exception is the highest threshold, which will be fixed at £150,000.
- No further changes to tax rates

12 We judge these to be a suitable set of assumptions for future years.

The cost base

13 The cost base is all Scottish income tax taxpayers. Our income tax model produces a detailed forecast of the number of taxpayers, their incomes and their current tax liabilities. Further details of our modelling approach can be found in the income tax section in Chapter 3 of our December 2017 report Scotland's Economic and Fiscal Forecasts, and in our "Current Approach to Forecasting" paper.[6] Using a forecast of the distribution of taxpayers and their incomes allows us to produce a forecast of the cost of this policy.

[6] Scottish Fiscal Commission (2017) Scotland's Economic and Fiscal Forecasts December 2017 (link)

Scottish Fiscal Commission (2017) Current Approach to Forecasting (link)

14 Table 4 shows how many taxpayers are expected to be in each band in each year of the forecast based on the results from our income tax model. For most bands, there is no change in thresholds, and so they remain in the same band before and after the policy change. Under the announcement in December, those taxpayers earning between £43,430 and £44,273 would have been intermediate rate taxpayers, but with the smaller increase in the higher rate threshold will now be higher rate taxpayers. We estimate that 17,900 people will be in this group in 2018-19.

Table 4: Forecast number of Scottish income tax taxpayers by tax band

	2018-19	2019-20	2020-21	2021-22	2022-23
Starter Rate	250,400	254,600	249,700	252,600	251,300
Basic Rate	1,031,300	1,034,500	1,039,500	1,041,700	1,042,500
Intermediate Rate	874,700	883,600	899,600	911,800	931,600
Move to Higher Rate	17,900	18,700	18,000	20,600	18,600
Higher Rate	332,000	337,100	348,200	360,300	374,300
Top Rate	18,900	20,300	21,800	23,500	25,300
Total	2,525,200	2,548,800	2,576,800	2,610,500	2,643,600

Source: Scottish Fiscal Commission

15 Over time, the total number of Scottish taxpayers is set to increase, primarily because of population and demographic changes. As earnings grow while the additional rate threshold is fixed at £150,000, the share of taxpayers expected to fall into the additional rate band increases rapidly over the forecast horizon. We estimate there will be an increase in the number of top or additional rate taxpayers of around 34 per cent as a result of this fiscal drag.

The costing

16 This section begins by presenting the costing for the final agreement on income tax policy as a whole. The second part of this section then presents the costing for the additional change in the higher rate threshold in isolation.

17 The static costing is the cost of the policy assuming the affected taxpayer population does not change their behaviour in response to the policy change. This is produced by calculating the change in tax liabilities between the baseline scenario and the policy scenario. For the purposes of illustrating the effects at different bands, we split the baseline scenario into the same

five bands. Table 5 and 6 detail the thresholds used in both the baseline and policy scenarios.[7]

Table 5: Income tax rates and thresholds - Baseline no policy change

	2018-19	2019-20	2020-21	2021-22	2022-23
Starter Rate (%)	20	20	20	20	20
Starter Threshold (£)	11,850	12,110	12,340	12,590	12,850
Basic Rate (%)	20	20	20	20	20
Basic Threshold (£)	13,850	14,154	14,422	14,714	15,017
Intermediate Rate (%)	20	20	20	20	20
Intermediate Threshold (£)	24,000	24,525	24,982	25,486	26,004
Higher Rate (%)	40	40	40	40	40
Higher Threshold (£)	44,273	45,237	46,062	46,985	47,923
Top Rate (%)	45	45	45	45	45
Top Threshold (£)	150,000	150,000	150,000	150,000	150,000

Source: Scottish Government

Table 6: Income tax rates and thresholds - Final policy

	2018-19	2019-20	2020-21	2021-22	2022-23
Starter Rate (%)	19	19	19	19	19
Starter Threshold (£)	11,850	12,110	12,340	12,590	12,850
Basic Rate (%)	20	20	20	20	20
Basic Threshold (£)	13,850	14,154	14,422	14,714	15,017
Intermediate Rate (%)	21	21	21	21	21
Intermediate Threshold (£)	24,000	24,525	24,982	25,486	26,004
Higher Rate (%)	41	41	41	41	41
Higher Threshold (£)	43,430	44,375	45,184	46,089	47,010
Top Rate (%)	46	46	46	46	46
Top Threshold (£)	150,000	150,000	150,000	150,000	150,000

Source: Scottish Government

18 We then calculate the impact on income tax liabilities. In comparison to the baseline scenario, all taxpayers with gross incomes below around £26,000 in 2018-19 will see their tax liabilities reduce by a maximum of £20.[8] Taxpayers with gross incomes above this threshold will have higher tax liabilities.

19 To calculate the total static cost of this policy measure we combine the individual impacts across the taxpayer distribution. Table 7 details the aggregate impact of the policy changes on taxpayers in different income ranges.

[7] The thresholds in 2018-19 for the basic, intermediate, higher and top rates, are £1 less than detailed in Table 5. This because of the treatment of thresholds in our modelling.

[8] For this particular illustrative comparison, we make some stylised assumptions, for example we assume there are no corresponding interactions with income deductions such as pension contributions.

Table 7: Static costing of income tax policy by income ranges, £ million

Income range 2018-19 (£)	Tax band	2018-19	2019-20	2020-21	2021-22	2022-23
11,850 – 13,850	Starter Rate	-2	-3	-3	-3	-3
13,850 – 24,000	Basic Rate	-21	-21	-22	-22	-23
24,000 – 43,430	Intermediate Rate	51	53	55	57	60
43,430 – 44,273	Move to Higher Rate	5	5	5	6	5
44,273 – 150,000	Higher Rate	187	193	202	212	224
150,000+	Top Rate	56	60	64	69	74
Static Costing		**276**	**287**	**302**	**319**	**338**

Source: Scottish Fiscal Commission. Figures may not sum to totals because of rounding.

20 With the policy announced in December, all basic rate taxpayers earning between £24,000 and £44,273 in 2018-19 would have become intermediate rate taxpayers. Now, those individuals at the top of this range earning from £43,430 to £44,273 in 2018-19 will instead become higher rate taxpayers. These two groups are separated out in Table 7.

21 The final step is to take account of any potential behavioural responses. We briefly discussed our approach to modelling behaviour in our December 2017 publication and we apply the same methodology here. We will publish further detail on our approaches to modelling behaviour in March 2018. There are two aspects we consider when evaluating a response to a change in income tax policy: shorter term forestalling responses and ongoing behaviour captured through the use of our elasticities.

Forestalling

22 Consistent with our forestalling approach in December, we have assessed forestalling effects to be negligible for this policy. We will review our forestalling approach once outturn data are available.

Ongoing behaviour elasticities

23 We apply the intensive and extensive elasticities described in our December 2017 report to the taxpayer population and calculate the corresponding behavioural response. Table 8 shows the scale of total behavioural response by taxpayers by different income ranges and the expected total behavioural impact.

Table 8: Impact of behaviour on tax liabilities by income range, £ million

Income range 2018- 19 (£)	Tax band	2018-19	2019-20	2020-21	2021-22	2022-23
11,850 – 13,850	Starter Rate	0	0	0	0	0
13,850 – 24,000	Basic Rate	0	0	0	0	0
24,000 – 43,430	Intermediate Rate	-1	-1	-1	-1	-1
43,430 – 44,273	Move to Higher Rate	-1	-1	-1	-1	-1
44,273 – 150,000	Higher Rate	-23	-24	-25	-27	-28
150,000+	Top Rate	-32	-34	-36	-39	-42
Total Behavioural Impact		**-56**	**-59**	**-63**	**-67**	**-71**

Source: Scottish Fiscal Commission. Figures may not sum to totals because of rounding.

24 The greatest behavioural response comes from those in the higher and top rate bands. We judge that these individuals have the greatest means and incentives to avoid or evade tax.

25 Combining the static and behavioural costings results in the final post-behaviour costing shown in Table 9. This is the Commission's final estimate of the Budget 2018-19 income tax policy in aggregate.

Table 9: Final costing of income tax policy

£ million	2018-19	2019-20	2020-21	2021-22	2022-23
Static Costing	276	287	302	319	338
Behavioural Effect	-56	-59	-63	-67	-71
Post-Behavioural Costing	**219**	**228**	**239**	**252**	**267**

Source: Scottish Fiscal Commission. Figures may not sum to totals because of rounding.

26 Table 10 shows how this final costing can be broken down between the December 2017 policy announcement and the additional change in the higher rate threshold announced at Stage 1.

Table 10: Final costing of income tax policy by announcement

£ million		2018-19	2019-20	2020-21	2021-22	2022-23
	Static Costing	215	224	235	249	264
December 2017	Behavioural Effect	-51	-54	-57	-61	-65
	Post-Behavioural Costing	**164**	**170**	**178**	**188**	**199**
Change to higher	Static Costing	61	63	67	70	75
rate threshold in	Behavioural Effect	-5	-5	-6	-6	-6
isolation	Post-Behavioural Costing	**55**	**58**	**61**	**64**	**68**
	Static Costing	276	287	302	319	338
Final Costing	Behavioural Effect	-56	-59	-63	-67	-71
	Post-Behavioural Costing	**219**	**228**	**239**	**252**	**267**

Source: Scottish Fiscal Commission. Figures may not sum to totals because of rounding.

Total NSND income tax liabilities

27 This section presents the Commission's final forecast of total NSND income tax liabilities.

Public sector pay

28 The final agreement for Budget 2018-19 also included an extension to the higher public sector pay awards announced in December 2017. One of the main elements of the December pay award was a 3 per cent basic pay award for those in scope earning less than £30,000 per year, and a 2 per cent basic pay award for those in scope earning over £30,000.[9] At the time, we reflected the impact of this higher than expected pay award in our baseline income tax forecast. The final agreement on Budget 2018-19 extended the 3 per cent basic pay award to individuals in scope earning up to £36,500 per year

29 In our December report we set out that we would not be adjusting our underlying economy forecast in response to the public sector pay announcement. This may mean some minor second round economic effects are missed, but these are not expected to significantly affect the economy or income tax revenues. We take the same approach here, and adjust our income tax forecasts directly to take account of the extended public sector

[9] The pay award is expected to apply to around 260,000 public sector workers in Scotland, on a full time equivalent (FTE) basis. This covers those working for the Scottish Government and other Scottish public bodies, NHS, police, fire, teachers and further education. The pay award does not cover Local Government or UK Civil Servants working in Scotland.

pay award, without adjusting the underlying economy forecasts. We will reflect further on this approach in our upcoming May forecasts.

30 In isolation, the extended pay award is expected to add an extra £7 million to income tax revenues in 2018-19, rising to £8 million by 2022-23. These figures are shown in Table 11.

Table 11: Impact on total NSND income tax liabilities of extension of higher public sector pay award

£ million	2018-19	2019-20	2020-21	2021-22	2022-23
Impact on tax liabilities	7	7	7	7	8

Source: Scottish Fiscal Commission.

Total NSND income tax liabilities

31 Table 12 shows the Commission's final forecast of total income tax liabilities for Budget 18-19 including all policy changes and the impact of the additional public sector pay adjustment.

Table 12: Final total NSND income tax liabilities forecast, £ million

	2018-19	2019-20	2020-21	2021-22	2022-23
December 2017 pre-measures total	11,951	12,413	12,906	13,474	14,098
December 2017 policy costing	164	170	178	188	199
February 2018 Higher rate adjustment costing	55	58	61	64	68
Final policy costing	219	228	239	252	267
Post-measures forecast	12,171	12,640	13,145	13,726	14,365
Public sector pay additional adjustment	7	7	7	7	8
Final post-measures forecast	**12,177**	**12,647**	**13,152**	**13,733**	**14,372**

Source: Scottish Fiscal Commission. Figures may not sum to totals because of rounding.

Uncertainties around the costing

32 The key uncertainty in the costing is the taxpayer behavioural response. We discussed the evidence around our approach in our December 2017 report. The behavioural response could be either higher or lower than estimated. We will continue to monitor the available evidence on behaviour and will publish a detailed methodology paper in March 2018. This costing will be updated at future fiscal events.

33 The costing is derived from our main income tax forecasting model, using our latest forecasts of Scottish wages and employment. Forecasts for these components are subject to their own uncertainties which may affect the costing presented above.

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