

Forecast evaluation report

October 2024

Office for Budget Responsibility: Forecast evaluation report

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October 2024



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Foreword

The Office for Budget Responsibility was created in 2010 to provide independent and authoritative analysis of the UK public finances. Twice a year – usually at the time of each Budget and Autumn or Spring Statement – we publish a set of forecasts for the economy and public finances over the coming five years in our *Economic and fiscal outlook (EFO)*. We use these forecasts to assess the Government's progress against its fiscal targets.

In each *EFO*, we stress the uncertainty that lies around all such forecasts. We compare our central forecasts to those of other forecasters. We highlight the limited confidence that should be placed in our central forecast given the scale of shocks that inevitably drive a wedge between any central predictions and subsequent outcomes. We use sensitivity and scenario analysis to show how the public finances could be affected by alternative economic outcomes. And we highlight the residual uncertainties in the public finances, even if one were confident about the path for the economy – for example, because of uncertain estimates of the cost of policy measures.

Notwithstanding these uncertainties, we believe that it is important to set out our forecast in detail. It is also important to examine regularly how our forecasts compare to outturn data and to explain any discrepancies so that we can learn from our experience.

Our annual Forecast evaluation report (FER) enables us to reflect on the reasons for divergence between our central forecast and the subsequent outturns. To a significant extent these differences between outturns and previous forecasts are inevitable given the inherent difficulty in forecasting the path of the economy and public finances, which has been amplified recently by a series of unforecastable shocks. But some differences are due to genuine errors, which would have been corrected before the forecast was finalised if we had spotted them. We use these reports to identify, understand, and learn from these errors and more generally improve the way in which we forecast.

This year our report analyses the performance of our March 2023 economic and fiscal forecasts for the 2023-24 financial year. This report was initially scheduled for publication on 18 July. The announcement on 22 May of a General Election on 4 July meant we postponed its release to 10 October. However, most of the preparation of this report had been undertaken on the initial publication schedule.

Therefore, economy outturn data is taken from the 28 June 2024 Quarterly National Accounts publication. We have not taken on the subsequent Blue Book revisions, which were released as aggregates on 7 August 2024 but not fully incorporated into Quarterly National Accounts until 30 September 2024.

For public sector expenditure, the outturn data used is from the ONS's June Public Sector Finances publication. This uses the ONS's 'Public Sector Analytical Tables' ('PSAT') economic categories of expenditure, rather than the full 'total managed expenditure' ('TME') breakdown that we focus on in our forecast and would normally analyse in FERs. This means we have had to classify the major spending forecast differences into economic and other factors, plus the impact of policy, in a more approximate manner than we would normally be able to, but we are confident the broad results are nevertheless robust.

For public sector receipts, we were able to update our analysis to use the outturn from the ONS's July 2024 Public Sector Finances publication, which reflected adjustments from HMRC's Trust Statement alignment exercise. When classifying the receipts forecast differences arising from economic factors, we used economic data from the ONS's March 2024 Quarterly National Accounts.

In line with our Memorandum of Understanding, we provided a final copy of this report to the Treasury two working days in advance of publication.

We would be pleased to receive feedback on any aspect of the content or presentation of our analysis. This can be sent to feedback@obr.uk.

Richard Hughes

Professor David Miles CBE

Tom Josephs

The Budget Responsibility Committee

1 Executive summary

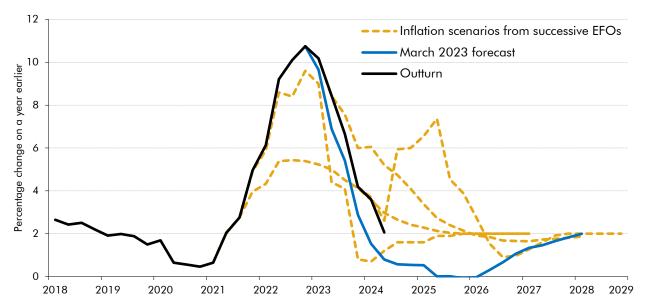
- The focus of this year's Forecast evaluation report (FER) is the performance of our March 2023 Economic and fiscal outlook (EFO) forecast for the financial year 2023-24. The economy outturn data uses the ONS's Quarterly National Accounts released on 28 June 2024. We have not taken on the Blue Book revisions partially released on 7 August 2024 and included in the 30 September 2024 Quarterly National Accounts, which arrived too late for consideration. The fiscal outturn data used is the ONS's July 2024 Public Sector Finances publication for receipts, which include changes to tax revenues from HMRC's Trust Statement alignment exercise, and the ONS's June 2024 publication for spending.
- 1.2 During 2023-24, inflation fell rapidly as energy prices dropped, while GDP growth stagnated following its recovery from the pandemic. The labour force grew as net migration reached record levels, more than offsetting further falls in the overall participation rate. Total tax receipts remained at historically high levels as a share of GDP, with income tax and NICs receipts in particular remaining elevated due to high nominal earnings combined with frozen personal tax thresholds. Public spending fell as a share of GDP, as higher inflation eroded its real value despite modest additions to departmental spending to fund pay settlements, and higher spending on debt interest.
- In this FER, in addition to examining the performance of our central forecast, we also explore how we presented the uncertainty around that forecast. While significantly different from our central forecast, outturns for energy prices, and interest rates were close to the alternative scenarios we explored for these key forecast determinants in the March 2023 EFO. In a volatile period for market expectations, outturns for gas prices proved to be closer to our downside scenario, while interest rates were closer to our upside. And the asymmetric impact of unexpectedly high inflation on the public finances, pushing up receipts more than spending, was consistent with the inflation scenarios included in successive EFOs.

Economy forecast differences

1.4 **CPI inflation** averaged 5.7 per cent in 2023-24 compared to our forecast of 4.1 per cent. But falling inflation during the year and in subsequent outturns was broadly consistent with our judgement that the spike in inflation would prove to be transitory. And, by the second quarter of 2024, inflation was close to the 2 per cent target. Inflation in 2023-24 was 1½ percentage points higher than our forecast despite lower-than-forecast wholesale energy prices. That is because these were more than offset by a more substantial pass-through of the previous rise in energy prices, and higher domestically generated inflation from a tighter labour market and stronger nominal wage growth.

1.5 To reflect the difficulty of forecasting inflation during the UK's largest inflation shock since the 1980s, we illustrated risks to our central inflation forecast using **scenarios** in successive EFOs (Chart 1.1). These scenarios mostly varied the size of the energy price shock and the extent to which inflation continued to reflect an imported energy shock versus passing through to domestically generated inflation. However, inflation often turned out to be somewhat higher than even our high-inflation scenarios, suggesting we could have used more extreme assumptions.

Chart 1.1: CPI inflation forecast, scenarios, and outturn

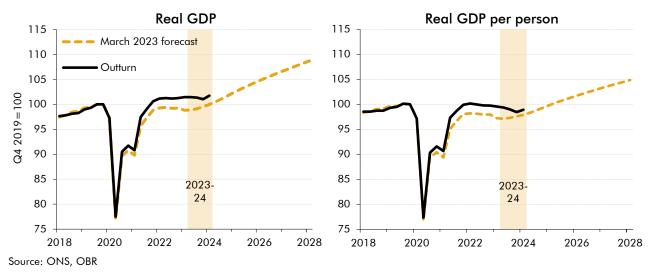


Source: ONS, OBR

- 1.6 Higher domestically generated inflation meant Bank Rate and gilt rates turned out to be higher than market expectations at the time of our March 2023 forecast. Bank Rate peaked at 5.25 per cent, 1.0 percentage points higher and a quarter later than markets expected, and averaged 0.9 percentage points above our forecast for 2023-24. Long-term (20-year) gilt rates averaged 4.3 per cent, 0.6 percentage points higher than the path assumed in our forecast. Our forecast was produced during a volatile period for interest rates, so in our March 2023 EFO we included scenarios to show the fiscal impact of these being higher and lower. Bank Rate turned out to be broadly in line with our upside scenario, which was 1 percentage point above our central forecast.
- 1.7 Alongside the uncertainty around inflation and interest rates, over the past few years there have been significant challenges in forecasting two key drivers of the size of the labour force: inactivity and net migration. This has been compounded by uncertainty about the quality of the statistics in the ONS Labour Force Survey (LFS). Our March 2023 forecast for the participation rate was in line with outturn, as inactivity due to long-term sickness and among students rose, while inactivity due to caring fell. But we underestimated the size of the labour force due to a very large upward revision to the size of the population following the reweighting of the LFS. This was driven by net migration, which rose to 740,000 over the year to mid-2023, 430,000 higher than the assumption in our forecast.

- 1.8 Aggregate real household disposable income (RHDI) growth was much stronger than we forecast, with growth of 3.0 per cent in 2023-24 compared to our forecast of a 1.5 per cent fall. Higher-than-expected inflation was more than offset by a combination of stronger nominal wage growth, higher net interest income, and much faster population growth. This contributed to higher-than-expected real consumption growth, which was 0.8 percentage points above our central forecast, at 0.2 per cent. However, the upside surprise in RHDI did not fully feed through to consumption due to a much higher saving rate than we forecast. This is likely because a higher Bank Rate incentivised saving, and stronger real income growth meant, in aggregate, households did not need to lower their saving to support their real consumption as much as we expected.
- 1.9 Based on ONS estimates available at the time of writing this report, **real GDP growth** of 0.1 per cent was very close to our forecast of 0.2 per cent. But its composition was somewhat different: growth in employment was higher than expected as net migration drove strong population growth, while average hours and productivity growth were weaker. In per-person terms, real GDP fell by 0.8 per cent in 2023-24 compared to our forecast of a 0.3 per cent decline. Despite the similar growth forecast, the **level of real GDP** in 2023-24 was 2 per cent higher than our forecast (Chart 1.2). This was because GDP revisions released after our March 2023 forecast suggested that the economy recovered more quickly and more fully from the pandemic than previously estimated. **Nominal GDP growth**, the key driver of our fiscal forecast, was higher than forecast due to stronger GDP deflator inflation.

Chart 1.2: Real GDP and real GDP per person



Fiscal forecast differences

1.10 Public sector net borrowing (PSNB) in 2023-24 was £120.3 billion (4.4 per cent of GDP), £11.2 billion (0.4 per cent of GDP) lower than we forecast in March 2023. This undershoot was the net effect of receipts exceeding our forecast by £38.8 billion (1.4 per cent of GDP), and spending exceeding our forecast by £27.6 billion (1.0 per cent of GDP). Receipts grew more strongly primarily due to higher inflation and earnings which boost receipts from taxes levied on a nominal base. Inflation had a smaller proportional impact on spending as

departmental expenditure and welfare benefit rates were largely fixed at an earlier point. Therefore, the net effect was that higher-than-anticipated inflation reduced PSNB relative to forecast, as summarised in Chart 1.3.

- 1.11 Policy changes increased borrowing by £8.5 billion, by reducing receipts by £1.6 billion and increasing spending by £6.9 billion relative to our March 2023 forecast. The reduction in receipts was primarily driven by the January 2024 2p cut to employee NICs. The largest policy change affecting spending was an increase in day-to-day departmental spending to fund 2023-24 pay settlements.
- 1.12 **Economic factors** reduced borrowing by £14.9 billion relative to our March 2023 forecast, through increasing receipts by £26.0 billion and spending by £11.1 billion:
 - The main economic factor was higher-than-anticipated **inflation and earnings**, which reduced borrowing by £15.3 billion, by increasing receipts by £18.4 billion and spending by £3.1 billion. Receipts were boosted by larger nominal tax bases for taxes such as income tax, NICs, and VAT. Spending on RPI-linked debt increased relative to our forecast. This was partially offset by higher earnings reducing the net cost of unfunded pension schemes.
 - Higher interest rates increased borrowing by £4.5 billion. Debt interest spending was £6.8 billion higher than forecast, with £6.5 billion of this relating to higher interest rates. This is partially offset by £2.0 billion higher interest and dividend receipts (which include income from the Government's financial assets), and savings income on which self-assessment income tax is raised.
 - Higher **employment levels** reduced borrowing by £4.5 billion by increasing income tax and NICs receipts.
 - Gas and electricity prices came in substantially lower than forecast, increasing borrowing by £4.3 billion. Tax revenues from gas and electricity generation were lower by £4.8 billion due to these lower prices, and spending on the energy bill relief scheme was £0.5 billion higher.
 - Other economic factors decreased borrowing by a further £3.9 billion. These include a £1.8 billion increase to onshore corporation tax receipts from higher-than-anticipated net interest margins boosting financial company profits, the impact of the stronger rise in real household disposable incomes on consumption (rather than changes to price levels) increased VAT receipts by £1.1 billion, and other factors that boosted income tax and NICs receipts by £1.1 billion.¹
- 1.13 Other fiscal forecasting factors reduced borrowing by £4.8 billion relative to our March 2023 forecast. This was the net result of a £14.4 billion underestimate of receipts, offset by a £9.6 billion underestimate in spending. £7.6 billion of these additional receipts and spending came from fiscally neutral changes. These other factors included:

¹ These include income from pensions, dividends, land and property, and capital formation.

- Higher-than-forecast corporation tax receipts as high profits and effective tax rates observed in 2022-23 remained elevated in 2023-24, rather than returning to historic levels as we had forecast. This increased onshore corporation tax compared to our forecast by £10.9 billion.
- Stronger-than-anticipated wage growth at the lower end of the earnings distribution appears to be one factor that boosted NICs receipts (relative to more evenly distributed earnings growth), driving £3.0 billion of other fiscal forecast differences in **income tax** and NICs, because the employee NIC rate falls to 2 per cent for higher-rate taxpayers.
- High payments from the top 1 per cent of **capital gains taxpayers** in 2022-23 proved to be temporary, decreasing receipts relative to our forecast by £3.0 billion.
- Tobacco clearances came in substantially below our forecast due to the rise of vaping, reducing receipts from **tobacco duties** by £1.6 billion.
- The **fiscally neutral changes** were mostly driven by the £5.6 billion increase to general government depreciation from ONS revisions to the post-pandemic assessment of capital stocks, and higher effective VAT rates on government procurement increasing VAT refunds by £2.1 billion. These changes increase both receipts and spending.

200 Difference due to policy Difference due to economy Difference due to other change: +£8.5 billion determinants: -£14.9 billion factors: -£4.8 billion 150 +6.9 +1.6131.6 +9.6 120.3 noillion 100 -26.0 -14.4 50 Increasing borrowing Decreasing borrowing 0 Receipts other Spending other PSNB outturn March 2023 Receipts policy Spending Economy Economy

Chart 1.3: March 2023 Public sector net borrowing differences for 2023-24

Note: The "Other" categories include fiscal forecast differences and classification changes. £7.6 billion of the increase to each receipts and spending is from PSNB-neutral changes.

in receipts

policy

determinants determinants in

spending

Source: ONS, OBR

forecast

1.14 Public sector net debt (PSND) came in 5.0 per cent of GDP lower than forecast in 2023-24. This largely reflects upward revisions to nominal GDP (4.7 per cent of GDP) with the remainder due to downward revisions to the cash level of debt by £7.9 billion (0.3 per cent of GDP). These include a series of largely offsetting changes:

- **PSNB** coming in £11.2 billion lower than forecast, as set out above.
- Bank of England Schemes adding £22.6 billion less to debt than forecast in March 2023, which was more than accounted for by six-year maturity Term Funding Schemes (TFS) being repaid in 2023-24 rather than in 2024-25 and 2025-26.
- **Gilt premia** valuation effects, which led to debt being £20 billion higher than forecast, due to lower-than-forecast gilt prices, while **other factors** added £6.0 billion.

Refining our forecasting methods

- 1.15 Forecasting the recovery from the pandemic and unwinding of the energy shock was always likely to be challenging, given the lack of recent historical precedents upon which to draw.

 But the lessons we can learn from 2023-24 for future forecasts include:
 - On the **economy** side, we have refined our inflation forecast to increase the indirect effect of energy prices, and are developing a suite of wage equations to improve our wage forecasts. We will also refine our approach to modelling the non-labour income components of RHDI. Given the large forecast difference on net migration, we have developed an in-house model for forecasting migration by visa type (rather than solely relying on ONS projections). To understand the drivers of health-related inactivity and its economic and fiscal implications, we analysed these issues in depth in our 2023 and 2024 Fiscal risks and sustainability reports.
 - On the **fiscal** side, the improvements to our inflation forecasting set out above should also improve our fiscal forecast. In addition, we have improved our VAT forecasting methodology to better assess the consumption of differently rated goods, which should improve its performance when inflation is high. We are also addressing other fiscal forecast issues, including developing our approach to assessing the sectoral composition of corporation taxpayers, and our analysis of the shape of the earnings distribution in our income tax and NICs forecast. We have also improved our welfare forecasting methods, addressing issues raised in the October 2023 *FER* and to reflect our ongoing analysis of the drivers of incapacity benefits.²
 - In this FER, we also reviewed how we present **uncertainty** around our central forecast. We will continue to make regular use of alternative scenarios around our central forecast, based on judgements about the key sources of uncertainty at the time. But the experience of the 2022 energy crisis suggests we need to consider more extreme assumptions in the construction of these scenarios. We will continue using fan charts but consider expanding our use of stochastic simulations in their construction. We will also explore other ways of presenting uncertainty including drawing on examples from economic history and illustrating volatility in recent market expectations.

² This FER assesses public sector net borrowing in 2023-24. Departmental spending in 2024-25 is the subject of an OBR review that is outside the scope of this FER and is ongoing at the time of publication of this report.

2 The economy

Introduction

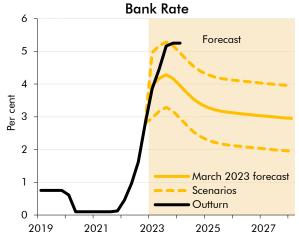
- 2.1 This chapter assesses the performance of our March 2023 forecast for the 2023-24 financial year, using Quarterly National Accounts data published by the ONS on 28 June 2024.³ During this year, inflation fell rapidly as energy prices dropped, while real GDP growth stagnated, following its recovery from the pandemic, and fell in per-person terms. The labour force grew as net migration reached record levels, but the inactivity rate rose further, resulting in a further decline in the employment rate from its pre-pandemic peak.
- Our March 2023 forecast was finalised at a time when wholesale energy prices were falling from their peak but were still elevated. This meant there was significant uncertainty about the outlook for retail energy prices, inflation, and interest rates. There was also uncertainty about the post-pandemic path of labour market inactivity, while the interaction of the post-Brexit visa regime and the end of the pandemic created challenges for forecasting net migration. In this chapter, we therefore consider how we presented uncertainty around these key forecast drivers, including through the scenarios we presented for the future path of Bank Rate, energy prices, inflation, and labour market inactivity.
- 2.3 To evaluate the performance of our forecast for 2023-24, this chapter explores the differences between our central forecast and outturns. We also review how our assessment of the risks around key economic variables compared with subsequent developments. In doing so, we discuss:
 - **conditioning assumptions**, including interest rates, gas and oil prices, equity prices, and the exchange rate (paragraph 2.4);
 - the rate of **inflation** and its components, (paragraph 2.6) and how we presented uncertainty around this forecast (Box 2.1);
 - **the labour market**, including inactivity and net migration forecasts, and **productivity** (paragraph 2.9);
 - the rate and composition of **real GDP growth** (paragraph 2.15); and
 - the rate and composition of **nominal GDP growth** (paragraph 2.19), a key fiscal forecast determinant.

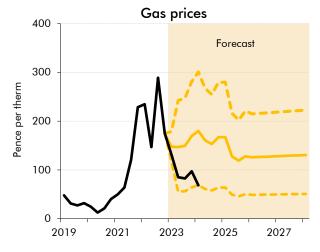
³ We have not taken on the subsequent Blue Book revisions, which were released as aggregates on 7 August 2024 but not fully incorporated into Quarterly National Accounts until 30 September 2024.

Conditioning assumptions

- We condition our forecast on market expectations of interest rates and energy prices. Actual interest rates in 2023-24 were significantly higher and gas prices significantly lower than the market expectations we used (Chart 2.1). Our March 2023 forecast was produced during a particularly volatile period for interest rates and energy prices. To reflect this uncertainty around our central forecast, in our March 2023 Economic and fiscal outlook (EFO) we included both energy price and interest rate scenarios to show the potential fiscal impact of higher and lower assumptions for these variables. The key differences between outturn and our central forecast and scenarios are:
 - expected, averaging 0.9 percentage points higher, and a quarter later, than markets expected, averaging 0.9 percentage points above our forecast for 2023-24. The Bank of England raised interest rates to their recent peak of 5.25 per cent in August 2023, responding to indicators of persistent inflationary pressures, in particular wage growth. This was broadly in line with our upside interest rates scenario, where Bank Rate was 1 percentage point above our central forecast. Long-term (20-year) gilt rates were also higher than expected, averaging 4.3 per cent in 2023-24, 0.6 percentage points higher than the path in our March 2023 forecast (Table 2.1). The consequences of higher interest rates for real income and GDP are discussed later in this chapter, and the significant impact on debt interest spending is covered in Chapter 3.
 - Gas prices were 83 pence a therm in 2023-24. This was approximately half the level we assumed based on market expectations and turned out to be in line with our downside scenario. European wholesale gas prices fell more than expected from their 2022 peaks, driven by lower demand due to lower electricity consumption, increased renewable electricity penetration, and a milder winter. Faster-than-expected ramping up of imported liquified natural gas (LNG) from the US and Qatar as substitutes for pipeline gas from Russia also contributed to the lower prices. Lower gas prices weighed on inflation, but this was more than offset by other components. Inflation outturn was therefore higher than forecast, as discussed in the next section. The fiscal consequences of lower gas prices are explored in Chapter 3.

Chart 2.1: Bank rate and gas prices





Source: Bank of England, Datastream, Eikon, OBR

Other conditioning assumptions turned out to be closer to our March 2023 forecast (Table 2.1). Oil prices were 3.6 per cent higher than forecast, driven by production cuts by OPEC+ members and concerns about the conflict in the Middle East. The stock of assets held in the APF was only £11.6 billion (1.6 per cent) less than we assumed in our forecast. The exchange rate index was 5.6 per cent higher than forecast, likely reflecting higher expected interest rates in the UK compared to the US and euro area.

Table 2.1: Conditioning assumptions for 2023-24, financial year average

			Oil price	Gas price	Quantitative	Equity prices	Exchange
	Bank Rate	Gilt rates	(\$ per	(pence per	easing ¹	(FTSE All-	rate
	(per cent)	(per cent)	barrel)	therm)	(£ billion)	share)	(index)
March 2023 forecast	4.1	3.7	79.4	161.5	739.8	4,398	77.2
Outturn	5.0	4.3	82.2	83.4	728.1	4,139	81.5
Difference							
Absolute	0.9	0.6	2.8	-78.1	-11.6	-259.7	4.3
Per cent			3.6	-48.3	-1.6	-5.9	5.6

¹ Total asset purchases, including corporate bonds, at the end of the 2023-24 financial year.

Inflation

2.6 Falling energy prices brought CPI inflation down from 10.1 per cent in 2022-23 to 5.7 per cent in 2023-24. But the decline was slower than expected as inflation was 1.5 percentage points higher in 2023-24 than in our March 2023 forecast. Inflation continued to fall after the final quarter of 2023-24, reaching its 2 per cent target in May 2024. This return to target is about two quarters later than we expected in our March 2023 forecast but in line with our expectation that the spike in inflation would prove to be transitory. RPI inflation, an important determinant of our fiscal forecast, was 1.1 percentage points higher than we expected in March 2023. This is slightly less than the difference in our CPI forecast as we overestimated the weights element of the wedge between RPI and CPI.⁴

Table 2.2: CPI and RPI inflation

		2023	'ercentage cl		202	4	2023-24
	Q1	Q2	Q3	Q4	Q1	Q2	average
CPI inflation							
March 2023 forecast	9.7	6.9	5.4	2.9	1.5	0.8	4.1
Latest data	10.2	8.4	6.7	4.2	3.6	2.1	5.7
Difference ¹	0.5	1.5	1.2	1.3	2.1	1.3	1.5
RPI inflation							
March 2023 forecast	12.9	10.1	8.1	4.9	2.7	1.6	6.4
Latest data	13.6	11.2	9.0	5.5	4.6	3.0	7.5
Difference ¹	0.7	1.0	0.9	0.6	1.9	1.5	1.1
¹ Differences in percentage	points. Totals may	not sum due to	rounding.				

Note: The quarterly figures are calculated as the annual growth in the three-month average of the monthly price indices rounded to one decimal place.

⁴ We forecast RPI by adding our forecast for the wedge between CPI and RPI inflation to our CPI inflation forecast. In our March 2023 forecast we mainly overestimated the weights element of this wedge, driven by lower-than-expected energy prices which have a higher weight in RPI than in CPI.

- 2.7 Looking at the drivers of these inflation forecast differences (Table 2.3), the impact of lower wholesale energy prices on utilities was more than offset by higher inflation in other categories due to:
 - A more substantial pass-through from the previous rise in energy prices than we had anticipated, which meant food and other tradables inflation fell more slowly than we forecast. Our October 2023 Forecast evaluation report concluded that our previous assumption for the knock-on effects of higher energy prices onto other prices (25 per cent) was likely too low. As a result, we have been using a higher energy pass-through assumption of around 50 per cent since our November 2023 forecast. Based on our two latest forecasts, the pass-through assumption for food prices is largely in line with our updated assumption, while we seem to have slightly overestimated inflation in other tradables. We will continue to review this judgement in our upcoming forecasts.
 - Higher-than-expected nominal earnings amid a tight labour market, which contributed to non-tradables inflation remaining 0.9 percentage points higher than our March 2023 forecast.

Table 2.3: Contributions to CPI inflation in 2023-24

		Percentage point contribution to annual CPI inflation							
	Food,	Food,							
	beverages			Other	Other non-				
	and tobacco	Utilities	Fuels	tradables	tradables	Total			
March 2023 forecast	1.2	0.2	-0.4	1.5	1.7	4.1			
Latest data	1.8	-0.1	-0.4	1.8	2.6	5.7			
Difference ¹	0.6	-0.3	0.0	0.3	0.9	1.5			
¹ Differences in percentage points. Totals may not sum due to rounding.									

Chart 2.2 shows how our March 2023 inflation forecast compared to the Bank of England and other forecasters. We generally expected a faster decline in inflation than other forecasters: from 10.8 per cent in the fourth quarter of 2022 to 2.9 per cent in the fourth quarter of 2023. This was roughly 1 percentage point lower than the Bank's forecast and the average of external forecasters. CPI outturn at the end of 2023 was 4.2 per cent, suggesting that the persistence of higher inflation has surprised other forecasters too, albeit to a lesser extent. CPI inflation fell further in the first and second quarters of 2024 and averaged around 1% percentage points higher than our March 2023 forecast.

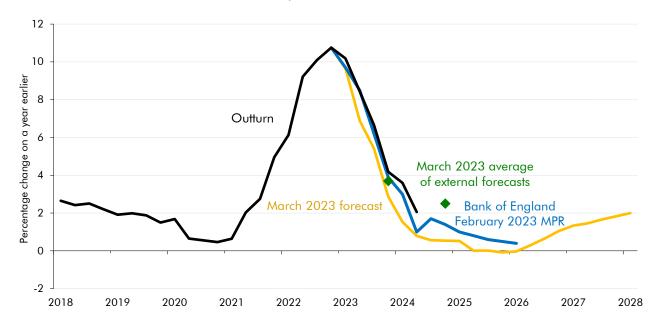


Chart 2.2: CPI inflation forecast comparison

Source: Bank of England, HM Treasury, ONS, OBR

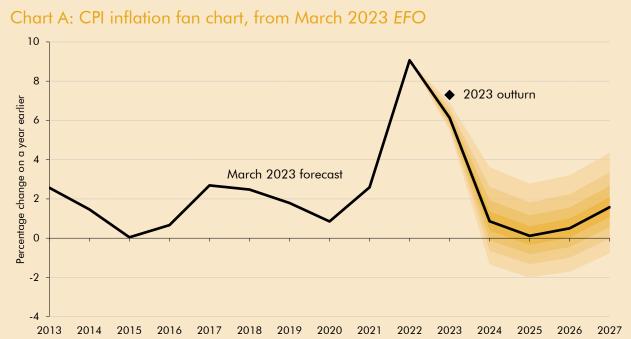
Box 2.1: Presenting uncertainty in our forecasts

The outlook for inflation was highly uncertain at the time of our March 2023 forecast: the UK was experiencing the largest inflation shock since the 1980s, and the first significant shock in the era of independent inflation-targeting central banks. This box reviews our presentation of this uncertainty using fan charts and scenarios in successive *EFOs*.

Fan charts

Chart A shows the fan chart included in our March 2023 *EFO*. The distribution is based on the range of forecast differences from OBR and Treasury inflation forecasts since 2003. This was a period of relatively low and stable inflation, so the forecast differences used to construct the fan charts were relatively small up to 2022. As such, these fan charts do not represent our assessment of specific risks to the central forecast, in particular during periods of high uncertainty. Instead, they show the outcomes that someone might anticipate if they believed that forecast errors in the past 20 years offered a reasonable guide to future forecast errors.

CPI inflation in 2023 was 7.3 per cent, which fell outside the fan chart's 80 per cent probability bands. The probability bands are narrow in the first year of our forecasts because, historically, differences between forecast and outturn in the first forecast year were typically small. However, the average of past forecast differences is not always a good indicator of the degree of uncertainty, especially following large shocks such as the energy crisis. We noted in our March 2023 EFO that the distribution around our CPI inflation forecast "is likely to understate the degree of uncertainty in the current environment of very high and volatile energy prices".



Note: Successive pairs of lighter-shaded areas around our baseline forecast (black line) represent 20 per cent probability bands. Source: ONS, OBR

Scenarios

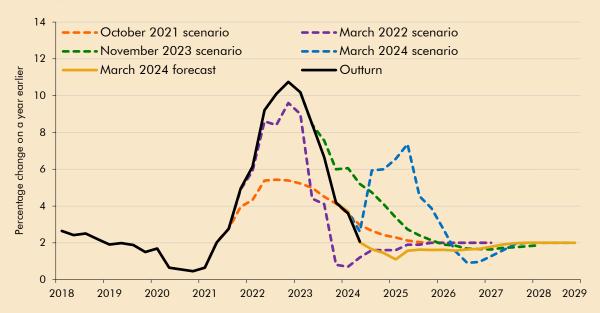
Given the limitations of historical fan charts in capturing the uncertainty around our inflation forecast, our recent forecasts have also presented a range of inflation scenarios (Chart B):

- In our October 2021 EFO, we looked at the difference between: (i) a scenario in which higher inflation originated in external product markets, and (ii) a labour market scenario, where higher inflation was driven by stronger domestic wage growth. These demonstrated that the fiscal consequences of higher inflation depend on its source. In both, CPI inflation peaked at around 5½ per cent in late 2022, but with very different fiscal consequences. In the product market scenario, imported inflation reduced real wages and increased borrowing in the short term. In the labour market scenario, real wages and consumption increased, which reduced borrowing due to higher income tax and VAT receipts and departmental budgets being fixed in nominal terms. These scenarios, described as "deliberately stark" at the time, did not foresee the Russian invasion of Ukraine and the subsequent large energy price shock which drove CPI inflation to around twice that level in 2022. But they did help to illustrate the macroeconomic and fiscal implications of higher inflation, which subsequently had elements of both scenarios.
- In our March 2022 EFO, one month after the Russian invasion of Ukraine, we looked at a scenario where global energy prices returned closer to the peaks seen in the immediate aftermath of the invasion. In this scenario, inflation peaked at 9.6 per cent at the end of 2022, around 1 percentage point higher than in our then central forecast. This turned out to be closer to, but still below, the eventual peak in inflation than our central forecast as energy prices surged in the third quarter of 2022.

- In our November 2023 EFO, as domestic wage growth surprised on the upside, we looked at a purely imported inflation scenario and a purely domestic inflation scenario. As in October 2021, this highlighted the different fiscal consequences of different types of inflation. The scenarios, which had the same overall CPI profile, projected a slower fall in inflation than our central forecast. CPI inflation outturn in 2023-24 was lower than our November 2023 central forecast by 0.4 percentage points and lower than these scenarios by 1.3 percentage points. Inflation has, however, been more domestically driven than anticipated in our central forecast.
- In our March 2024 EFO, we looked at the impact of a second successive inflation shock, driven by further instability in the Middle East leading to higher shipping costs and a second spike in energy prices. In this scenario CPI inflation reached a second peak of around 7½ per cent in mid-2025, before falling back down. To date, inflation has not rebounded sharply in line with this scenario, but continued global instability means a second spike in inflation remains a forecast risk.

These scenarios illustrated the risks to our central inflation forecast and they turned out to mirror the sources of the eventual forecast differences: (i) the size of the energy price shock and (ii) the extent to which inflation remained an imported energy shock versus passing through to domestically generated inflation. However, inflation often turned out to be somewhat higher than even our high-inflation scenarios, suggesting that we could have better illustrated the risks around our central forecast by using more extreme assumptions.

Chart B: Inflation scenarios



Source: ONS, OBR

Presenting uncertainty in future EFOs

This assessment suggests that in future we should:

- Continue to use fan charts to communicate uncertainty around our central forecast but explore the use of alternative construction methods such as stochastic simulations during periods where the economy and public finances have been hit by 'out of sample' shocks.^b
- Continue to make regular use of scenarios around our central forecast, using past volatility, market intelligence, and our judgement of key uncertainties to select the scenarios, but aiming to use more extreme assumptions. The Bank of England's Bernanke Review similarly recommends regularly augmenting their central forecast with alternative scenarios.
- Explore and use other ways of communicating the uncertainty around our central forecasts, such as: (i) drawing on examples from economic history, (ii) making greater use of our fiscal ready reckoners to conduct sensitivity analysis that illustrates the vulnerability of our fiscal forecasts to changes in key economy forecast outcomes, such as growth, inflation, and interest rates,^d and (iii) using swathe charts to show the volatility in market expectations in the months leading up to our forecasts.

Labour market and productivity

2.9 Labour market outturns for 2023-24 have been restated following the reweighting of the ONS Labour Force Survey (LFS) in February 2024 with updated estimates of the size and composition of the UK population. This resulted in a larger adult population due to a stronger rise in net migration, which is partially offset by lower labour force participation and average hours worked due to the ageing of the population. While this reweighting has improved the representativeness of the data, challenges with low sample sizes and volatility in recent periods will take longer to resolve and the ONS advises caution when interpreting these numbers. The ONS plans a further update to these estimates by the end of this year so they capture more recent trends in net migration and other demographics. This will be followed with a fuller reweighting and switchover to the Transformed LFS survey in 2025, which may have further implications for our understanding of labour supply over 2023-24. These uncertainties complicate our assessment of the labour market forecast, which we plan to revisit when the final version of the labour market estimates become available.

Labour supply

2.10 Labour supply growth in 2023-24, measured in terms of total hours worked, was broadly in line with our March 2023 forecast (Table 2.4). This is despite frozen personal tax thresholds, combined with stronger-than-expected nominal wage growth, weighing on labour supply.⁸

^a Box 3.2 of the October 2021 EFO.

^b We explored stochastic simulations in OBR, Working Paper No. 17, Evaluating forecast uncertainty with stochastic simulations, December 2021.

^c Bank of England, Forecasting for monetary policy making and communication at the Bank of England: a review, April 2024.

^d Our fiscal ready reckoners are available on our website. See The OBR ready reckoner, October 2023.

⁵ ONS, Impact of reweighting on Labour Force Survey key indicators, 2024.

⁶ The population on which the reweighted LFS is based does not fully capture the recent rise in migration, so is likely to still be an underestimate. This means the latest data presented in Table 2.4 are likely to underestimate the error for the size of the labour force and the level of employment.

⁷ ONS, Labour market transformation – update on progress and plans, July 2024.

⁸ See Box 3.2 in our March 2024 EFO.

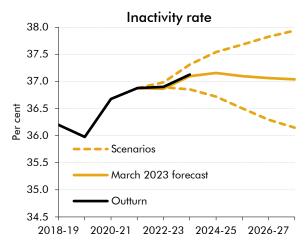
Stronger growth in employment and a smaller rise in unemployment suggest that labour market conditions eased by less than expected last year. This was offset by weaker average hours, leaving total hours worked little changed year on year. However, the level of total hours worked in 2023-24 was 0.9 per cent higher than our March 2023 forecast. This was mainly due to an underestimation of the adult labour force, with 2023-24 outturn around 1 per cent (350,000) higher than our forecast. This entirely reflects an upward revision to the population level following the LFS reweighting, while our forecast for the participation rate was in line with outturn.

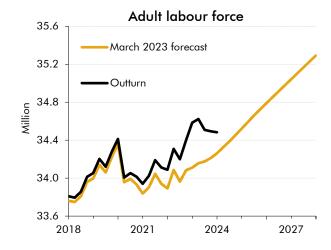
- 2.11 The two biggest challenges in forecasting the labour market over the last few years have been the significant uncertainty around net migration and inactivity, which both reached historically high levels in the period since the pandemic:
 - Net migration has been significantly higher than forecast, rising to 740,000 over the year to mid-2023, compared to 310,000 in our forecast. It has since fallen to 685,000 in the year to end-2023 but remains well above the March 2023 forecast, which used the January 2023 ONS population projections. The risks around these ONS estimates are large as they are projections based on an average of past migration, to which recent flows are assumed to steadily converge. They do not explicitly account for global factors (such as the war in Ukraine), compositional changes, or the impact of government policy. The forecast difference on migration largely reflects the significant uncertainty over the impact of policy decisions, with the new post-Brexit regime resulting in a much higher level of immigration than in recent history. We have subsequently shifted from using the ONS projections over the whole forecast period to producing near-term migration forecasts in-house. These take into account factors such as government policy and a more disaggregated estimate of inflows and outflow rates for different visa types.
 - The rise in **inactivity** in 2023-24 was in line with our expectation and meant the inactivity rate remained around 1 percentage point above its pre-pandemic level. The path of inactivity since the pandemic remains a significant source of uncertainty, and judging how much of the rise reflects persistent factors presents a challenge. As the long-term sick account for the bulk of the increase in inactivity, we explored these risks in our March 2023 EFO scenarios, and our 2023 and 2024 Fiscal risks and sustainability reports (FRSs). In our March 2023 EFO we considered a labour market scenario with a 500,000 increase or decrease in the labour force, the equivalent of a 0.9 percentage point change in inactivity by 2027-28. The outturn for the inactivity rate was in line with our central forecast (Chart 2.3, left panel). However, as discussed above, a higher population resulted in a higher labour force level than expected (Chart 2.3, right panel).

⁹ The ONS produced this interim update in January 2023 to assist with the publication of the Spring Budget 2023. Their projections aimed to reflect the latest evidence and expert views suggesting higher-than-previously-expected net migration. This resulted in a slight upward revision of the medium-term level of net migration, based on a past 22-year average, along with a slightly higher near-term path for the first three years of the projection period.

¹⁰ See Chapter 3: Inactivity and health of the 2023 FRS and Chapter 3: Long-term health trends of the 2024 FRS.

Chart 2.3: Inactivity rate and adult labour force





Source: ONS, OBR

Earnings and real income

- 2.12 Nominal average earnings growth was stronger than we expected in our March 2023 forecast, by 3.1 percentage points. This was driven by a combination of higher-than-expected inflation and continued tightness in the labour market. Furthermore, industrial action, which had begun in 2022 and continued into 2023, posed another uncertainty around our forecasts. This was particularly the case for our public sector pay forecast which is conditioned on announced government policy. Public sector pay growth rose sharply to 8 per cent over 2023-24, substantially above what was implied by government spending forecasts of the pay bill available at the time. The government spending forecast in our March 2023 EFO would not have included subsequent decisions over the course of 2023 on a more generous package of basic pay increases of 5-7 per cent, some of which were backdated, and a number of one-off, lump-sum payments.
- Growth in aggregate **real household disposable income** (RHDI) was much stronger than we forecast in March 2023, rising by 3.0 per cent in 2023-24, rather than falling by 1.5 per cent. This was partly due to nominal wage growth responding by more than expected to high inflation, as the terms of trade (the ratio of export to import prices and a key driver of income growth) rebounded significantly faster than we anticipated. Non-labour income also grew more quickly than we expected, driven by net interest income and households' operating surplus. Long fixes on mortgage interest rates mean that households' interest payments have risen more slowly than the interest they have earned on savings deposits as Bank Rate has risen. While we anticipated some effect from this, the size of the impact has been surprisingly large. Meanwhile, the change in households' operating surplus is likely due to stronger-than-expected rents, though it is also a volatile series subject to significant revisions. Finally, stronger-than-expected population growth also meant that employment growth was above our forecast, pushing up aggregate RHDI.

¹¹ See Box 2.2 of the October 2023 Forecast evaluation report for more detail.

¹² Household's operating surplus is dominated by imputed rent, which is a national accounts adjustment that represents the rental income that owner occupiers would be receiving on their property if they were to rent it out. There is an offsetting effect in private consumption so it does not affect the saving rate.

Productivity

2.14 Productivity growth in 2023-24 was 0.1 per cent, close to our forecast of 0.2 per cent. Productivity growth has been weak since the financial crisis, and this has been compounded in recent years with disruptions from the pandemic, Brexit and the higher cost of energy. Trend productivity growth has averaged ²/₃ per cent in the decade following the financial crisis, well below the average of around 2½ per cent in the decade before.

Table 2.4: Labour market in 2023-24

	Total hours (million)	Average hours (hours)	Total employment (thousand)	Labour force (thousand)	Unemployment rate ²	Average earnings	Productivity per hour
Per cent change from	n previous ye	ar					
March 2023 forecast	0.0	0.1	-0.1	0.4	0.5	4.1	0.2
Latest data	0.0	-0.4	0.2	0.4	0.2	7.2	0.1
Difference ¹	-0.1	-0.5	0.3	0.0	-0.3	3.1	-0.1
Levels change from p	revious year						
March 2023 forecast	0.2	0.0	-26	141	167		
Latest data	-0.4	-0.1	74	154	81		
Difference ¹	-0.7	-0.2	100	13	-87		

¹ Difference in unrounded numbers.

Real GDP

- 2.15 Real GDP growth over 2023-24 was 0.1 per cent, only 0.1 percentage points lower than we forecast in March 2023. While our forecast of GDP growth over this period was close to outturn, its composition was different (Table 2.5):
 - Consumption growth over 2023-24 was 0.2 per cent, which is 0.8 percentage points higher than forecast in March (contributing 0.5 percentage points to the difference in real GDP growth between our March 2023 forecast and outturn). This reflects the stronger aggregate RHDI growth discussed above being only partially offset by a higher saving rate than we forecast. The saving behaviour of households has been particularly uncertain over recent years: forced savings were built up over the pandemic, Bank Rate increased to its highest level in over a decade which incentivised saving, and the surge in energy prices may have driven precautionary saving among households. Furthermore, the surprising strength of RHDI meant households, in aggregate, did not lower their saving rate to support real consumption as much as we expected.
 - We also underestimated business investment, which increased by 2.6 per cent over 2023-24 whereas we had expected it to fall by 4.1 per cent. We expected unwinding of policy effects, high interest rates and the uncertain global environment to weigh more significantly on investment. However, business investment is volatile and prone to large revisions.

² Levels changes are in thousands of unemployed people.

- **Net trade** was less of a drag on GDP growth over 2023-24 than expected (by around 0.9 percentage points) driven by a smaller-than-expected decline in exports as services export growth surprised on the upside. As noted in our 2023 *FER*, changes in data collection have led to more revisions and volatility in UK trade data over the recent years which makes forecasting trade a significant challenge.¹³
- Over this period, private residential investment fell in line with our March 2023
 forecast while real government consumption and investment grew a little slower than
 we expected. Other components of GDP are highly volatile and subject to large
 revisions but are estimated to have weighed on GDP growth over 2023-24, partly
 driven by a reduction in inventories.

Table 2.5: Expenditure contributions to real GDP growth in 2023-24

			_						
		Percentage points							
		Private							
	Private	Business		residential	Total				
	consumption	investment	Net trade	investment	government	Other	GDP		
March 2023 forecast	-0.4	-0.4	-1.4	-0.4	1.3	1.4	0.2		
Latest data	0.1	0.3	-0.5	-0.4	0.7	-0.2	0.1		
Difference ¹	0.5	0.7	0.9	0.0	-0.5	-1.6	-0.1		
Difference in unrounded numbers.									

2.16 In each of our EFOs, we present our central forecast for the economy against a backdrop of the range of uncertainty surrounding any point estimate forecast. In our March 2023 EFO, we presented our GDP growth forecast in the context of a fan chart that illustrates the probability of a range of possible outcomes conditioned on the size of past differences in official forecasts. Under these assumptions, we assessed there was approximately a 50 per cent chance that real GDP growth in 2023 was positive which turned out to be the case. But past forecast errors may not always be a guide for future economic shocks. For this reason, we also presented alternative upside and downside scenarios to illustrate further the uncertainty around our assessment.

¹³ ONS, Understanding the latest changes to UK trade figures with the EU, March 2022.

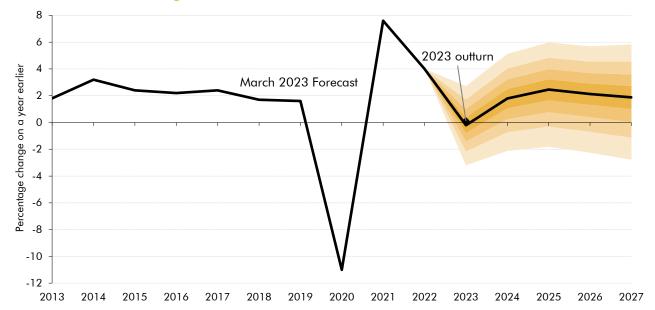


Chart 2.4: Real GDP growth fan chart, from March 2023 EFO

Note: Successive pairs of lighter-shaded areas around our baseline forecast (black line) represent 20 per cent probability bands. Source: ONS, OBR

- 2.17 Despite the similar GDP growth forecast, the *level* of real GDP was higher in outturn than in our forecast (Chart 2.5, left panel). GDP revisions released after our March 2023 forecast suggested that the economy recovered more quickly and more fully from the pandemic than previously estimated. In the Quarterly National Accounts consistent with Blue Book 2023, the ONS revised up GDP growth between 2020 and 2022, leaving the level at the end of 2022 around 2 per cent higher than the data available at our March 2023 forecast. This meant that in 2023-24 the GDP level was also around 2 per cent higher than our forecast. In terms of components, business investment was revised up, so the level was 2.3 per cent higher at the end of 2022 than the vintage of data used in our March 2023 forecast. The level of consumption was revised down so it was 0.7 lower at the end of 2022 and the level of exports and imports were both revised up by the ONS.
- 2.18 In per-person terms, real GDP fell by 0.8 per cent in 2023-24 compared to our March 2023 forecast of a 0.3 per cent decline (Chart 2.5, right panel). Real GDP per person fell in each quarter between the first quarter of 2022 and the end of 2023, driven by weak productivity growth and rises in inactivity. However, the overall level is higher than in our March 2023 forecast due to the historical revisions to GDP.

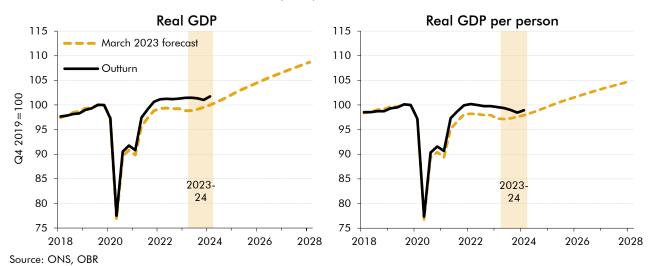


Chart 2.5: Real GDP and real GDP per-person levels

Nominal GDP

Our economy forecast provides the basis for the fiscal forecasts that we use to assess the Government's performance against its fiscal targets. The most fiscally important elements of the economy forecast are those that drive the major tax bases, namely the income and expenditure components of nominal rather than real GDP. Stronger-than-expected growth in the GDP deflator meant our March 2023 forecast underestimated growth in nominal GDP in 2023-24, despite real GDP growth outturn being close to our forecast. The GDP deflator grew by 6.2 per cent in 2023-24, 3.7 percentage points higher than in our forecast. This difference is more than twice our CPI inflation forecast error. The GDP deflator includes the change in the relative price of exports to imports, which recovered much faster than we expected largely due to much lower gas prices than assumed in our forecast. In addition, the implied price of government consumption and investment were higher than our forecast.

2.20 Chart 2.6 shows the composition of nominal GDP growth:

- By expenditure component, growth in all the major components was stronger than our forecast, driven mainly by higher prices.
- By income component, higher compensation of employees contributed around half of the nominal GDP forecast difference as nominal earnings growth held up much better than we had expected, supported by a tight labour market and strong public sector earnings growth. The contribution from gross operating surplus (a measure of profits in the National Accounts) was lower than we had forecast. The forecast difference in other income components of nominal GDP is largely due to households' operating surplus, which is consistent with higher-than-forecast RHDI (paragraph 2.13).

¹⁴ The GDP deflator covers the price of all products produced in the UK. CPI covers the price of products consumed by households.

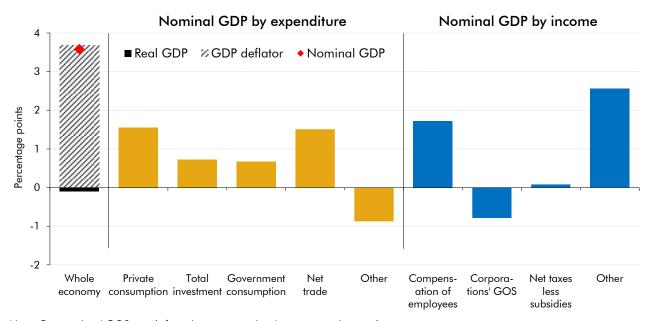


Chart 2.6: March 2023 forecast differences in nominal GDP growth in 2023-24

Note: Corporations' GOS stands for private corporations' gross operating surplus.

Source: ONS, OBR

2.21 The combination of the higher level of real GDP, due to ONS revisions, and the higher-than-expected growth in the GDP deflator meant that the level of nominal GDP in 2023-24 was 5.6 per cent higher than in our March 2023 forecast. This meant that although receipts and spending outturns for 2023-24 were both higher than we forecast in March 2023 in nominal terms, when presented as a share of GDP, they were each lower than expected. As we explore in the following chapter, the receipts and spending forecast differences were smaller than that for nominal GDP because revisions to the historical level of GDP did not influence these. In addition, departmental spending and welfare benefit rates were already fixed for 2023-24 by the time of our March 2023 forecast.

3 The public finances

Introduction

- 3.1 This chapter assesses the performance of our March 2023 fiscal forecast for the 2023-24 financial year. We explore the differences between our forecast and the latest outturn data for:
 - public sector net borrowing (PSNB), beginning with a summary of how our estimates of PSNB in 2023-24 evolved over successive forecasts, and how these compared to estimates produced by other forecasters;
 - the receipts and spending forecasts that underpinned this borrowing forecast; and
 - public sector net debt (PSND).
- 3.2 Our usual approach in Forecast evaluation reports (FERs) is to break down differences between outturn data and our fiscal forecasts into four categories:
 - policy changes differences due to policies announced after the publication of the forecast;
 - **economic factors** differences due to the changes in underlying economic conditions relative to our initial forecast;
 - **classification changes** differences due to items being reclassified into or out of the public sector following the forecast; and
 - fiscal forecasting differences any remaining differences that cannot be explained by the other categories, such as those related to how well the underlying forecast model matches reality or judgements that we impose on top of the effects of economic determinants.
- 3.3 We have taken this approach to analysing the performance of our March 2023 receipts forecast. For public sector expenditure, as discussed in the Foreword, at the time this report was prepared the available outturn data source was the ONS's ('PSAT') economic categories of expenditure, rather than the full 'total managed expenditure' ('TME') breakdown that we focus on in our forecast and would normally analyse in FERs. This means we have had to classify the major forecast differences into groups that approximate closely to 'economic' and 'other fiscal forecasting' factors, plus the impact of policy. We are confident the broad results are nevertheless robust.

Public sector net borrowing

- PSNB in 2023-24 was £120.3 billion (4.4 per cent of GDP). In March 2023, we expected it to be £131.6 billion (5.1 per cent of GDP) an £11.2 billion (8.5 per cent) overestimate. As we discuss in detail below, this largely reflects higher-than-anticipated inflation and nominal earnings in 2023-24, which increased receipts by more than it increased spending.
- Our earlier March 2022 forecast for 2023-24 substantially underestimated borrowing by £70.1 billion, with our subsequent three forecasts in November 2022, March 2023 and November 2023 coming in much closer to outturn (Chart 3.1). This path is also reflected in the average of contemporaneous independent forecasts (also shown in Chart 3.1). Forecasters became substantially more pessimistic about the outlook for the economy and government borrowing during autumn 2022, due to the steep rise in energy costs, inflation and interest rates that took place in the wake of the energy crisis and so-called 'mini-Budget' (discussed in more detail in our October 2023 FER).

350 Range of independent forecasts · Average of independent forecasts 300 Outturn OBR forecast assessed in this chapter 250 **OBR** forecasts 200 £ billion 150 100 50 0 -50 Jun Aug Oct Dec Feb Apr Jun Aug Oct Dec 2022 2023 Month of publication

Chart 3.1: Range of forecasts for 2023-24 PSNB

Source: HM Treasury, OBR

3.6 Our March 2023 one-year-ahead PSNB forecast difference was smaller than average past differences. Chart 3.2 below shows the absolute values of our historic one-year-ahead PSNB forecast differences, with averages including (£38.8 billion) and excluding (£12.0 billion) those forecasts that were affected by the Covid pandemic. Both averages are higher than the £11.2 billion March 2023 forecast difference. This below-average forecast difference is despite the significant risks to our March 2023 forecasts from the uncertainty at that time around the outlook for inflation, gas prices, and interest rates. Reflecting these risks, the March 2023 Economic and fiscal outlook (EFO) set out alternative scenarios for gas prices and interest rates, which included the impact these could have on the central PSNB forecast. The risks from inflation were further assessed in the November 2023 EFO, which showed that higher domestically generated inflation will tend to reduce PSNB, largely

by boosting the major nominal tax receipts by more than it boosts nominal expenditure. This is consistent with the finding in this report that a large portion of the lower-than-forecast PSNB in 2023-24 was driven by more domestically generated inflation. Full analysis of the drivers of inflation in 2023-24 compared to our *EFO* economy forecasts and risk analysis is provided in Chapter 2 of this report.

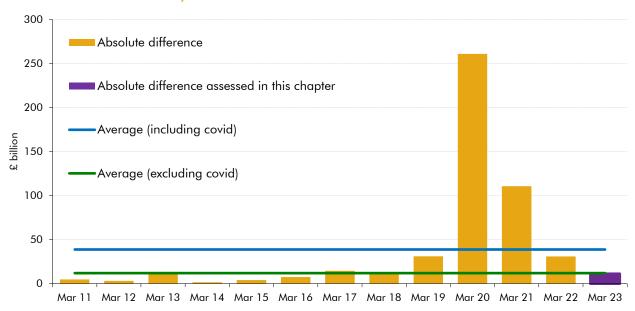


Chart 3.2: Historic one-year-ahead PSNB forecast difference

Note: Excluding covid excludes March 2020 and March 2021 from the average. Source: ONS, OBR $\,$

- 3.7 Chart 3.3 summarises the drivers of the £11.2 billion difference between the March 2023 forecast for PSNB in 2023-24 and outturn. It shows that:
 - Policy changes announced after March 2023 increased PSNB by £8.5 billion in 2023-24 compared to the forecast. This comprised a £1.6 billion reduction in receipts, primarily due to the cut to employee NICs taking effect on 6 January 2024, and a £6.9 billion increase in spending, largely due to one-off NHS pay awards.
 - Economic factors increased receipts by £26.0 billion relative to the forecast, and increased spending by £11.1 billion, therefore reducing PSNB by £14.9 billion overall. Higher-than-anticipated inflation and nominal earnings drove up receipts, with a partial offset from lower gas and electricity prices reducing energy tax revenues. However, the impact of higher-than-anticipated inflation on spending was more muted. Departmental spending limits were fixed in nominal terms and welfare benefit rates were increased in April 2023 using September 2022 CPI. However, higher inflation and interest rates did push up debt interest costs by £10.2 billion.
 - Other forecast differences decreased borrowing by £4.8 billion compared to forecast, the net result of a £9.6 billion increase in spending and a £14.4 billion increase in receipts. Fiscally neutral changes that do not affect PSNB increased both receipts and

spending by £7.6 billion, mostly from higher general government depreciation due to the 2022-23 starting point being revised up by the ONS. The higher receipts also reflected a higher effective tax rate on onshore corporation tax than anticipated. The higher spending also reflected higher public sector gross investment.

200 Difference due to policy Difference due to other Difference due to economy change: +£8.5 billion determinants: -£14.9 billion factors: -£4.8 billion 150 +6.9+1.6 131.6 +9.6 120.3 -26.0 -14.4 100 50 Decreasing borrowing Increasing borrowing 0 March 2023 Receipts other Spending other PSNB outturn Receipts policy Spending policy Economy Economy determinants in forecast determinants in receipts spending

Chart 3.3: March 2023 Public sector net borrowing differences for 2023-24

Note: 'Receipts other' and 'Spending other' include differences due to classification changes. Source: ONS, OBR

Receipts and spending were both higher than forecast in nominal terms, but lower than forecast as a share of GDP, by 0.8 percentage points and 1.4 percentage points respectively. In both cases this largely reflects the higher-than-forecast level of nominal GDP in 2023-24 arising from the ONS' 2023 Blue Book revisions that were released after we had produced the forecast. These increased 2020-to-2022 GDP growth, as discussed in paragraph 2.17 of Chapter 2. By raising the level of nominal GDP in 2023-24, this reduced both tax and spending as a share of GDP in that year. Lower-than-forecast spending as a share of GDP also reflects departmental spending and welfare benefit rates being fixed in cash terms despite higher-than-anticipated nominal GDP growth in 2023-24. The resulting larger undershoot for spending as a share of GDP led to borrowing as a share of GDP being 0.7 per cent of GDP below forecast (Chart 3.4). In the remainder of this chapter, we focus on the nominal differences in receipts and spending.

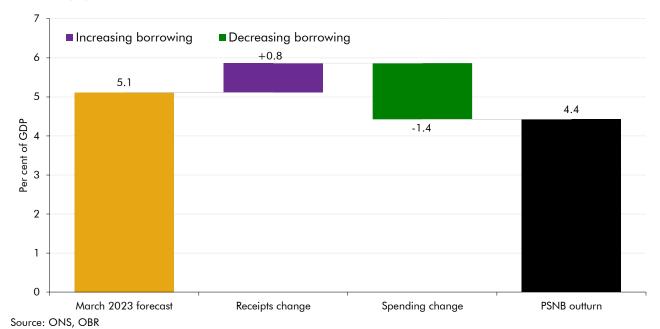


Chart 3.4: March 2023 PSNB differences for 2023-24 as a share of GDP

Receipts

3.9 Public sector current receipts (PSCR) in 2023-24 were £38.8 billion higher than we anticipated in the March 2023 forecast. This was primarily due to a £26.0 billion difference relating to economic factors, largely as a result of the effects of higher-than-anticipated inflation and nominal earnings (£18.4 billion). This is summarised in Chart 3.5 and discussed in detail in the sections below.

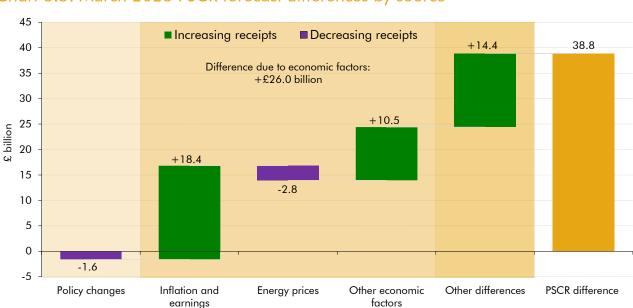


Chart 3.5: March 2023 PSCR forecast differences by source

Source: ONS, OBR

Differences due to policy changes

- 3.10 Policy changes announced after March 2023 but with a receipts effect during 2023-24 added £1.6 billion to borrowing. These included:
 - the **2p cut to the employee NICs rate** announced at Autumn Statement 2023, which was implemented from January 2024. The latest estimate of this cost for 2023-24 is £2.3 billion; and
 - an increase in visa fees and the immigration health surcharge was expected to raise an extra £0.4 billion in receipts in 2023-24, while the extension to permanent full expensing is expected to have brought in a further £0.3 billion in corporation tax in 2023-24.

Differences due to economic factors

Inflation and earnings

- 3.11 Higher domestically generated inflation tends to boost tax receipts because the majority of taxes are levied as a proportion of the nominal value of the tax bases, for example, earnings, company profits, or retail sales. A smaller portion of receipts come from taxes levied in volume terms such as fuel duty, levied per litre of fuel which tend to not rise as a result of inflation in the short term.¹
- 3.12 Higher-than-forecast inflation and nominal earnings increased receipts in 2023-24 by £18.4 billion relative to the forecast. This is mainly driven by the 3.1 per cent overshoot in nominal earnings increasing income tax and NICs receipts, and the 2.6 per cent nominal consumption overshoot increasing VAT receipts. Chart 3.6 below compares the rise in nominal earnings and consumption relative to the forecast with the rise in income tax, NICs, and VAT receipts resulting from changes to nominal earnings, consumption, and other economic and non-economic factors.

¹ Unit taxes often have their rates increased by inflation, which can mean revenues will increase with higher inflation. However, by the time of the March 2023 forecast, rates had already been set for 2023-24 for taxes such as fuel duties, air passenger duty, and vehicle excise duties. This means revenue from these taxes were affected subsequently only by volumes consumed rather than changes in their price due to higher inflation. Alcohol duties, by contrast, had their rates set after March 2023, meaning that changes to the inflation forecast did affect receipts.

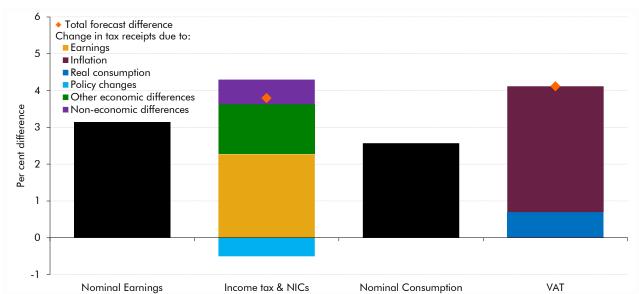


Chart 3.6: Personal tax and VAT forecast differences relative to earnings and consumption

Source: ONS, OBR

- 3.13 Higher nominal average earnings explain £10.0 billion of the total £16.0 billion overshoot in income tax and NICs receipts resulting from economic factors. The remaining impact from economic factors is mainly due to higher employment levels discussed below which are shown in the green bar in Chart 3.6. The rise in income tax and NICs receipts related to earnings was proportionately smaller than the rise in earnings, as the overshoot in 2023-24 earnings did not affect self-assessment receipts, which were based on 2022-23 liabilities. However, the overall impact was amplified because, since April 2021, most tax thresholds, which typically increase with inflation each year, have been frozen (for more details see paragraphs 3.38 to 3.41 in the March 2024 EFO). This created significant 'fiscal drag', where more of taxpayers' income is taxed and taxed at higher rates.
- 3.14 Higher inflation explains £5.5 billion of the £6.6 billion overshoot in in VAT receipts resulting from economic factors. The remaining impact is from the share of the nominal consumption overshoot that results from higher real consumption rather than inflation.² The prices of VAT-intensive goods exceeded our forecasts more significantly than consumer prices overall, causing £1.1 billion of the higher-than-expected VAT receipts from the inflation surprise. This is why, as shown in Chart 3.6, the overall overshoot in VAT receipts was greater than the overshoot in nominal consumption. Table 2.3 in Chapter 2 shows that most of the CPI overshoot came from higher prices in 'other tradeables' and 'other non-tradeables', primarily consisting of goods subject to the 20 per cent standard rate of VAT. The less VAT-intensive categories of fuels and utilities (domestic electricity and gas paying only the 5 per cent reduced rate of VAT) contributed less to CPI inflation than anticipated.

² Of the 2.6 per cent overshoot in nominal consumption relative to the forecast, around 1.8 per cent is a result of higher-than-anticipated inflation. The remaining 0.8 per cent represents increased real consumption.

3.15 Higher inflation increased **other receipts** lines by £2.9 billion. Of this, £1.3 billion relates to onshore corporation tax, where inflation increased non-financial companies' profits, £0.9 billion relates to higher PSNB-neutral VAT refunds that are offset in spending, and £0.7 billion relates to smaller tax lines that increased with the larger nominal economy.

Energy prices

3.16 Lower-than-anticipated energy prices drove a net decrease in receipts of £2.8 billion – lower oil, gas and electricity receipts partially offset by higher Contracts for Difference (CfDs) receipts. Wholesale electricity and gas prices were both around half our central estimate, due to a combination of lower demand, higher-than-anticipated renewable electricity penetration, and a milder winter. Lower energy prices drove £4.8 billion of the £7.5 billion (64.3 per cent) undershoot in revenues from taxes on oil, gas, and electricity generation: oil and gas revenues by £2.6 billion and electricity generator levy revenues by £2.2 billion. These were partially offset by lower electricity prices boosting CfDs receipts by £2.0 billion, but this is fiscally neutral as it is fully offset in spending.

Other effects of economic factors

- 3.17 Economic factors other than earnings, inflation and energy prices led to our 2023-24 receipts forecast coming in £10.5 billion higher than anticipated. Some of the main drivers of this overshoot included:
 - Employment levels exceeded our forecast due to higher-than-anticipated population growth, boosting NICs by £3.6 billion and income tax by £0.9 billion. Both the measures of employment that we use in our forecasts came in higher than expected, though by differing degrees: Workforce Jobs (WFJ) by 2.2 per cent, and the Labour Force Survey (LFS) by only 0.3 per cent. The WFJ measure is most closely related to NICs receipts which explains the larger NICs forecast difference due to employment. While there are reasons for differences between these data sources, external commentators have suggested that the recent large discrepancy may be caused by data quality issues in the Labour Force Survey.
 - Short-term interest rates were around 0.9 percentage points higher than anticipated, adding around £2.0 billion to receipts. Around three-quarters of this effect was from higher interest and dividend receipts (from a higher return on bank deposits held by government and foreign exchange reserves as well as higher seigniorage income for the Bank of England). The higher interest rates also boosted savings income taxed via the self-assessment regime.
 - Profits in the financial sector are estimated to have grown by 11½ per cent in 2023 compared with a projection of flat profits in the March 2023 EFO, mainly as a result of stronger-than-anticipated net interest margins at retail banks. This added around £1.8 billion to corporation tax receipts from this sector.

³ Oil and gas revenues comprise the offshore corporation tax regime, the energy profits levy, and petroleum revenue tax.

⁴ NICs receipts are more closely related to the WFJ measures as NICs is levied per job worked, and employers do not need to consider pay from other employments when calculating employer NICs. Income tax is levied on an individual's total income so is more closely related to the LFS measure.

⁵ See, for example, Resolution Foundation, Measuring up? Exploring data discrepancies in the Labour Force Survey, August 2024.

Differences due to classification changes

3.18 The capacity markets and the green gas support schemes were included in our environmental levies forecast but not in ONS outturn, reducing outturn receipts relative to our forecast by £1.1 billion. This is entirely offset in spending and so is neutral for borrowing. These schemes have now been classified by the ONS but are not yet included in their data.

Fiscal forecast differences

- 3.19 The remaining £15.5 billion of the receipts forecast difference was due to other tax-specific differences, of which £7.6 billion was from fiscally neutral changes that are offset in spending. In particular:
 - Onshore corporation tax overshot our forecast by £10.9 billion due to fiscal forecasting differences. As we have noted in earlier FERs, onshore corporation taxes have repeatedly come in significantly stronger than anticipated in recent years. Profits have proved more resilient than expected but the average tax rate paid on these profits has also been higher than expected, as sectors that are historically large CT payers (e.g. financial, retail and professional services) continued to perform well. The March 2023 forecast also included an assumption that only some of the unexpected strength seen in 2022-23 would be maintained into 2023-24, which proved too pessimistic.
 - £3.0 billion of the overshoot in the **income tax and NICs forecast** relates to other fiscal forecast differences, £2.6 billion of which relates to NICs. One reason could be stronger growth in wages and salaries at the lower end of the earnings distribution, which boosts NICs receipts relative to an evenly distributed increase in earnings, because the employee NIC rate falls to 2 per cent for higher-rate taxpayers.⁶
 - Tobacco duties undershot our forecast by £1.6 billion due to fiscal forecasting differences, driven by tobacco clearances falling more sharply than expected. Cigarettes purchased fell 19.8 per cent year on year, compared to our forecast of a 6.3 per cent decrease, and other tobacco products (mostly hand-rolled tobacco) fell 22.2 per cent, compared to our forecast of a 0.9 per cent increase. This likely reflects increased substitution from tobacco products to vaping.
 - Capital gains tax was £3.0 billion lower than our March 2023 forecast as a result of fiscal forecast differences. This is primarily due to our judgement that the strength in receipts from 2022-23, which were £2.2 billion (13.9 per cent) higher than we had expected in November 2022, represented a lasting change in the level of receipts. This strength was driven by very high payments from the top 1 per cent of payers and turned out to be temporary.

⁶ The earnings distribution we assume in our personal tax forecasts are explained in: Nash, A., *Income tax and the earnings distribution*, July 2024.

• Gross operating surplus was £9.2 billion higher than our March 2023 forecast. The majority of this difference (£5.6 billion or 61.4 per cent) relates to higher-than-forecast general government depreciation, which is offset in spending (discussed below) and so neutral for borrowing. The remaining £3.5 billion relates to higher-than-forecast public corporations' gross operating surplus, due to higher outturn from the ONS.

Table 3.1: Breakdown of our March 2023 PSCR forecast differences for 2023-24

	£ billion							
	Forecast	Outturn Difference			of which:			
				Policy changes	Economic factors	Classification changes	Fiscal forecast difference	
Income tax and NICs	440.3	457.0	16.7	-2.2	16.0	0.0	3.0	
Value added tax (VAT)	162.2	168.9	6.7	0.0	6.6	0.0	0.0	
Onshore corporation tax	76.9	91.6	14.7	0.7	3.1	0.0	10.9	
Fuel duties	24.3	24.8	0.5	0.0	0.0	0.0	0.5	
UK Oil and Gas revenues ²	10.4	5.1	-5.4	0.0	-2.6	0.0	-2.8	
Electricity generator levy	3.3	1.2	-2.1	0.0	-2.2	0.0	0.1	
Business rates	29.9	30.6	0.7	0.0	0.0	0.0	0.7	
Stamp duty land tax ¹	11.5	11.6	0.2	0.0	-0.2	0.0	0.4	
Tobacco duties	10.4	9.0	-1.5	0.0	0.1	0.0	-1.6	
Alcohol duties	13.1	12.5	-0.6	-0.1	0.2	0.0	-0.7	
Environmental levies	7.6	9.5	1.9	0.0	2.0	-1.1	1.0	
ETS auction receipts	6.2	6.0	-0.2	0.0	0.0	0.0	-0.2	
Capital gains tax	17.8	14.5	-3.3	-0.1	-0.2	0.0	-3.0	
Other taxes	136.6	138.6	2.0	0.0	1.8	0.0	0.2	
National Accounts taxes	950.5	980.9	30.4	-1.6	24.5	-1.1	8.6	
Interest and dividends	40.5	39.5	-1.0	0.0	1.5	0.0	-2.6	
Gross operating surplus	64.4	73.6	9.2	0.0	0.0	0.0	9.2	
Other non-tax receipts	2.1	2.5	0.3	0.0	0.0	0.0	0.3	
Current receipts	1,057.6	1,096.5	38.8	-1.6	26.0	-1.1	15.5	

¹ Excludes Scottish LBTT and Welsh LTT.

Spending

3.20 Total managed expenditure in 2023-24 was £1,217 billion, or £27.6 billion (2.3 per cent) higher than the March 2023 forecast of £1,189 billion. As explained above, spending data availability has meant we have not been able to apply our usual breakdowns in line with our forecast categories. The approach we have used instead, based on ONS PSAT data, shows that the largest contribution to the increase came from economic factors, which explain £11.1 billion of the difference, with policy decisions contributing £6.9 billion, and the remainder explained by other fiscal forecasting differences, as shown in Chart 3.7.

² Includes Offshore Corporation Tax, Petroleum Revenue Tax and the Energy Profits Levy.

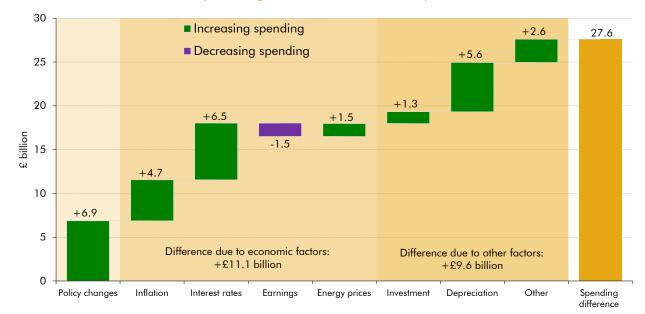


Chart 3.7: March 2023 spending forecast difference by source

Source: ONS, OBR

Differences due to policy changes

3.21 Policy decisions taken after the March 2023 EFO increased spending by £6.9 billion. The largest policy decision was the £4.4 billion of higher resource departmental spending to fund 2023-24 pay settlements. Of this, £3.9 billion went to fund the NHS 2023-24 pay settlement with the remaining £0.4 billion funding pay settlements across other departments. Other policy decisions included a £1.0 billion increase to departmental capital spending in 2023-24.

Differences due to economic factors

Inflation and interest rates

- 3.22 Higher-than-anticipated inflation and interest rates explain £11.2 billion of the difference between our March 2023 forecast for 2023-24 expenditure and outturn. The largest contribution to this came from a £6.8 billion increase in debt interest spending (Table 3.2). Changes to RPI inflation increased the costs of index-linked gilts by £3.7 billion. Interest rates (Bank Rate and gilt rates) further increased debt interest costs by £6.5 billion. These differences were only partly offset by financing and other factors, such as a lower-than-forecast average interest payable on newly issued debt in 2023-24, resulting in debt interest spending being £6.8 billion higher than forecast overall.⁷
- 3.23 The impact of higher-than-anticipated inflation on other areas of spending was more limited. Departmental spending limits were fixed in nominal terms other than for the policy changes set out above. Welfare benefit rates were uprated in April 2023 but, as is normal practice, using CPI from the previous September.

⁷ This reflects the difference between the actual interest paid on newly issued debt and that implied by the gilt yield curve.

Table 3.2: March 2023 debt interest spending forecast difference by source

	£ billion			
	Forecast	Outturn	Difference	
Central government debt interest, net of APF	94.0	100.8	6.8	
of which:				
RPI inflation			3.7	
Bank Rate			5.3	
Gilt rate			1.2	
Financing and other			-3.4	

Earnings

3.24 Slightly offsetting these increases, higher wage growth resulted in higher employee and employer contributions to **unfunded pension schemes** which reduced the net cost of these schemes in 2023-24. Set against fixed department budgets for employer contributions, this reduced overall spending by £1.5 billion relative to forecast.⁸

Energy prices

3.25 Lower-than-anticipated energy prices resulted in spending being £1.5 billion higher than forecast. This was due to £2.0 billion of higher spending on subsidies from the **Contracts for Difference** scheme (this is fiscally neutral as it is offset by higher receipts), offset by £0.5 billion lower spending on the **energy bill relief scheme**.

Other fiscal forecast differences

- 3.26 Other fiscal forecasting differences explain the remaining £9.6 billion difference between our March 2023 forecast and outturn for spending, of which £7.7 billion is from fiscally neutral changes that are offset in receipts. The major drivers of this difference were:
 - **Investment spending:** outturn for public sector gross investment was £1.3 billion higher than we forecast in March 2023.
 - General government depreciation was £5.6 billion higher than our March 2023 forecast (although this is neutral for borrowing as it is fully offset by higher receipts).
 The ONS's assessment of capital stocks post-pandemic was higher than that implied by our forecast, which resulted in our forecast for depreciation being too low.
 - £2.1 billion of the £3.0 billion overshoot in our **VAT refunds** forecast relates to a higher effective VAT rate on government procurement expenditure. The remainder relates to higher inflation.

⁸ At the time of publication outturn for unfunded pensions were not available, so this estimate is based on forecast changes.

Public sector net debt

- 3.27 Public sector net debt (PSND) was 5.0 per cent of GDP lower in 2023-24 than we forecast in March 2023. This largely reflects an upwards revision to nominal GDP, which reduced debt by 4.7 per cent of GDP compared to forecast. The remainder is explained by a £7.9 billion (0.3 per cent of GDP) downwards revision to the cash level of debt. This is a small forecasting difference for the overall cash level of debt, but reflects a set of larger, but broadly offsetting, changes:
 - **Public sector net borrowing** (PSNB) was £11.2 billion lower than forecast, driven, as set out above, by stronger-than-forecast receipts (£38.8 billion) more than offsetting higher spending (£27.6 billion).
 - Bank of England schemes, comprising the Asset Purchase Facility (APF) and the Term Funding Scheme (TFS), reduced debt by £22.6 billion more than forecast in March. This is more than accounted for by £31.7 billion of TFS loans being repaid early in 2023-24, rather than all in 2024-25 and 2025-26 (when they were due to be repaid). This is partly offset by higher outturn sales and redemptions losses of gilts held in the APF than forecast in March 2023.
 - Lower-than-forecast gilt prices which led to new gilts being sold for less than their face value, rather than more. This **negative premia on new gilt issuance** increased debt by £20.0 billion compared to forecast.
 - Other factors, including government net lending, adjustments to convert accrued measures of borrowing into cash measures (as required to forecast debt) and valuation changes for international reserves, added £6.0 billion more to debt than forecast.

Table 3.3: March 2023 public sector net debt forecast difference by source

	March 2023 forecast	2023-24 Outturn	Difference
Per cent of GDP	103.1	98.1	-5.0
of which:			
Nominal GDP			-4.7
Change in cash debt			-0.3
£ billion	2702.0	2694.1	-7.9
of which:			
PSNB			-11.2
Bank of England Schemes			-22.6
Gilt premia			20.0
Other			6.0
Memo: Public sector net debt ex BoE	2,421	2,453	

4 Refining our forecasts

Introduction

4.1 We strive to provide transparency around our forecasts to facilitate understanding, inform policymaking, and ensure that we can be held to account for the judgements we make. Transparency requires us to scrutinise our forecasts in detail, examining and explaining the inevitable differences between those forecasts and subsequent outturns. This will help people gauge whether our forecasts are based on impartial professional judgement, rather than politically motivated wishful thinking. The process also affords an opportunity to learn lessons that can be applied to future forecasts, which we summarise in this chapter.

Lessons learnt

Economy forecast

- 4.2 As discussed in Chapter 2, our March 2023 forecast was prepared during the economy's recovery from two external shocks: the 2020 pandemic and 2022 energy crisis. As with forecasting the initial impact of the pandemic (discussed in our December 2021 Forecast evaluation report (FER)) and energy shock (discussed in our October 2023 FER), predicting how these shocks would unwind and the economy recover presented challenges. Key differences between our economy central forecast and outturn relate to the pace of the decline in inflation, resilience in real household incomes, and levels of net migration in the wake of successive shocks.
- 4.3 The key lessons we have learned include:
 - Inflation was more persistent that we had expected. In our October 2023 FER, we reviewed and increased the indirect effect of energy prices on inflation in our forecasts. In response to underestimating wage growth and domestically generated inflation, we are developing a suite of econometric equations to inform our wage growth forecast, including exploring different measures of labour market slack.
 - Real household disposable income (RHDI) growth was much stronger than we expected. In addition to the aforementioned developments in our wages forecast, we plan to review our approach to the non-labour income components of RHDI such as the households' operating surplus.
 - While our March 2023 forecast for the **inactivity rate** in 2023-24 was in line with outturn, the post-pandemic evolution of inactivity has been hard to predict, particularly

- due to the rise in health-related inactivity. We used our 2023 and 2024 Fiscal risks and sustainability reports, and 2024 Welfare trends report, to explore this issue further.
- Our March 2023 forecast used ONS population projections, which significantly
 underestimated **net migration** amid the uncertainty of the new visa regime and the
 aftermath of the pandemic. Since then, we have developed our own model for
 forecasting migration by visa type and used this to deviate from ONS projections in
 our November 2023 and March 2024 EFOs. It is important that our forecasts can
 draw on timely official net migration forecasts that reflect the latest government policy.
- 4.4 More generally, given the more volatile macroeconomic environment we have experienced in recent years, there are important lessons about the presentation of uncertainty around our central forecast. We plan to:
 - Continue using **fan charts** to communicate uncertainty around our central forecast but consider expanding our use of stochastic simulations to construct them.
 - Continue to make use of **scenarios** around our central forecast, but consider more extreme assumptions to make sure we capture a wider range of possible outcomes.
 - Explore and use other ways of communicating uncertainty such as drawing on
 examples from economic history, making greater use of our fiscal ready reckoners to
 conduct sensitivity analysis that illustrates the vulnerability of our fiscal forecasts to
 changes in our economy forecast, and illustrating the volatility in market expectations
 in the months leading up to our forecasts on charts.

Fiscal forecast

- 4.5 As discussed in Chapter 3, the main cause of our £11.2 overestimate of borrowing in 2023-24 was higher-than-anticipated inflation and earnings. The lessons set out in paragraph 4.3 should therefore also help improve our fiscal forecasts. In addition, we have significantly redeveloped our forecast model for VAT to better capture changes to inflation and energy prices. Different categories of consumption, subject to different VAT rates, are now forecast separately using the splits in our economy forecast for nominal consumption. This allows for different rates of inflation across the economy to be properly captured in our VAT forecast. The forecast should therefore respond more accurately to high levels of inflation.
- 4.6 In addition to the differences due to inflation, Chapter 3 identifies a set of other fiscal forecasting issues. The lessons we draw from the fiscal forecast differences in 2023-24, that are now being reflected in our forecast models, include:
 - Onshore corporation tax (CT): we now assume a compositional change to the
 corporation-tax-paying population has permanently increased receipts. Sectors that
 are more CT-intensive due to their high profitability and high effective tax rates on
 their profits (e.g. financial, retail and professional services) have performed strongly
 since the pandemic, increasing corporation tax receipts. In contrast to our March 2023

forecast, we no longer assume this strength is temporary, and we will assess the sectoral composition of CT outturn in more detail to inform future forecast judgements.

- NICs overshot our March 2023 forecast even allowing for the stronger labour market and despite the 2 per cent cut in the employee NICs rate. For employee NICs, this could be due to higher-than-anticipated earnings growth among lower earners boosting NICs receipts. In March 2023, the forecast was based on a U-shaped distribution for earnings growth, which assumes stronger earnings growth for lower earners and the top 1 per cent, relative to earners in the middle of the distribution. We will continue to assess this distribution in light of the additional potential underestimate of earnings growth among lower earners shown in this FER. In addition, reflecting apparent additional strength in the bonuses awarded to higher earners, we have now linked bonuses in the financial and professional services sectors to the growth in equity prices in the quarter just prior to the bonus months.
- Tobacco and capital gains tax both saw tax bases come in significantly below expectations in 2023-24. Lower-than-anticipated tobacco clearances were driven by a structural change from the rise of the vaping market, while the lower-than-anticipated capital gains tax receipts were driven by very high payments among the top 1 per cent of payers in 2022-23 proving to be temporary. This highlights the importance of separately identifying and assessing the temporary and permanent factors driving changes in these tax bases.
- 4.7 Beyond the specific fiscal forecast issues identified in Chapter 3 of this *FER*, we have made wider modelling improvements to our welfare forecast over the past year, including:
 - Universal credit (UC): we have improved how we forecast UC claimants' earnings
 growth and subsequent award tapering. Outturn data shows that UC claimants'
 earnings have grown faster than economy-wide average earnings since mid-2019. We
 now assume that UC claimants' earnings grow in line with our forecast for the
 National Living Wage, reflecting the concentration of low earners in UC.
 - Incapacity benefits: we have improved our understanding of the drivers of incapacity benefits including through analysis for our Welfare trends report. This highlights the importance of scrutinising DWP's operational performance, particularly in terms of reassessments, when making decisions about the medium-term path of incapacity benefit caseloads in the forecast.

Alongside most Forecast evaluation reports we publish a model assessment database. This provides information on priorities for model development informed by forecasting issues highlighted in the FER. Given the time constraints in compiling this report, we have not published a full database this time and will instead update it alongside the next FER.

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¹ Nash, A., Income tax and the earnings distribution, July 2024.

A Summary of spending forecast differences by PSAT category

- A.1 As explained in Chapter 3, the outturn data available when this report was finalised means we are not able to provide the usual breakdown of differences against the forecast categories in our *EFOs*. Instead, we have compared the forecast to outturn from the ONS's expenditure categories as reported in the national accounts (PSAT). Chapter 3 explains the £27.6 billion forecast difference for spending based on the key economic and policy drivers. In this annex Table A.1 summarises the differences by PSAT category:
 - Consumption and other current grants expenditure was £14.2 billion higher in 2023-24 than our March 2023 forecast. Around half of this relates to resource departmental spending (RDEL), with further increases relating to depreciation (£5.6 billion) and VAT refunds (£3.0 billion).
 - Net social benefits and adjustments for pension entitlements were £3.4 billion higher than our March 2023 forecast. Central government net social benefits (that is, DWP benefits) were very close to our March 2023 forecast, coming in £0.1 billion lower than expected. The rest of the difference relates to local government net social benefits. Around £1 billion relates to an error we have identified in our 2023-24 forecast for local authority net social benefits, which we will address in future forecasts. The remaining difference for local authority net social benefits relates to higher than forecast education-related grants. However, as local authority outturn data is received with a greater lag than central government outturn data, this difference remains uncertain and subject to change.
 - Subsidies were £1.7 billion higher than our March 2023 forecast. This largely reflects the £2.0 billion upwards revision to the ONS's estimate of spending on the Contracts for Difference scheme (this revision was neutral for borrowing, with a corresponding increase in central government receipts). Our forecast for environmental levies includes £1.1 billion of spending on capacity markets and green gas support schemes, but although these schemes have been classified by the ONS they are not yet included in outturn data. This is offset in receipts and overall neutral for borrowing.
 - **Net current grants abroad** were broadly in line with our March 2023 forecast, coming in £0.6 billion higher than the £13.5 billion we had forecast.
 - Interest and dividends paid were £5.3 billion higher than our March 2023 forecast, with this difference largely driven by the effect of higher inflation and interest rates on debt interest spending (as explained in paragraph 3.22).

• Forecast outturn for **public sector gross investment** was £2.4 billion higher than our March 2023 forecast. This relates to a combination of policy decisions (£1.1 billion of higher capital departmental expenditure limits) and forecast changes (£1.3 billion).

Table A.1: March 2023 forecast differences for 2023-24 by PSAT category

	£ billion					
	Difference, of which			f which:		
	Forecast	Outturn	Total	Classification changes	Policy changes	Other
Consumption and other current grants	574.1	588.2	14.2	0.0	5.8	8.6
Subsidies	36.3	38.0	1.7	-1.1	0.0	2.8
Net social benefits ¹	316.0	319.4	3.4	0.0	0.0	3.4
Net current grants abroad	13.5	14.0	0.6	0.0	0.0	0.5
Interest and dividends paid	115.7	121.1	5.3	0.0	0.0	5.3
Public sector current expenditure	1,055.6	1,080.8	25.2	-1.1	5.8	20.4
Public sector gross investment	133.6	136.0	2.4	0.0	1.1	1.3
Less depreciation	-59.9	-65.1	-5.2	0.0	0.0	-5.2
Public sector net investment	73.6	70.9	-2.8	0.0	1.1	-3.9
Total managed expenditure	1,189.2	1,216.8	27.6	-1.1	6.9	21.8

¹ This includes adjustments for pension entitlements.

Note: Economic factors are not separated out in this table as the necessary data was not available at the time of publication. We have instead aimed to draw out these differences in the chart and text in Chapter 3.

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