



UK Government  
Investments

# ANNUAL REPORT ON THE UK GOVERNMENT'S CONTINGENT LIABILITIES, MARCH 2025



# Contents

<b>Foreword from the Chief Secretary to the Treasury</b> .....	<b>3</b>
<b>Foreword from the Director of FInTAG</b> .....	<b>4</b>
<b>Executive Summary</b> .....	<b>6</b>
<b>Chapter 1: Diagnosing Contingent Liabilities Across Government</b> .....	<b>11</b>
Scope of the Report .....	12
Contents of the Report .....	12
Definition of On-Budget and Off-Budget Liabilities.....	13
Typology of On-Budget and Off-Budget Liabilities .....	14
Measures of Cost .....	14
Data Sources and Limitations .....	15
<b>Chapter 2: Portfolio Overview</b> .....	<b>16</b>
Summary.....	16
Introduction .....	16
Portfolio Summary .....	17
Key Risks of the Contingent Liability Portfolio .....	20
Cross Sector Triggers .....	20
Sectors of Risk .....	21
Future Landscape and Historical Trends of the Contingent Liability Portfolio.....	22
<b>Chapter 3: On-Budget Liabilities</b> .....	<b>24</b>
Summary.....	24
Introduction .....	25
On-Budget Portfolio Overview .....	25
Types of Liability .....	26
Resource or Capital Expenditure.....	28
Risks .....	29
<b>Chapter 4: Financial Guarantees</b> .....	<b>33</b>
Summary.....	33

Introduction .....	33
Portfolio Summary .....	34
Net Expected Cost and Coverage Analysis .....	36
<b>Chapter 5: Off-Budget Liabilities .....</b>	<b>39</b>
Summary .....	39
Introduction .....	40
Off-Budget Portfolio Overview .....	40
Key Characteristics .....	41
Beneficiaries and Charging .....	42
Risk and Vulnerabilities .....	43
<b>Chapter 6: Sub-Portfolio Stress Scenario .....</b>	<b>46</b>
Summary .....	46
Introduction .....	46
Scenario .....	47
Characterisation of the Sub-Portfolio .....	48
Interpretation of Analytical Findings .....	48
Methodology .....	49
Setting the Scenario .....	49
High Level Methodology for Determining Additional Costs .....	49
Assumptions, Limitations and Risks .....	50
<b>Chapter 7: Summary and Next Steps .....</b>	<b>51</b>
Government's Contingent Liability Risk .....	51
Management of Contingent Liabilities Portfolio .....	51
<b>Annex A: Definitions .....</b>	<b>54</b>
<b>Annex B: Data Sources .....</b>	<b>58</b>
<b>Annex C: Data Limitations .....</b>	<b>60</b>
<b>Annex D: Consistency and Quality Assurance .....</b>	<b>65</b>
<b>Annex E: Sub-portfolio Stress Scenario Methodology .....</b>	<b>68</b>
<b>Annex F: Guarantees Methodology .....</b>	<b>79</b>

# Foreword from the Chief Secretary to the Treasury

Stable public finances are the precondition of economic growth. This government has committed to the responsible management of its contingent liabilities, provisions, guarantees and insurance liabilities.

Government rightly takes on risk through financial guarantees, indemnities, and provisions to achieve its policy objectives. Being transparent about the risks we face enhances our fiscal credibility and accountability when spending taxpayers' money.



This report delivers on the government's strong commitment to a transparent and predictable fiscal policy-making environment. By managing liabilities across government as a single portfolio of financial risk, it helps us to identify where risks are linked. And by setting out the expected cost of government guarantees and guarantee schemes, we increase the government's ability to manage these risks on behalf of the taxpayer.

I'd like to congratulate the officials in the UKGI and government departments in taking this important step forward in our management of contingent liabilities.

**The Rt Hon Darren Jones MP**

Chief Secretary to the Treasury

# Foreword from the Director of FInTAG

Contingent liabilities are financial instruments that can be used by the government to support various policy objectives, such as growth. The risks that fall to government by using these instruments can be unique and complex.

Established as an expert advisor within UK Government Investments, working with departments across government on key transactions, the Contingent Liability Central Capability (CLCC) had a mandate to bring specialist knowledge into transaction teams, quantify government's exposure and improve visibility of potential future costs.



Three years from set up, we have taken a significant step forward with this report and associated work across government, bringing together unique data combined with published financials to review the 'stock' of outstanding exposure. This means generating insights for government based on aggregated data and quantifying the government's exposure. Alongside Autumn Budget 2023, the group delivered market first analysis for both on- and off-budget risks. This work set out, for the first time, a holistic view of the government's risk exposure at a portfolio level.

In this report, we start to see the value of collating data over multiple years as we identify trends and patterns emerging from changes at the portfolio level. New work provides a sub-portfolio stress scenario to understand the downside impact of a major economic or financial downturn, and analysis quantifying whether government is charging sufficiently for taking on risks.

The aim of CLCC's work is to improve government's ability to consider how decisions influence the level of risk across the portfolio. This year's report delivers on the UK's commitment to transparent reporting and provides a continued focus on risk impact.

As a central resource available on demand, the team is on hand to quickly resolve technical queries raised by colleagues across government. Simultaneously, we apply our expertise to long term work streams to help develop funding solutions for government's largest and most complex projects. Since inception, the CLCC has advised on approximately 200 new schemes and policies with a total maximum exposure exceeding £50bn.

The team takes the role to champion best practice principles, and these have been produced in consultation with officials and specialists across departments, public financial institutions and arms-length bodies regularly involved in setting up or managing contingent liability risks. This has enabled the team to deploy frameworks to enable those developing these schemes to better manage risk and align with the Contingent Liability

Approval Framework.<sup>1</sup> Through this we have enabled policy decisions based on balanced assessments of risk and their potential impact and will continue to do so for contingent liabilities, government loans and government equity investments.

**Siobhán Duffy**

Director of Financial Instruments and Transactions Advisory Group

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1 [Contingent Liability Approval Framework.pdf](#)

# Executive Summary

## Key Messages

- The UK Government has over 1,600 contingent liabilities, the present value of which have decreased from £514bn to £250bn since our last report. This has largely been driven by a change in the discount rate applied to on-budget items.
- In contrast, excluding the impact of a change in discount rate, the underlying cost of on-budget liabilities has increased, since 2011.
- Nuclear decommissioning and clinical negligence represent c.70% of the expected cost of the whole portfolio while the remainder of the portfolio is spread across a diverse range of sectors.
- Analysis of the UK Government's financial guarantees highlights that the c.£8bn expected cost will not be fully covered through fees and premiums charged.
- This is largely attributable to schemes that prioritised a policy response, in the public interest, over ensuring losses were recouped via fees (e.g. COVID-19 guarantee schemes account for c.77% of the expected cost across all schemes).
- Analysis of liabilities with a stated cross-sector trigger of a major economic or financial downturn suggests that the expected cost of this sub-portfolio (£18bn) could increase by c.£10bn in a downside scenario.

The UK Government defines contingent liabilities as commitments to use public funds if uncertain future events occur. Contingent liabilities are a versatile tool that can be used to deliver policy objectives. This report focuses on factors that influence the risk arising from contingent liabilities and other areas of the balance sheet that share an element of uncertainty. They can take the form of multiple different financial products, tools and commitments that include insurance indemnities, financial guarantees, purchaser protections and legal cases, amongst others. They are often grouped within accounts as contingent liabilities, provisions, insurance indemnities or financial guarantees.

Deployed effectively contingent liabilities can be used to stimulate economic growth by sharing risk and encouraging private sector investment or providing stability and support where the private sector is unwilling or unable to take on risk. Simultaneously, contingent liabilities left unmanaged can become sources of fiscal risk as highlighted by the Office for Budget Responsibility (OBR) in its Fiscal risks report.<sup>2</sup>

Examining the UK Government's stock of contingent liabilities at a portfolio level can help the government evaluate its exposure to these risks, the extent to which it is willing to take this on and inform fiscal planning and future policy decisions.

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<sup>2</sup> <https://obr.uk/frs/fiscal-risks-report-july-2021/>



## A Diagnostic Analysis of the Government's Risk

**Figure 01A: Change to total expected cost between our last report and 31st March 2024 organised by typology<sup>3</sup>**

Type	On-Budget £bn	Off-Budget £bn	Total £bn	Total (2023 Report) £bn
Government Responsibilities	214	17	231	480
Government as Insurer	5	5	10	14
Government as Guarantor	9	1	10	20
Total	227	23	250	514

The UK Government's total expected cost from contingent liabilities stands at £250bn, of which £227bn is accounted for on its balance sheet (on-budget) and £23bn is off balance sheet (off-budget). Of the total, £20bn of the expected cost across on- and off-budget liabilities is incurred to support the private sector, split between the government acting as an insurer or guarantor. The remainder is accounted for where the government is obliged to spend because of its past public sector activities (government responsibilities).

### On-Balance Sheet Liabilities

The overall expected cost of on-budget liabilities has reduced by c.£265bn since our previous report. A major factor influencing this is the change in prescribed discount rates affecting the value placed on long-term financial obligations for accounting purposes. Discount rates enable different commitments to be compared on a market-consistent basis, however, they do not influence the underlying cost.

Excluding the impact of a change in discount rate on the expected cost of the largest items across government's portfolio indicates that the underlying cost of these items has increased. Furthermore, historic analysis of the on-budget liability data since 2011 suggests that the government's underlying on-budget cost has increased over time.

This demonstrates reporting solely on expected cost, measured on an accounting basis, can provide a volatile view of large, long-term liabilities year-on-year due to the impact of discount rate changes. Other metrics, such as expected cost on a constant discount rate and annual expenditure, are carefully examined by government when making decisions on these liabilities to provide a more complete view of its risk.

<sup>3</sup> Values in figures and tables may not add to 100% or the table total due to the effects of rounding for presentational purposes.

**Figure 01B: Distribution of contingent liabilities and their expected cost, as of March 2024**

Type of Contingent Liability	Number of Items	Expected Cost £bn
Clinical Negligence and Nuclear Decommissioning	5	174
All Other Contingent Liabilities	1596	77
Total	1601	250

As **Figure 01B** shows, clinical negligence and nuclear decommissioning make up the majority of the expected cost (c.70%). These items are made up of just 5 individual contingent liabilities, with nuclear decommissioning comprising of 4 individual items. Throughout this report, we refer to these four items as “nuclear decommissioning” rather than their individual names.

Excluding the impact of the discount rate, the underlying cost of these two items has increased by c.£40bn in real terms since our previous report. This report highlights the importance of effectively managing the costs of these liabilities which may otherwise be obscured by the change in discount rate. Excluding these items, the portfolio is broadly diversified, which helps mitigate risk by preventing overexposure to any one area.

### Off-Balance Sheet Liabilities

The off-budget segment of the portfolio refers to those items that are not on the balance sheet. These items are reported within departments’ notes to accounts, often recognised as contingent liabilities or remote contingent liabilities. This means there is limited financial information disclosed with respect to these items, in accordance with accounting standards. By working with government departments

to quantify these items, our analysis shows that this sub-portfolio has an expected cost of £23bn.

The expected cost arising from off-budget liabilities remains similar to that disclosed in our previous report as new liabilities were broadly offset by those that changed in value or expired. Our analysis also highlights that this risk is spread across a diverse range of sectors. Although these liabilities represent a relatively small proportion of the overall portfolio, as they are not captured via normal government accounting methods, it is important to capture information on them in this report so that emerging trends can be identified and monitored.

## Charging Fees and Premiums for Government Guarantees and Insurance

**Figure 01C: expected cost recovered for guarantees from charging a fee or premium**

Sub-Portfolio of Guarantees	Expected cost of the sub-portfolio £bn	Of which covered by premiums and fees
All Financial Guarantees	8	0%
Only Guarantees that Charge a Fee	2	34%
Only Guarantees that Charge a Fee and excluding Covid-19 schemes (e.g. BBLs, CBILs and CLBILs)	1	69%

This report examines the extent to which government could be reimbursed for the risk it has taken on from the private sector through financial guarantees.

An analysis to what extent the expected cost of the financial guarantees sub-portfolio is covered by lifetime expected premiums and fees shows 0% coverage (**Figure 01C**). This is due to the fact that the lifetime expected premiums and fees (£1,995m) are exceeded by crystallisations (£10,472m) already incurred in the portfolio, meaning there is no remaining lifetime expected premium and fee income that can be used to offset the expected cost of this sub-portfolio. While the sizable amount of crystallisations is the main cause for the 0% coverage, this portfolio also includes financial guarantees where government does not charge a premium or fee.

Covid-19 schemes, such as the Bounce Back Loan Scheme (BBLs), were exceptional in that supporting the economy in a time of crisis was deemed more important than ensuring that fees and premiums cover their expected cost. This is explored further in **Chapter 4**.

In addition, and, in line with common practice, fees have not been charged for several high-value financial guarantees provided to support other nations. This includes, but is not limited to, support given to Ukraine following the illegal invasion by Russia in 2022.

Just considering schemes that do charge premiums and fees, the net lifetime expected premiums and fees are projected to offset some of the expected cost, resulting in 34% coverage.

When only considering schemes that are developed under normal circumstances and where government does charge a premium or fee, the expected cost coverage improves to 69%.

### Modelling Risk

This report includes further analysis on a subset of the portfolio, those liabilities which are primarily triggered by a “major economic or financial downturn”. The risk underpinning most of these items is driven by the ability of a counterparty to service debts and payments. A stress scenario was conducted to determine the order of magnitude cost impact if there was a significant deterioration in the creditworthiness of counterparties. In

such a downside scenario there would be additional costs of c£10bn, compared to the expected cost of this sub-portfolio of £18bn.

Therefore, policy makers can consider their risk appetite for further contingent liabilities with similar characteristics and trade-offs between different segments of the portfolio can also be considered. For example, the additional cost in this stress scenario is less than the increase in underlying cost for nuclear decommissioning and NHS clinical negligence over the past two years, which reinforces the importance of these two large items.

## Next Steps

The value of government understanding the expected cost across its portfolio of contingent liabilities is in its ability to enable the government to consider the impact of new policy decisions. The insights included within this report; setting out the diversification of risk, changes in portfolio composition and impacts of accounting treatment relative to underlying cost provide a series of metrics that could be used as key performance indicators.

With this information and a better understanding of potential losses in a downside scenario, UKGI will work with policy makers to consider how best to continue the management of government's contingent liability portfolio. i.e., the government can examine and take risks on new contingent liabilities with an understanding of the nature of the portfolio the fiscal risk it holds. The lessons learnt from managing contingent liabilities will be applied to financial transactions more broadly, so that government's investments are also managed effectively.

# Chapter 1: Diagnosing Contingent Liabilities Across Government





The UK Government defines contingent liabilities as commitments to use public funds if uncertain future events occur. Contingent liabilities are a versatile tool that can be used to deliver policy objectives. They can take the form of multiple different financial products, tools and commitments that include insurance indemnities, financial guarantees, purchaser protections and legal cases, amongst others. They are often grouped within accounts as contingent liabilities, provisions, insurance indemnities or financial guarantees. They can also share interdependencies and correlations with similar financial products. Where such interdependencies exist, the scale and rate of crystallisation can increase across the portfolio.

Contingent liabilities often do not impact key fiscal metrics immediately upon creation. For this reason, the OBR in its series of Fiscal Risk and Sustainability reports, states that if left unmanaged, contingent liabilities and other areas of uncertainty can become sources of fiscal risk. This could cause the fiscal outlook to deviate from what was forecast and pose a threat to its sustainability over the long term. Fiscal risks can be difficult to anticipate and contingent liabilities that are not designed or managed effectively can place a strain on public finances.

It is essential to structure contingent liabilities so that they include appropriate risk sharing arrangements, are judged to be affordable within the overall fiscal position and allow for government to sufficiently charge for the risk it takes on where appropriate. This will also ensure that private sector beneficiaries of contingent liabilities are adequately incentivised to act in a way that reduces the risk to government.

The Annual Report on the UK Government's Contingent Liabilities, 2023, published alongside the Autumn Budget of the same year, was a first step in improving the government's understanding of its risk, providing transparency of the fiscal risks involved and informing how the UK Government manages its contingent liabilities.

Building on our previous report, this report aims to:

-  Understand how the scale of the contingent liability risk has changed over time.
-  Categorise the risk and stress test the government's liabilities against a specific scenario.
-  Assess whether the government charges adequately for the risk it takes on.
-  Consider how to improve value for money across the portfolio.

## Scope of the Report

As established in our previous report, we have focused on analysing the contingent liability portfolio across central government. The scope of our work does not include contingent liabilities or other uncertain items held across devolved administrations or local government. Our analysis covers a range of financial products, tools and commitments that can be grouped as 'on-budget' or 'off-budget' liabilities.<sup>4</sup> Further information about the data sources used in this report can be found in **Annex C**.

## Contents of the Report

This report provides a portfolio analysis of the UK Government's exposure in **Chapter 2**, followed by more in-depth analysis and conclusions on both the on- and off-budget sub-portfolios in **Chapters 3, 4 and 5**. Of these, **Chapter 4** examines the government's on-budget financial guarantees in detail and provides an assessment of whether government financial guarantees charge sufficiently for the risk taken on from the private sector. **Chapter 6** assesses how the government's portfolio of risk could react to a major economic or financial shock.

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<sup>4</sup> In this report, the Devolved Administrations and Local Authorities are not included in our analysis. The Whole of Government Accounts reports on business-as-usual spending and contingent liabilities for Local Authorities. Therefore, this information will not be analysed within this report. <https://www.gov.uk/government/collections/whole-of-government-accounts>

## Definition of On-Budget and Off-Budget Liabilities

Figure 02: Classification of liabilities as on-budget and off-budget

	On-Budget liabilities	Off-Budget liabilities
<b>Description</b> <sup>5</sup>	Items that are, in accordance with accounting standards, <b>included in financial accounts</b>	Items that are, in accordance with accounting standards, <b>disclosed in the notes to accounts with limited financial information</b>
<b>Accounting Treatment</b> How is information on this contingent liability reported?	<b>Balance sheet liability</b> In accordance with accounting standards, departmental accounts will include a 'best estimate' for these items, whilst recognising there is uncertainty in actual future outturn	<b>Described in the 'notes' to accounts.</b> In accordance with accounting standards, these are not recorded on departmental balance sheets because, in isolation, they are considered to be relatively unlikely to crystallise in estimation. Items are disclosed in notes to the accounts with limited or no quantification
<b>Accounting Terminology</b>	Provisions, financial guarantees, or insurance liabilities	Contingent liabilities and remote contingent liabilities
<b>Importance of Monitoring</b> Why is it important that we collate and monitor information on these contingent liabilities?	<b>To build a portfolio view</b> There is a risk that on-budget items are mostly managed on a department-by-department basis, and separately from off-budget items. This report brings together a portfolio view to improve oversight and inform policy decisions	<b>Limited information is available on the quantum and features of this risk.</b> Across the government's portfolio, crystallisations are possible and will need to be met from departmental budgets. Until now, limited financial information has been captured on these liabilities

This report and the data that informs it has been collated by working with central government departments to provide an analysis of almost 800 on-budget and over 800 off-budget liabilities.

<sup>5</sup> Note that this accounting definition of the term 'contingent liability' is a narrower definition than that used by the government, namely, commitments to use public funds if uncertain future events occur. The broader government definition therefore includes both accounting contingent liabilities and the on-budget liabilities. In general, use of the term in this report refers to the broader definition.

## Typology of On-Budget and Off-Budget Liabilities

To identify characteristics of the portfolio of risk, liabilities are categorised by the nature of the commitment made by the government. Primarily, this relates to whether the liability is a result of the government’s own public sector activity, or whether it exists to support the private sector.

Liabilities are also analysed by considering the financial product or tool that has been used to make the commitment. More details are provided in **Figure 03A** and **03B** and **Chapters 3** and **5**.

**Figure 03A: Typology of on-budget and off-budget liabilities**

	Typology of Government’s Role
<p><b>Government’s role</b> What is the nature of the commitment made?</p>	<p><b>Government responsibilities</b> – future contingent or uncertain expenditure that the government is legally or contractually committed to incurring because of its past public sector related activities.</p> <p><b>Government as insurer/guarantor</b> – where, to achieve its objectives, the government provides insurance, indemnities, or financial guarantees explicitly to support the private sector.</p>

**Figure 03B: Typology of on-budget and off-budget liabilities**

	Typology of Liability Products and Tools			
	Guarantees	Indemnities	Legal cases	Purchaser protections
<p><b>Type</b> What is the type of financial product or tool used to make the commitment?</p>	When the government agrees to pay the debts of a third party if they default.	When the government agrees to cover costs if a certain event occurs.	When a lawsuit is likely to be brought against the government while undertaking its core activities.	Where the government agrees to provide warranties or indemnities relating to asset sales.

## Measures of Cost

The analysis underpinning this report is focused on the expected cost of contingent liabilities across the portfolio. The expected cost is an estimate that refers to the probability-weighted outstanding lifetime gross future cost to government, that arises from past decisions or activities.

The way expected cost is determined is different for on- and off-budget items.

For on-budget liabilities, the expected cost is calculated in line with the Government Financial Reporting Manual (FReM) and is effectively a ‘fair-value’ estimate of the underlying liability included in departmental accounts. The ‘fair-value’ estimate considers the likelihood of crystallisation, the future



costs to government, and when that cost will occur, applying the time-value of money.

For off-budget risk the expected cost is harder to estimate given the inherent uncertainty with these liabilities. Therefore, whilst we follow similar principles to on-budget items, they are not calculated in line with accounting standards. Instead, we apply a range estimates, in orders of magnitude, for off-budget items. In this report, we have used the mid-point of these estimates to provide figures for this measure.

Measuring the cost of contingent liabilities and other uncertain items across the government's portfolio in this way provides a more realistic estimate of the government's aggregate risk than solely using metrics such as maximum exposure. Applying maximum exposure at a portfolio level can result in an inflated measure of risk as it assumes a worst-case scenario across every liability, even where there is some diversification of risk.

Expected cost does not capture income received (fees or premiums charged by the government), for example when taking on risk from the private sector. When reviewing government guarantee schemes, this report has considered the extent to which charging is used to compensate for some of government's risk. This is referred to as the Net Expected Cost. **Chapter 4** provides more detailed analysis of this metric and the methodology used to calculate it.

## Data Sources and Limitations

This report uses data from 18 central government departments as at year ending 31 March 2024. This includes additional management information for

on-budget liabilities, which has been used to supplement data included in departmental annual reports and accounts.

Due to availability of data at that time, the November 2023 CLCC Annual Report on the UK Government's Contingent Liabilities used data with an effective date of 31 March 2022 for the on-budget analysis and 31 March 2023 for the off-budget analysis. We have moved the timing of the publication and the collection of data from departments to enable this latest report to align on- and off- budget data.

To provide consistency between reports and to allow readers to make more direct comparisons, numbers published in our November 2023 report have been used as the baseline for comparisons.

Values in figures and tables may not add to 100% or the table total due to the effects of rounding for presentational purposes.

A full assessment of the data sources and their limitations is covered in **Annex B** and **Annex C**.

# Chapter 2: Portfolio Overview

## Summary

- This chapter analyses the government's total portfolio of on-budget and off-budget liabilities. This provides greater clarity around the overall level of risk across the portfolio, which can help inform the UK Government's risk appetite for entering into new liabilities.
- The expected cost of the total portfolio is £250bn as of March 2024. This is just under half of the expected cost cited in our previous report. The reduction in expected cost is overwhelmingly driven by a change in discount rates affecting long-term financial obligations.
- Excluding the impact of this change, the underlying cost of the portfolio has increased and this has been a consistent trend across the time period that data is available for, since 2011.
- The portfolio is dominated by two large items, nuclear decommissioning, and NHS clinical negligence, which combined account for 70% of the total expected cost. Excluding these items, the portfolio is broadly diversified.
- There has been a 41% (£14bn) decrease in expected cost from the government taking on risk from the private sector by acting as insurer or guarantor. This decrease is primarily driven by a reduction in the value of loans covered by government financial guarantees that were issued in response to the COVID-19 pandemic.
- Around 13% (£32bn) of liabilities in the existing portfolio are scheduled to expire over the next decade, substantially changing the quantum and characteristics of the portfolio's risk. The duration of the portfolio can help inform fiscal planning and decisions to enter new contingent liabilities.

## Introduction

This chapter analyses the government's total contingent liability portfolio of both on-budget and off-budget items, presenting a holistic view of its characteristics and exposure. This enables a greater understanding of the overall level and composition of risk in the portfolio and identification of emerging trends in the expected cost of the portfolio.

## Portfolio Summary

**Figure 04: Total expected cost between CLCC's last report and 31st March 2024**

Type	On-Budget £bn	Off-Budget £bn	Total £bn	Total (2023 Report) £bn
Government Responsibilities	214	17	231	480
Government as Insurer	5	5	10	14
Government as Guarantor	9	1	10	20
Total	227	23	250	514

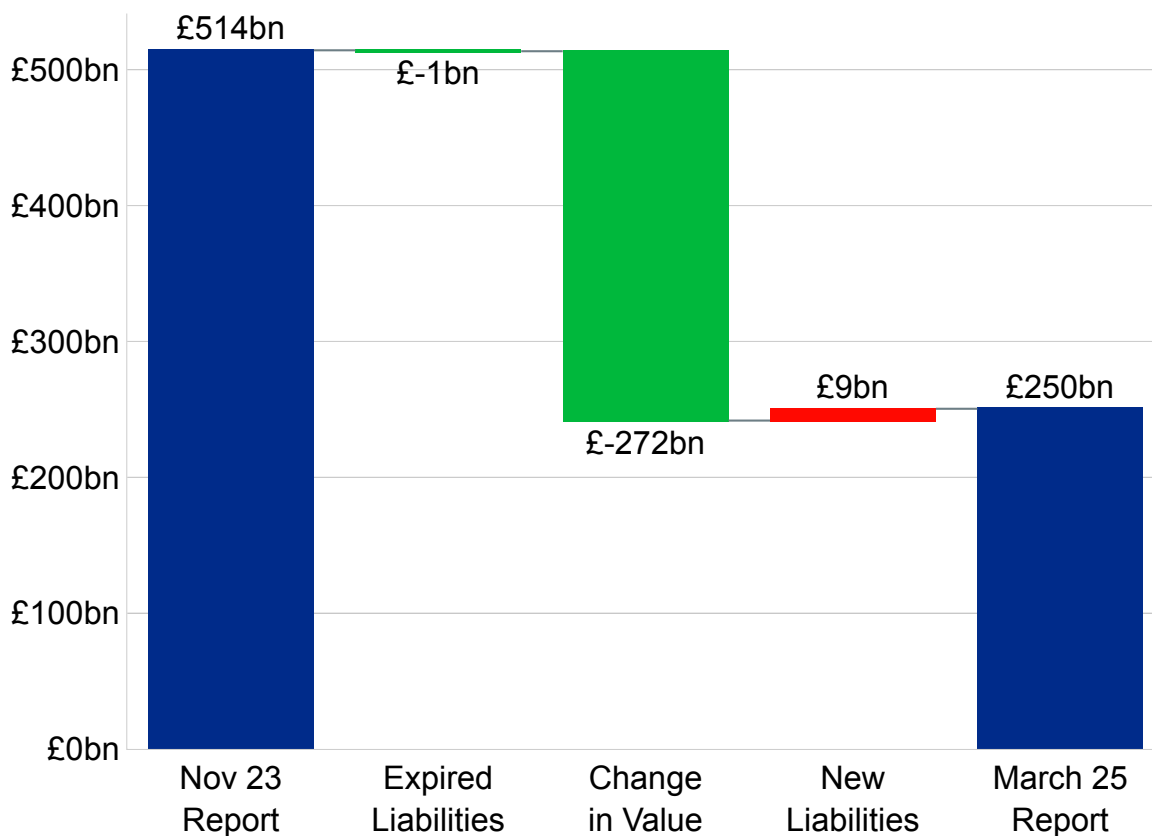
The government's expected cost across its contingent liability portfolio as of 31st March 2024 was £250bn. This is just under half of the expected cost that was stated in our previous report. Most of the expected cost arises from on-budget liabilities, captured on the government's balance sheet. Of these on-budget liabilities, the largest expected costs relate to nuclear decommissioning and NHS clinical negligence (i.e., government responsibilities) which account for around 70% of the portfolio. These items are discussed further in **Chapter 3**.<sup>6</sup>

The remaining expected cost of the portfolio is accounted for by off-budget liabilities. Although there has been some change in the composition of this sub-portfolio, the overall position has remained stable in terms of expected cost. These are explored further in **Chapter 3** and **Chapter 5** respectively.

As highlighted by **Figure 04**, schemes where the government has taken on risk from the private sector to support its policy aims (as both insurer and guarantor) gives rise to £20bn of expected cost across on- and off-budget liabilities as of 31<sup>st</sup> March 2024. Most of this sits in the on-budget sub-portfolio, with the largest exposures relating to guarantee schemes that were set up in response to the Covid-19 pandemic.

<sup>6</sup> For on-budget items, this is a change over a 2-year period.

**Figure 05A: An analysis of the change to the total portfolio expected cost between CLCC's last report and 31st March 2024**



The significant reduction in expected cost due to a change in value of existing liabilities is substantially due to a change in the discount rate affecting on-budget liabilities.

**Figure 05B: A definition of the discount rate**

- A discount rate is a financial assumption used to express what the value of money paid in the future is worth in the present. Small changes to discount rates can affect the value of on-budget liabilities significantly due to the compounding nature of applying these assumptions over time. These rates are prescribed by HMT in the Government Financial Reporting Manual (FReM).

Since March 2022, on-budget discount rate assumptions have increased, reflecting increases in government gilt yields. The long-term prescribed discount rate used for accounting purposes when valuing provisions, has increased from 0.95% as at March 2022 to 4.72% as at March 2024.<sup>7</sup> These prescribed discount rates do not apply to off-budget liabilities so that part of the portfolio has not experienced a similar reduction in expected cost.

<sup>7</sup> The discount rate to determine the value of His Majesty's Government (HMG) provisions is set by HMT in their annual publications on the Public Expenditure System (also known as PES papers). The average duration of the 2024 on-budget liability portfolio is over 40 years. For that reason, the most appropriate PES provisions discount rate would be the one for the "very long term". However, this specific rate has only been updated annually since 2021, and therefore the "long-term" rate has been used for prior years.

For the purposes of this report, the liabilities, where discounted, enable different commitments to be compared on a market consistent basis. This helps with the identification of the most material items and to compare the scale of different contingent liabilities.

Importantly, discount rate assumptions do not influence the underlying cost, or the annual expenditure in the short term. For example, the annual expenditure across the whole portfolio in the last financial year was £27bn in total, this amount is unaffected by the discount rate. This level of expenditure is material when compared to total public sector current expenditure for 2023/24.<sup>8</sup>

More granular data on how the change in value is split into different components is not available for all liabilities. As the seven largest on-budget liabilities represent 88% of the total expected cost, we sourced granular data on those seven line items which, in our view, provides useful analysis for this report. We used this data to analyse their change in value between March 2022 and March 2024<sup>9</sup> and to provide an indicative assessment of the change in underlying cost across the portfolio.

These items account for a £260bn reduction in value. Through this we can understand trends at the portfolio level. At an aggregate level for these seven liabilities:<sup>10</sup>

- The change in discount rate assumptions reduced the liabilities by c.£270bn;

- The liabilities were further reduced by c.£40bn of payments made over the two year period since the position reported in our previous report; and
- This was offset by increases to the existing liabilities of c.£50bn because of new activity and changes to future expected cashflows, among some other less material technical factors.

This suggests that, aside from the effect of discount rate changes, the government's aggregate underlying costs for these liabilities are continuing to increase. Furthermore, given the size of this increase, there is a net increase in underlying costs across the whole portfolio. Further details on some of these liabilities, and the underlying analysis for year-on-year changes in the on-budget part of the portfolio can be found in **Chapter 3**.

This demonstrates that solely considering expected cost measured on an accounting basis can provide a volatile view of large, long-term liabilities year-on-year due to the impact of discount rate changes. Other metrics, such as the expected cost on a constant discount rate and annual expenditure, can now be examined when making management decisions on these liabilities to provide a more complete view of the risk.

8 Total public sector current expenditure for 2023-24 was reported to have an outturn value of £1,087.8bn at the Autumn Budget 2024.

9 These seven items are Nuclear Decommissioning; NHS Clinical Negligence; EU Financial Settlement; Oil & Gas Field Decommissioning; Coal Authority's responsibilities for mine water treatment, public safety and subsidence and subsidence pumping stations; Financial Assistance Scheme and the Bounce Back Loan Scheme

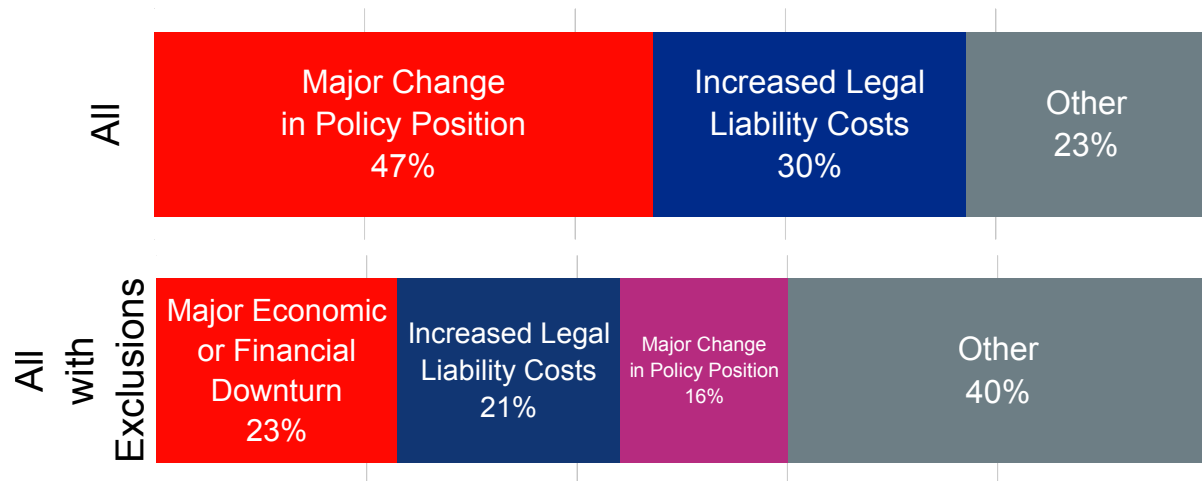
10 Note that there were inconsistencies between different annual report and accounts with regards to the treatment of inflation and the order in which items were calculated (which has an impact on the magnitude of the change in liabilities). To mitigate the impact of this we have expressed the changes in liabilities to the nearest £10bn.

## Key Risks of the Contingent Liability Portfolio

We have examined the specific cross-sector triggers and economic sectors which most influence the cost of the liabilities. Analysing government's composition of risk can act as an early-warning system. Insights on potential concentrations of risk towards a particular trigger or sector of the economy help facilitate the making of informed decisions by government based on its risk appetite.

### Cross Sector Triggers

**Figure 06A: The distribution of cross-sector triggers across the portfolio**



A cross-sector trigger is defined as an event which could most influence the probability or size of any future crystallisations across different types of contingent liability. By analysing these triggers, the government can identify the events that could have an adverse impact on its portfolio and whether there are any it is over-exposed to.

It is useful to conduct this analysis both with, and without, nuclear decommissioning and clinical negligence liabilities to understand the distribution of this risk across the portfolio. Our analysis shows that over half of the government's portfolio of contingent liabilities and other uncertain costs are attributable to three main cross-sector triggers:

- a major change in policy position,
- increased legal liability costs,
- a major economic or financial downturn.

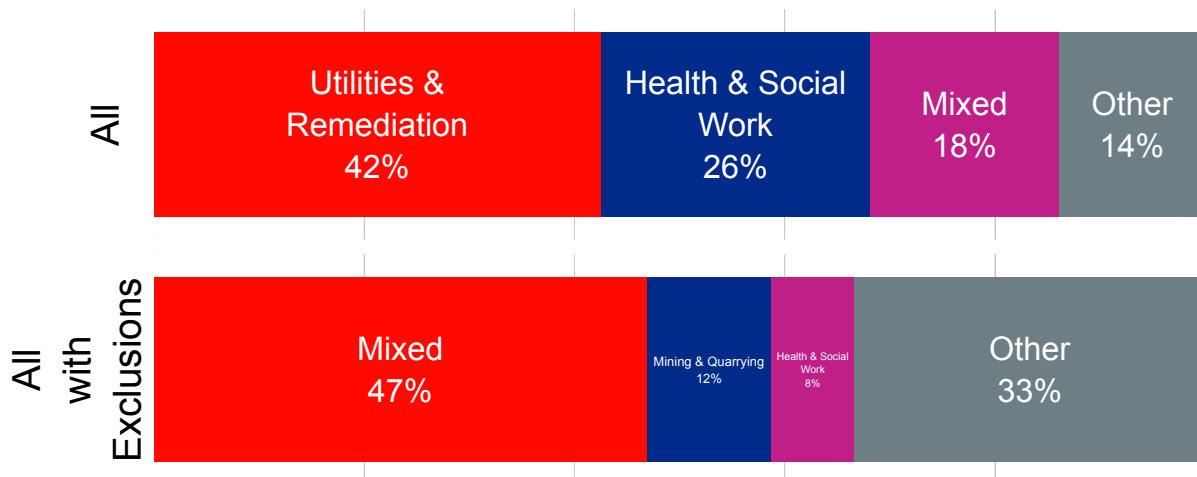
However, the distribution of the portfolio across these (and other triggers) varies significantly when including or excluding nuclear decommissioning and NHS clinical negligence. This is demonstrated in **Figure 06A** which suggests that government is not over-exposed to any one trigger when excluding the two largest items.

When considering the potential impact of these events, it should be noted that not all triggers interact with liabilities in the same way. For example, a direct change in policy on nuclear decommissioning would be very unlikely to impact other liabilities. Other triggers, such as a major economic or financial downturn may impact liabilities that share common features meaning a single event could cause several significant crystallisations simultaneously.

For more information on the additional cost government could be exposed to under a major financial or economic downturn see **Chapter 6**.

## Sectors of Risk

**Figure 06B: The sectors that have the most contingent liability risk associated with them**



Private firms consider sector allocation to understand the diversity of their investment portfolios and adjust their portfolios to increase returns and minimise losses. Contingent liabilities can be managed in a similar way, by adopting mitigating strategies to lower sector concentration risks. While government may not be able to choose the sectors to which it is exposed, understanding the portfolio enables government to plan and to use strategies to mitigate concentration risk.

The data shows that the government's portfolio is particularly exposed to the utilities and the health and social work sectors. These two sectors account for £171bn, almost two-thirds, of the total expected cost across the portfolio. The distribution changes significantly, when nuclear decommissioning and NHS clinical negligence are excluded from the analysis, as shown in **Figure 06B**.

Closer examination shows that while risk is concentrated across two large liabilities, these are independent of one another. Excluding these large items, the analysis also indicates that the portfolio is broadly diversified, with just under half of the remaining liabilities being attributable to two or more (mixed) sectors of risk. Mixed means that the liabilities interface with two or more sectors.

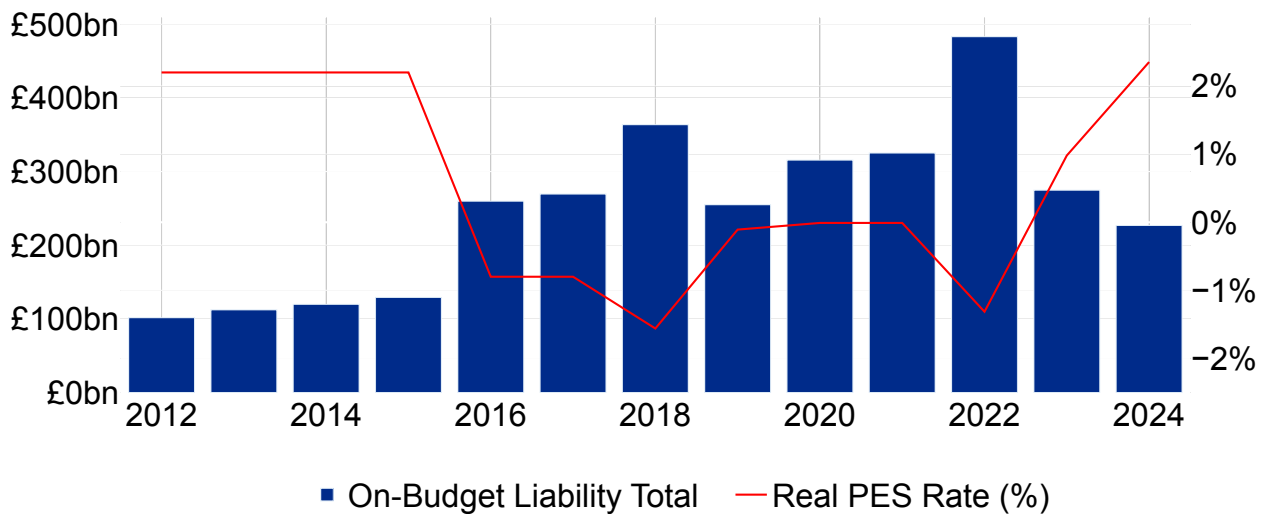
This analysis does not account for secondary and tertiary risks to crystallisation of expected cost that may impact liabilities across the portfolio, such as inflation. The methodology used is available in the Technical Annex.

## Future Landscape and Historical Trends of the Contingent Liability Portfolio

Analysing historical trends across a portfolio can help inform future decisions linked to the management of that portfolio. For example, understanding how a portfolio has reacted to events in the past can help decision makers to anticipate future risks and use mitigation strategies.

### Historical Trends

**Figure 07: The on-budget total expected cost over past years alongside movements in the Public Expenditure System (PES) real discount rate, at the longest term available, between 2012 to 2024**



We have carried out high-level analysis of how the on-budget portfolio has evolved over time. This analysis uses balance sheet data from published annual reports and accounts, and discount rate data going back to 2012.<sup>11</sup>

This analysis does not consider off-budget liabilities because the expected cost of these liabilities has only been measured since 2023. However, since on-budget liabilities make up most of the expected cost, this can be seen as indicative of trends across the whole portfolio.

As **Figure 07** demonstrates, there has been significant year-on-year volatility in the total expected cost of on-budget liabilities as reported for accounting purposes. Figure 07 also illustrates the volatility of the discount rate over the same period, leading to large fluctuations in the expected cost of the portfolio. Where the discount rate decreases or increases, the corresponding on-budget expected cost moves in the opposite direction.

For periods where the discount rate has remained stable (2011-2015, 2016-17, 2019-2021), the expected cost is less volatile, with

<sup>11</sup> The discount rate to determine the value of His Majesty's Government (HMG) provisions is set by HMT in their annual publications on the Public Expenditure System (also known as PES papers). The average duration of the 2024 on-budget liability portfolio is over 40 years. For that reason, the most appropriate PES provisions discount rate would be the one for the "very long term". However, this specific rate has only been updated annually since 2021, and therefore the "long-term" rate has been used for prior years.

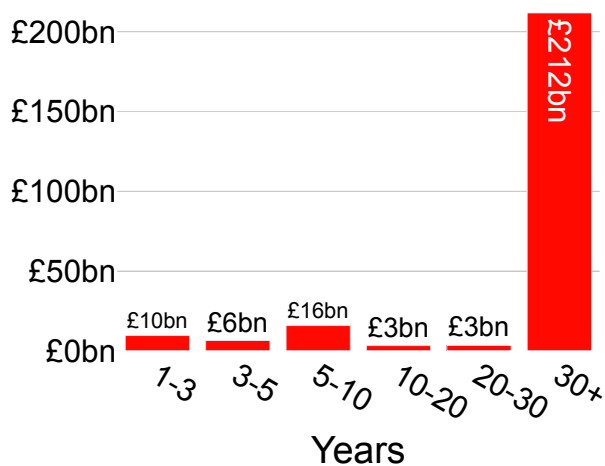


the overall expected cost seeing a steady year-on-year increase. In addition, the expected cost of the portfolio is substantially higher in 2024 compared to 2012, where there was a similar long-term discount rate. Therefore, it is possible to conclude that the underlying cost has, and continues, to increase over time. This should be a key consideration in how the government manages its existing contingent liability portfolio and where the government considers taking on new contingent liabilities.

As described throughout this report, the on-budget expected costs are heavily influenced by two significant provisions: nuclear decommissioning and clinical negligence. Examining the historic annual report and account data, highlighted that these have consistently remained the largest provisions for the government over the last 12 years. The remainder of the portfolio demonstrated a noticeable increase in 2020 in response to the COVID-19 pandemic. This impact is now beginning to unwind as we move further away from the pandemic.

## Future Landscape

**Figure 08: End date of liabilities over time. The categories show the range of years outstanding**



Examining the possible future landscape of the contingent liability portfolio can generate useful insights for government to inform its management strategy. A framework that considers future changes such as the expiry of existing liabilities, alongside other metrics, could help decision makers to develop informed fiscal plans.

**Figure 08** shows the forecast reduction in expected cost of existing contingent liabilities as they expire. If no new contingent liabilities are entered into, this is expected to create fiscal headroom. By maintaining this analysis overtime, it will be possible to assess the impact new contingent liabilities replacing expiring ones will have on the total expected cost of the portfolio.

While we have provided data on future run off, the portfolio is constantly changing and hence there is uncertainty in how the on-budget expected cost develops over time. The data supports fiscal planning but it must be understood that there are limitations in making future predictions based solely on historical or current data.

The process and analysis now embedded gives government a new level of understanding of these risks. Whilst it is not possible to predict whether future risks that impact the UK economy will materialise, it is possible to consider what scenarios may have an impact on the future costs of government contingent liabilities. This form of analysis could be used by decision makers to inform a risk appetite statement and is why **Chapter 6** assesses the portfolio against a specific risk trigger, a Major Financial and Economic Downturn.

# Chapter 3: On-Budget Liabilities

## Summary

- This chapter analyses the government’s on-budget liabilities, for which the total expected cost is £227bn as of March 2024. This is just under half of the total expected cost as of March 2022 disclosed in our previous report.
- Nuclear decommissioning and NHS clinical negligence are the largest on-budget liabilities. Decreases in their individual expected costs accounted for c.83% of the total change across the on-budget sub-portfolio. This was largely driven by changes to the discount rate since our last report.
- As noted in **Chapter 2**, changes in the discount rate do not impact the underlying cost and annual expenditure of the portfolio. Excluding the impact of the discount rate the expected cost for NHS clinical negligence and nuclear decommissioning has increased by c.£40bn in real terms in aggregate since our last report.
- The overall composition has remained largely unchanged since the previous report. Outside of the two largest on-budget items, the UK Government’s on-budget liabilities sit across a diverse range of sectors.
- There has also been a significant decrease in the expected cost of the Covid-19 schemes since our last report, mainly driven by the Bounce Back Loans Scheme (BBLs).

**Figure 09: Estimated expected cost of the portfolio as at March 2024**

Type	On-Budget £bn	Off-Budget £bn	Total £bn
Government Responsibility	<b>214</b>	17	231
Government as Insurer	<b>5</b>	5	10
Government as Guarantor	<b>9</b>	1	10
Total	<b>227</b>	23	250

## Introduction

This chapter analyses the subset of government contingent liabilities that are considered on-budget. On-budget liabilities represent risk where the government is more likely than not to make future payments. These liabilities are included in departments' financial accounts as provisions, financial guarantees, or insurance liabilities. This chapter will draw out the key characteristics and drivers of change to this sub-portfolio of liabilities and provide a foundation for future government fiscal planning.

This report introduces new data points that have helped to characterise the government's on-budget contingent liabilities when compared to previous reports. This provides a richer view of the portfolio's characteristics and facilitates the identification of key risks and vulnerabilities across the on-budget items.

## On-Budget Portfolio Overview

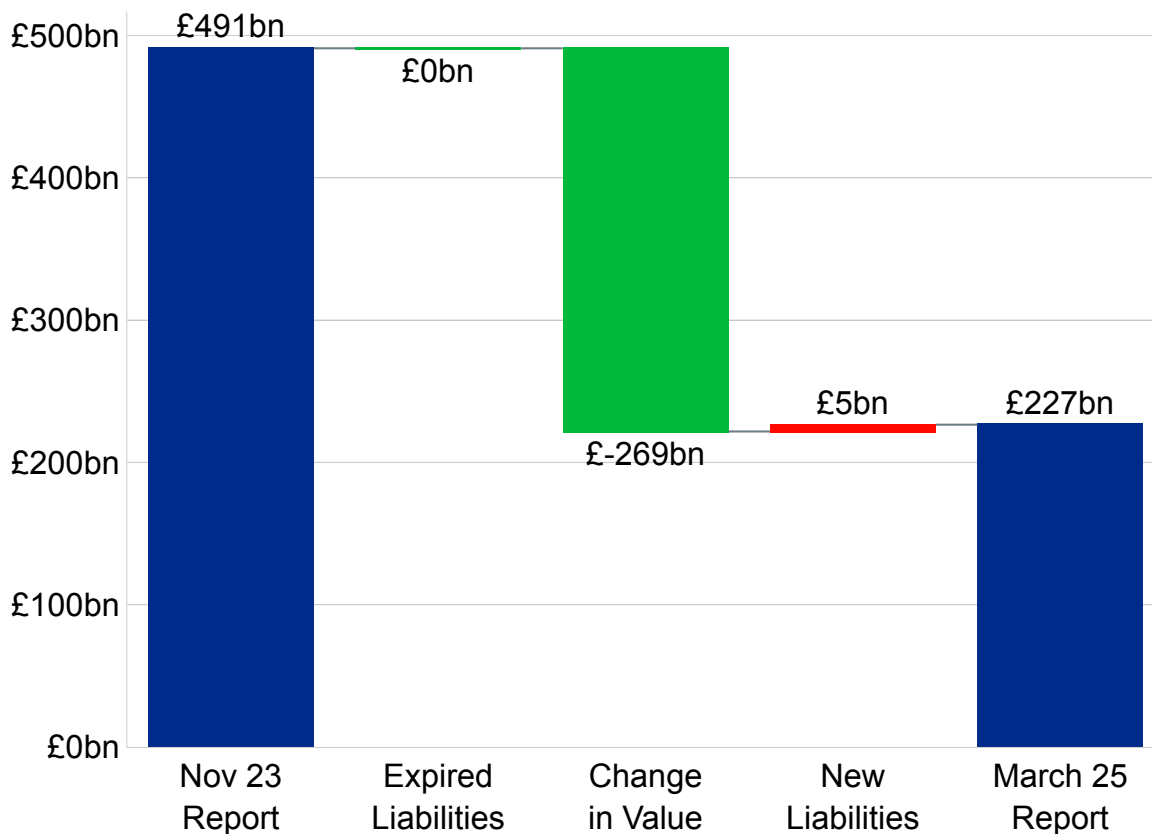
As **Chapter 2** notes, the expected cost from on-budget liabilities as of March 2024 was just under half of the expected cost stated in our previous report. This is predominantly driven by the effect of a changing discount rate. However, excluding the impact of a change in discount rate, the government's underlying cost for its on-budget liabilities are continuing to increase.

**Figure 10: The change to the expected cost of on-budget liabilities from March 2022 to March 2024**

Type	On-Budget (£bn)		
	2024	2022	Change
Government Responsibilities	214	465	-251
Government as Insurer	5	8	-3
Government as Guarantor	9	18	-9
Total	227	491	-265

Alongside the change in value of existing liabilities (for example due to the impact of discount rates), the expected cost of the on-budget sub-portfolio is influenced by new liabilities arising and existing liabilities expiring, although as demonstrated by **Figure 11** these changes are very small from a portfolio perspective.

**Figure 11: An analysis of the change to the total On-Budget Liabilities between 31 March 2022 (CLCC's last report) and 31 March 2024**



## Types of Liability

To help understand the sub-portfolio of on-budget contingent liabilities we have provided analysis based on their type. These are split between government responsibilities, government as insurer and government as guarantor.

### Governments Responsibilities

Government responsibilities (as described in **Figure 03A**) account for c.94% of the on-budget expected cost. There are two dominating items which make up most of the portfolio: nuclear decommissioning (£115bn) and NHS clinical negligence (£58bn).

Nuclear decommissioning liabilities represent the costs that Government is subject to with regards to the management and decommissioning of hazardous waste associated with certain nuclear sites. Most of the risk exposure in government's nuclear decommissioning portfolio arises from two sources: the Nuclear Decommissioning Authority (NDA) and Ministry of Defence (MoD). More information on the nature of these costs can be found in UKGI's Cross-Government Nuclear Decommissioning Cost Review.<sup>12</sup>

NHS clinical negligence liabilities account for future costs in cases where the Department for Health and Social Care (DHSC), or relevant NHS providers, are the defendant in legal

<sup>12</sup> <https://www.ukgi.org.uk/download/5744/>

proceedings, brought by claimants seeking damages for the effects of alleged clinical negligence. NHS Resolution, an arm's length body of DHSC, manages claims relating to the NHS in England. More information on the nature of these liabilities can be found in our previous report.

As set out in **Chapter 2**, changes in the discount rates have caused a significant reduction in the expected cost of on-budget liabilities reported in accounts, although the underlying costs of nuclear decommissioning and NHS clinical negligence have increased between March 2022 and March 2024.

For nuclear decommissioning this was by c.£20bn in real terms with the main cause a change in the estimate of the Magnox, Dounreay and Sellafield programmes, reflecting updated estimates of the cost, duration and timing of the decommissioning of the sites.<sup>13</sup> For NHS clinical negligence this was also c.£20bn in real terms, which largely reflects claims anticipated as a consequence of new NHS services being delivered during the last two years.<sup>14</sup>

During the period since our last report, the majority of the new and expiring on-budget items were small relative to the whole and therefore have not materially changed the government's exposure. Increases in energy prices during the period invoked a government response and the development of the Energy Bills Discount Scheme and

The Energy Price Guarantee. Much of the support for these schemes, £3bn of the annual expenditure in 2023/24 (12% of the annual on-budget expenditure), has already been paid and only a small liability of the order of £0.1bn remains as of March 2024.

### Government as Insurer

The on-budget liabilities arising from the government's role as an insurer represent £5bn as of March 2024.

The Financial Assistance Scheme (FAS) is the most material item with an expected cost of £4bn as of March 2024.<sup>15</sup> This is a reduction of £2bn since March 2022, once again driven by changes in the discount rate.

The government's obligations in respect of government acting as insurer continue to be relatively small in the context of the wider portfolio, and the composition of this part of the sub-portfolio has been stable since our previous report.

### Government as Guarantor

The on-budget liabilities arising from the government's role as a guarantor, covering financial guarantees to the private sector, represented £9bn as of March 2024, just under half of the expected cost stated in our previous report. This reduction results from the amortisation of a significant proportion of the Covid-19 loans including claims made and paid.

13 The change reflects updated assumptions related to future costs of existing commitments, which are subject to considerable uncertainty. Further information is available in departmental accounts which describe approximately £10bn of increases in both the 2022/23 and 2023/24 financial years respectively.

14 The liability from new NHS activity exceeds clinical negligence claim payments over the period. However, note the value of this increase is influenced by discount rates used to present movements in the financial accounts. Therefore, this figure is not directly comparable to the corresponding nuclear decommissioning figure. Further details on the change in clinical negligence cost are available in DHSC's departmental accounts.

15 The scheme aids members of defined benefit occupational pension schemes that were wound up or under-funded when their employers became insolvent during the period January 1997 to April 2005 and therefore is a legacy liability with no ongoing accruals.

The Covid-19 schemes remain the largest component of the expected cost where the government acts as a guarantor, accounting for £6bn of the expected cost.

These schemes and other financial guarantees represent an area where the government takes on risk that has been transferred from the private sector.

**Chapter 4** explores, in more detail, the key changes to these contingent liabilities and an assessment as to whether fees and premiums charged sufficiently cover their expected cost.

Considering the on-budget liabilities by their product type highlights how much, and what type of risk the government accepts from the private sector. Risk mitigation and management options will vary by the type of product. Noting their size, reporting on and assessing them in a transparent manner is critical to informing both departmental and cross-governmental considerations on new liabilities.

This presents an opportunity for government to consider new liabilities in the context of existing on-budget items and improve risk sharing across the full range of financial instruments, as government decides to take these on.

## Resource or Capital Expenditure

**Figure 12: The total on-budget liabilities as of March 2024 split by budget type**



Most government spending is split into Departmental Expenditure Limits (DEL) or Annually Managed Expenditure (AME).<sup>16</sup> DEL spending is controlled tightly, and limits are set at regular intervals as part of the Spending Review process. Changes outside of spending reviews to DEL budgets can only be made with HM Treasury approval.

AME spending is demand-driven spending, such as benefits or tax credits. Departments have less control over this type of spending as it may be unpredictable or not easily controllable. This means that budgets for AME spending are not set in advance.

Within both DEL and AME spending, departmental accounts further divide spending between Resource or Capital spending. Resource spending is incurred on day-to-day resources and administration costs. Capital spending is money spent on all investment.

Entities that collect revenue, such as taxes, on behalf of the UK Government can do this via Trust Statements. These are typically used for taxes collected via HMRC and are stated separate from their other departmental expenditure in their annual report and accounts. These accounts are separate from RDEL, CDEL, RAME, and

<sup>16</sup> <https://www.gov.uk/government/publications/how-to-understand-public-sector-spending/how-to-understand-public-sector-spending>

CAME as they cover tax liabilities and not departmental budgets.

Contingent liabilities occur for these Trust Statements and therefore any crystallisation of these would not be paid out from any RDEL, CDEL, RAME, or CAME budgets. This is why we cover an additional category of spending in our analysis.

**Figure 12** highlights which budgets the government's liabilities are allocated to. These liabilities will be paid over future years and could consequentially put pressure on future departmental budgets. Most of the government's accrued liability is allocated to resource spending. This shows that RDEL budgets could be most at risk if expected costs were higher than currently anticipated. For this reason, UKGI will continue to

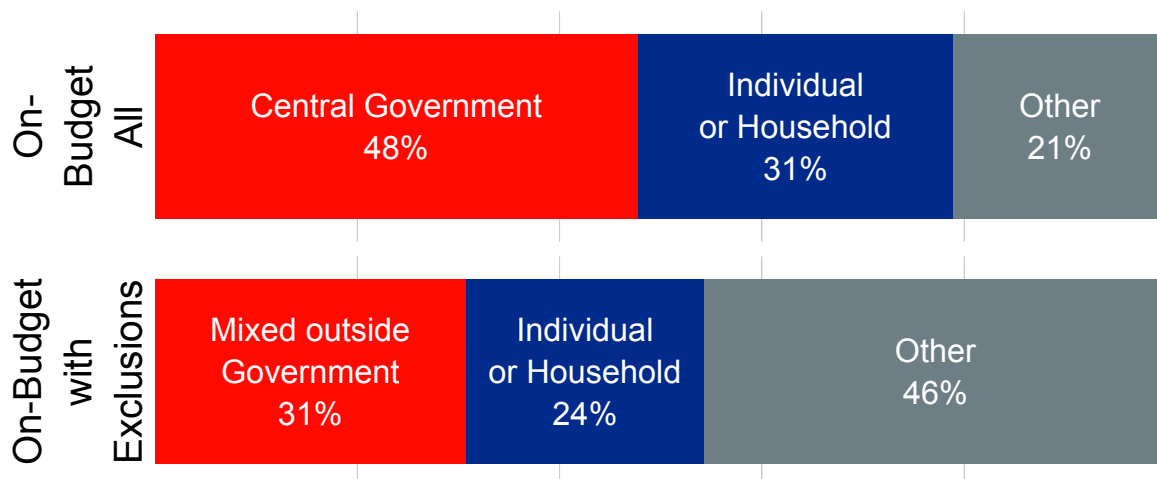
work with departments to consider how these costs can be effectively managed. If future costs are higher than anticipated, there would be a significant impact on departmental budgets.

## Risks

This report introduces new analysis of on-budget liabilities that considers how much of the on-budget risk falls within or outside government. By considering who the beneficiaries of on-budget liabilities are, we can see the distribution of this risk across the entire sub-portfolio and with the two largest liabilities excluded. **Figure 13** provides information on what type of person or organisation benefits from the underlying policy that the contingent liability sits behind.

## Beneficiaries

**Figure 13: The total on-budget liabilities as of March 2024 split by the type of beneficiaries**



Nuclear decommissioning liabilities are classified as part of central government, whilst NHS clinical negligence liabilities are to individuals or households who have incurred injury due to medical negligence.

**Figure 13** shows that government is exposed to almost half of the risk from contingent liabilities.

When excluding the two largest obligations, the chart shows that the government's liabilities are shared across a wide range of beneficiaries, with just under a third of the remaining items supporting two or more (mixed) types of beneficiaries in the private sector. This reflects that the government

supports a wide range of policy objectives using this kind of fiscal instrument.

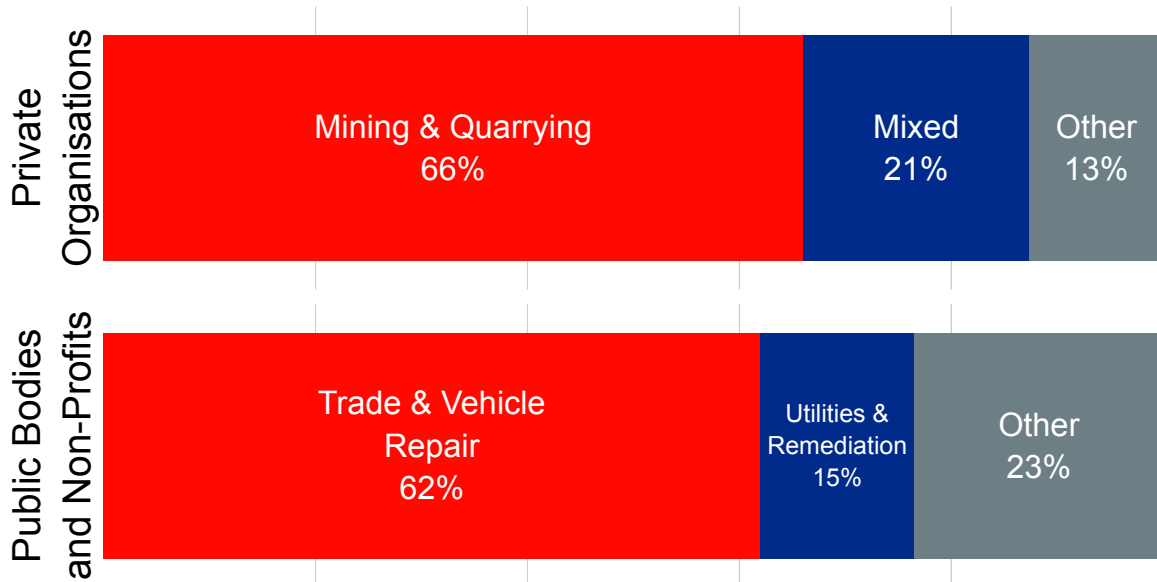
This shows that only c.£11bn of on-budget liabilities (in terms of expected cost) have a beneficiary outside of government and a breakdown of these are shown in **Figure 14**.

Due to the small proportion of on-budget liabilities that fall within these categories, in terms of expected cost, the government can be assured that there is not a significant

amount of risk concentrated in either the “mining and quarrying” nor the “wholesale and trade” sectors across either private or public organisation beneficiaries.

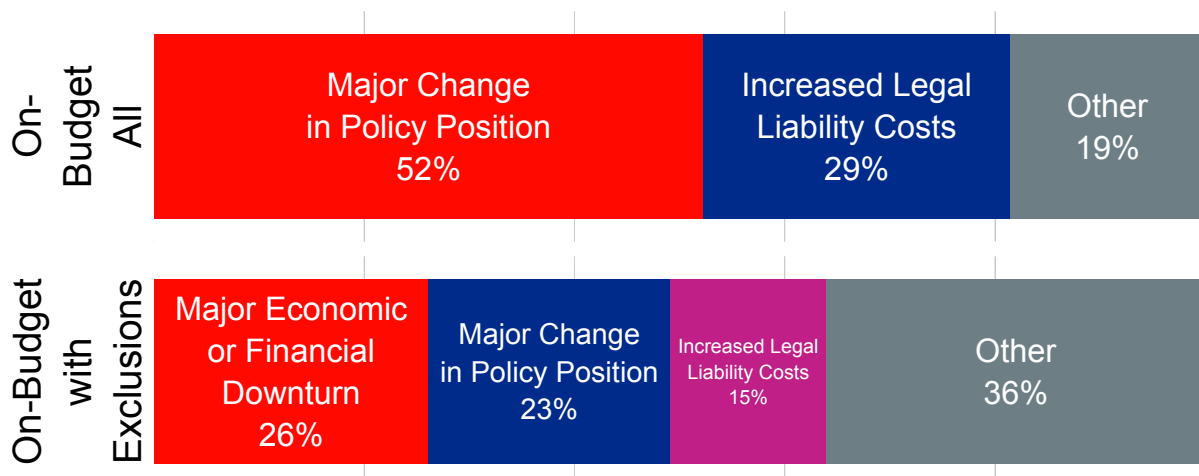
Understanding the sectors where crystallisation could occur across this sub-portfolio can enable the government to centrally plan and understand how the on-budget liabilities are spread across different elements of expenditure, allowing more robust fiscal planning.

**Figure 14: On-budget liabilities as of March 2024 split by the sector of external beneficiaries**



### Cross-Sector Triggers

**Figure 15: The total on-budget liabilities as of March 2024 split by the cross-sector trigger**





As discussed in **Chapter 2** the analysis of cross-sector triggers supports the identification of events that could most influence the probability or size of the costs being incurred by the government. The analysis has been conducted both with and without nuclear decommissioning and NHS clinical negligence liabilities.

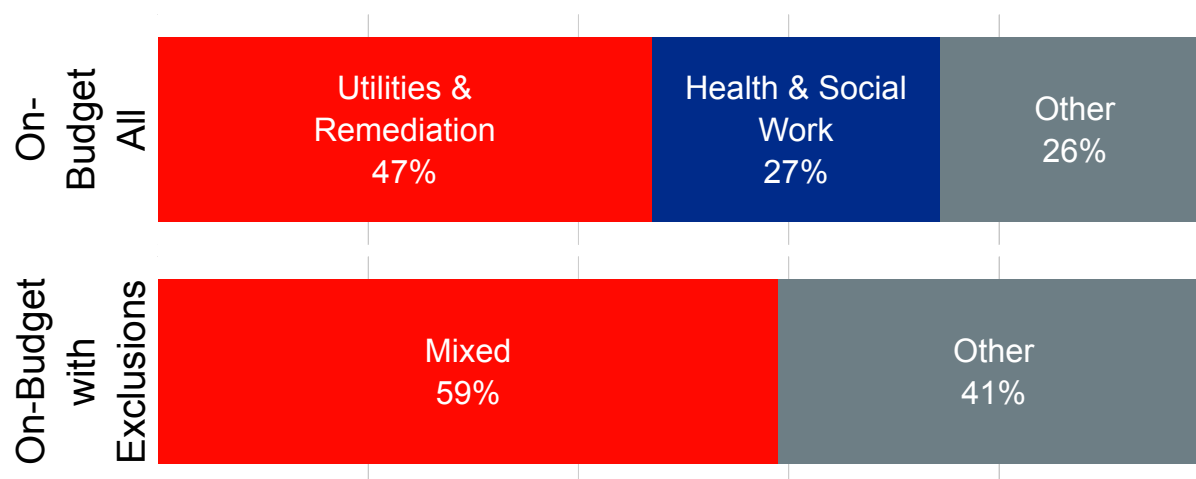
In line with the whole portfolio position reported in **Chapter 2**, a change in policy position or an increase in legal liability costs are the most significant cross-sector triggers for the government,

because they are associated with the nuclear decommissioning and NHS clinical negligence items respectively. Excluding these largest obligations, a major economic or financial downturn becomes the most significant trigger.

This is consistent with the trends identified in **Chapter 2** due to the fact that on-budget liabilities make up the majority of the whole portfolio. Policy makers should consider how new liabilities will impact the diversification and overall risk profile of the portfolio.

## Sectors of Risk

**Figure 16: The total on-budget liabilities as of March 2024 split by the sector exposed to the risk**



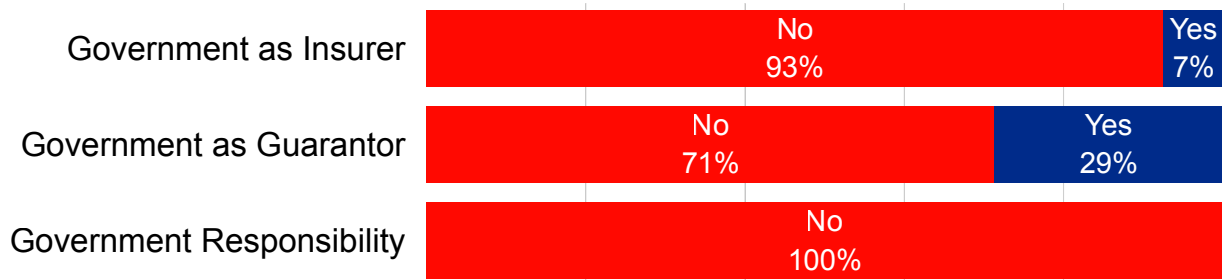
In a similar trend to that described in **Chapter 2** the utilities and remediation (nuclear decommissioning) and health (clinical negligence) sectors pose the largest shares of on-budget risk, and this is consistent with the largest on-budget liabilities described throughout this report. Good management of these liabilities and effective monitoring of these sectors is and will remain crucial to the UK's fiscal health. Factors such as investment, technological advancements, workforce supply, available expertise, and legislation in these areas

will significantly impact the size of the government's future expenditures.

**Figure 16** shows that over half of on-budget liabilities (excluding nuclear decommissioning and clinical negligence) are attributed to multiple sectors of risk, whilst just under half are related to single sectors of risk. There is no significant concentration of risk centred around a single sector, showing that the government utilises contingent liabilities across a range of policies that sit in a diverse range of economic sectors.

## Charging When Accepting Risk into Government

**Figure 17: A demonstration of whether or not government's contingent liabilities charge a fee or premium, by product type**



Our analysis also explored the extent to which the government has charged premiums in respect to risk transferred through on-budget liabilities. Managing Public Money requires a risk-based fee to be charged where appropriate and possible when risk is transferred from the private to the public sector.

As can be seen in **Figure 17**, charging is most prevalent when government acts a guarantor. Therefore, for those products, it is important to understand the impact of charging to fully understand the fiscal pressure on the government. This report explores charging in more detail in **Chapter 4**.

For government responsibilities and government as an insurer, there is almost no charging in place because of the nature of these liabilities, namely:

- Government responsibilities are typically created as a consequence of providing a public service and are funded by normal government spending (via tax receipts and borrowing) rather than any explicit charge; and
- The largest component of the government as an insurer category is the Financial Assistance Scheme which acts as an insurer of last resort by providing compensation to members of occupational pension schemes who have lost their pension because their sponsoring employer became insolvent. The policy only applies to companies that entered the scheme due to an insolvency between January 1997 and April 2005. The scheme was set up retrospectively in 2005, hence there was no suitable mechanism for charging.

# Chapter 4:

## Financial Guarantees

### Summary

- This chapter examines the government's on-budget financial guarantees, analyses how the portfolio has changed since our last report and whether the government is charging enough to cover the expected cost of these schemes.
- The aggregate outstanding balance of guarantees covered in this chapter is £53bn as of 31 March 2024 with an expected cost of £8bn.
- Our analysis also shows that in aggregate the government does not cover the expected cost of these schemes through charging. This is impacted by not charging for guarantees issued specifically to support foreign countries, which is in line with FCDO's policy on guarantees, and those issued to support the UK economy during the Covid-19 pandemic, where achieving economic support outweighed the need for charging.
- Where the government does charge a fee or premium, and does so under normal circumstances, charging recovers 69% of the expected costs.

### Introduction

In this chapter, we examine the government's on-budget financial guarantees which interface with the private sector, multilateral development banks (MDBs) and other governments. We have analysed how each sub-group has evolved since our last report in 2023, and the extent to which charging has been applied to compensate the government for the risk it undertakes. These guarantees have been grouped thematically.

## Portfolio Summary

**Figure 18: Entire financial guarantees portfolio summary as of March 2024**

Guarantee Scheme	Outstanding Balance (£m)		Expected Costs (£M) <sup>17</sup>		Type of financial guarantee
	March 22	March 24	March 22	March 24	
COVID-19 Schemes <sup>18</sup>	60,000	24,494	15,500	5,860	Domestic
Export Finance Guarantees <sup>19</sup>	10,838	11,269	287	206	Both
Int. Development & Foreign Sovereign Guarantees	885	7,873	<100	723	International
Housing Guarantees	6,501	7,135	<100	105	Domestic
ENABLE Guarantee Scheme	200	430	<0.1	<0.1	Domestic
Recovery Loan Scheme	2,600	731	300	510	Domestic
Enterprise Financial Guarantees	6	6	6	6	Domestic
Infrastructure Guarantees (Active)	0	240	0	45	Domestic
Infrastructure Guarantees (Legacy)	577	577	137	137	Domestic
<b>Total<sup>20</sup></b>	<b>81,607</b>	<b>52,755</b>	<b>16,230</b>	<b>7,591</b>	

17 Due to the data provided, we are only able to provide a range for the expected costs of some of the financial guarantees or guarantee schemes as of 31 March 2022. This follows industry practice. In order to present the most granular data possible, there may be inconsistencies in the presentation of some numbers. For more information on the data limitations, please see Annex B and Annex C.

18 Covid-19 Schemes outstanding balance is based on the “on schedule” outstanding balance generated by the portal and not one reported by the respective accredited lenders.

19 HM Treasury sets UK Export Finance’s financial objectives, which are designed to enable it to support UK exporters while making sure UKEF: receives a return that is at least adequate to cover the cost of the risks it is assuming; does not expose the taxpayer to the risk of excessive loss; and, covers its operating costs. A fuller description of UKEF’s financial objectives, risk appetite and controls can be found in UKEF’s Annual Report and Accounts.

20 Based on restated figures showing £81.6bn in outstanding balance and £16.3bn in expected cost, down from £103.6bn and £18bn in the CLCC 2023 report. These changes are not related to accounting practices and reflect adjustments to financial guarantees within the Export Finance Guarantees portfolio (excludes insurance contracts from UK Export Finance’s Guarantees & Insurance Account (Account 2) and Temporary Covid Risk Framework Account (Account 6)).

**Figure 18** groups the largest government financial guarantees and guarantee schemes by theme. Our analysis shows that the financial guarantee portfolio, as at March 2024, has an outstanding balance of £53bn, with an expected cost of £8bn. This represents a c.£29bn decrease in outstanding balance and a c.£9bn decrease in expected costs across financial guarantees. Further to these overall changes, there has been significant movement within the portfolio including major additions and amortisations of various types of schemes.

The International Development & Foreign Sovereign group of guarantees has increased significantly since our last report. The total increase of c.£7bn in outstanding balance is due to c.£4bn support to Ukraine and c.£3bn supporting programs of the African Development Bank and World Bank lending.

New issuances across export finance, international development and foreign sovereign, housing, ENABLE and infrastructure guarantees have meant that c.£10bn of outstanding balances were added to the portfolio by 31 March 2024.

The National Wealth Fund (previously UK Infrastructure Bank), as set out in their mandate, has issued its first financial guarantee with an outstanding balance of £240m. The legacy infrastructure scheme shown in the table **Figure 18** has closed to new applications.

This increase in outstanding balance and expected costs of financial guarantees has been more than offset by the reduction in Covid-19 financial guarantees. This is due to the amortisation of these financial guarantees, resulting from repayments of the underlying loans and claims made by beneficiaries of the financial guarantees. This is to be expected as we move further away from the pandemic. Despite this, the Covid-19 support schemes still represent the largest component of both the outstanding balance and expected cost as a proportion of government's financial guarantees.

## Net Expected Cost and Coverage Analysis

**Figure 19A: Net-coverage of the government's portfolio of financial guarantees for each thematic group**

Guarantee Scheme	Expected Costs (£m)	Net Premiums and Fees (£m) <sup>21</sup>	Net Expected Costs (£m) <sup>22</sup>	Net Premiums and Fees Coverage
COVID-19 Schemes	5,860	0	5,860	0%
Export Finance Guarantees	206	451	0	220%
Int. Development & Foreign Sovereign Guarantees	723	15	708	2%
Housing Guarantees	105	331	0	316%
ENABLE Guarantee Scheme	0.1	17	0	25,969%
Recovery Loan Scheme	510	0	510	0%
Enterprise Financial Guarantees	6	0	6	0%
Infrastructure Guarantees (Active)	45	57	0	126%
Infrastructure Guarantees (Legacy)	137	0	137	0%

**Figure 19B: Net-coverage of the governments portfolio of financial guarantees for the whole portfolio and for fee-charging only schemes**

Summary of Guarantee Scheme Portfolio	Expected Costs (£m)	Net Premiums and Fees (£m)	Net Expected Costs (£m)	Net Premiums and Fees Coverage
Entire Financial Guarantees Portfolio	7,591	0	7,591	0%
Fee Charging Financial Guarantees Portfolio	1,755	606	1,149	34%

Managing Public Money guidance states that services provided to the private sector should start from a position of charging fees to mitigate any potential crystallisations.<sup>23</sup>

21 Net Premiums and Fees - actual and future premiums and fees (net of any crystallisations to date) available to offset the expected cost. If crystallisations to date exceed actual and future premiums and fees net premium and fees is shown as zero.

22 Net Expected Costs - net expected costs is nil if net premiums and fees exceed the expected costs.

23 [https://assets.publishing.service.gov.uk/media/65c4a3773f634b001242c6b7/Managing\\_Public\\_Money\\_-\\_May\\_2023\\_2.pdf](https://assets.publishing.service.gov.uk/media/65c4a3773f634b001242c6b7/Managing_Public_Money_-_May_2023_2.pdf)

It is important to understand whether the expected lifetime fees and premiums charged against the government's financial guarantee portfolio net of any crystallisations to date cover the expected costs of these schemes. This allows us to assess whether the government is being sufficiently compensated for taking on risk from the private sector.

**Figure 19A** provides a summary of these schemes and shows to what extent fees and premiums cover the net expected cost for each of these schemes. It should be noted that while our analysis focuses on expected cost and charging of fees, departments will also consider other factors when designing new guarantees such as policy objectives and economic or social benefits which are not reflected in our analysis.

To understand whether government charges enough to recover the expected costs of the sub-portfolio, we should look at how this operates across the suite of schemes. However, it is also useful to understand the data and nuance that sits behind this.

**Figure 19B** allows us to draw two important conclusions:

1. Over the remaining lifetime of the *entire* portfolio of guarantee schemes, expected lifetime fees and premiums net of crystallisations to date do not cover the remaining expected cost.<sup>24</sup> This is because the expected lifetime fees and premiums have been exceeded by crystallisations already incurred in the portfolio and there is no available remaining fee income to offset some or all of the expected cost.

2. When *only* considering those schemes that charge a fee or a premium, the government is projected to recover 34% of the expected costs.

This indicates that the charges administered by government do not cover the expected costs of the guarantees it has in place. It should be noted that this is based on estimates of the expected costs. In line with commercial practices, an assessment of the adequacy of charging for each scheme can only be fully completed once the scheme has closed. In addition, the analysis is heavily influenced by two specific types of schemes.

First, financial guarantees under International Development & Foreign Sovereign Guarantees are designed to ensure that any charging of fees or premiums does not have a negative effect on the intended policy outcome. Therefore, pricing for these guarantees is flexible so that they are affordable for partners. In these cases, it will be appropriate to charge a fee for portfolio guarantees but not those where costs would be passed on to a single country or borrower. In line with FCDO's policy on guarantees, fees have not been charged for several high-value financial guarantees provided to support other nations, including guarantees provided for World Bank lending to Ukraine following the invasion by Russia.

Second, several schemes were set up as part of the UK Government's response to the Covid-19 pandemic. This contained a mix of both fee and non-fee charging schemes, with a specific policy objective of stimulating or supporting the UK economy. These schemes were set up at pace, with short-term policy aims, and therefore the

<sup>24</sup> As set out in Figure 21, where the expected lifetime fees and premiums are less than the crystallisations to date, then the net premiums are set to 0.

government accepted a high likelihood of expected costs exceeding any fees or premiums charged. As of March 2024, the total reported losses incurred across the Covid-19 schemes amount to £9.9bn.

The scale of the impact of both factors is illustrated by the fact that excluding non-fee charging schemes and Covid-19 schemes from this analysis we estimate that 69% of the expected cost of this sub portfolio is covered by the net expected lifetime fee income. This shows that where government does charge a fee or premium, in its usual

course of business, the position does improve. Charging is not sufficient to fully cover the expected costs of the remainder of the sub-portfolio.

Policy makers, when considering a new guarantee scheme, should judge its value based on its own merits but consider how this influences the risk profile across government's financial guarantees. The net expected cost of government's guarantee schemes could be considered a key performance indicator (KPI) to influence this.

### Figure 20: Methodology for calculating the net expected cost of guarantee schemes

- The net expected cost is a measure used to determine the extent to which the expected lifetime premium and fee income net of crystallisations (i.e. losses incurred) cover the expected cost of the financial guarantees portfolio. With this assessment we aim to understand whether government is being compensated adequately for assumed risks. This approach is similar to mechanisms used within the private sector.
- The net expected cost analysis takes into consideration the expected lifetime fee and premium income of the financial guarantees portfolio. This is done by taking the sum of premiums and fees already received and future expected premiums and fees over the lifetime of each financial guarantee.
- From this total any crystallisations (i.e. losses incurred) up to 31.03.2024 are deducted, resulting in a net expected lifetime fee and premium income. Only values greater than zero are used to offset some or all of the expected cost, resulting in a net expected cost position.
- Values of zero or less mean that there is no available remaining fee income that can be used to offset the expected cost and should a crystallisation occur a different source of funding to meet this cost will need to be identified<sup>25</sup>.
- For example, the analysis for the entire sub-portfolio of financial guarantees shows that the lifetime expected premiums and fees (£1,995) are exceeded by crystallisations (£10,472) already incurred in the portfolio, meaning there is no remaining lifetime expected premium and fee income that can be used to offset the expected cost of this sub-portfolio. As a result, in effect 0% of the expected costs of that portfolio is covered by fee income.
- More detail can be found within **Annex F**.

25 In these scenarios the net expected cost will be equal to the expected cost.



# Chapter 5: Off-Budget Liabilities

## Summary

- This chapter analyses the government’s off-budget contingent liabilities. The total expected cost for off-budget liabilities is £23bn as of March 2024.
- The stability of the overall expected cost of this sub-portfolio is driven by the fact that the addition of new liabilities has been broadly balanced by those liabilities which have changed value or expired since our last report.
- The off-budget part of the government’s contingent liability portfolio is disproportionately weighted to a few large items. Only 4% of off-budget liabilities have an expected cost greater than £100m, and this accounts for 84% of the expected cost. This is consistent with the findings in our previous report.
- 4% of the off-budget items that existed at the time of our last report have crystallised and we will conduct work to understand if there are any common themes between these items.
- As shown in **Chapter 2**, off-budget liabilities represent a relatively small proportion of the overall expected cost. As they are not captured via normal government accounting methods, it is important to capture information on them in this report so that trends across the sub-portfolio can be identified and monitored.

**Figure 21: Estimated expected cost of the portfolio as at March 2024**

Type	On-Budget £bn	Off-Budget £bn	Total £bn
Government Responsibilities	214	<b>17</b>	231
Government as Insurer	5	<b>5</b>	10
Government as Guarantor	9	<b>1</b>	10
Total	227	<b>23</b>	250

## Introduction

This chapter focuses on the off-budget part of the portfolio. These are items which are recognised as contingent liabilities and remote contingent liabilities disclosed with limited financial information within accounts. This accounting treatment means such items are unlikely to be explicitly included in government spending forecasts, with the risk that any crystallisations need to be met from savings elsewhere in departmental budgets.

This analysis focusses on characterising year-on-year changes for this subset of the portfolio, and any emerging themes across these items. This work builds on our November 2023 report which showed that the expected cost of the off-budget sub-portfolio was largely concentrated in a few items and that as the off-budget sub-portfolio was a small proportion of the overall expected cost.

As described in **Chapter 1** there are inherent uncertainties and difficulties in providing cost estimates for this purpose. Therefore, range estimates for each item have been aggregated and analysed. References to single point estimates for expected cost in this chapter are based off the mid-point of these range estimates.

This data does not meet the quality thresholds under accounting standards and is not sufficient for analysing or reporting on individual items. Aggregating these items remains beneficial, however, as this information enables government to better understand the scale of its financial exposure to contingent liabilities and key constituents of the off-budget portfolio.

For further information about data quality and limitation, please see **Annex C** and **Annex D**.

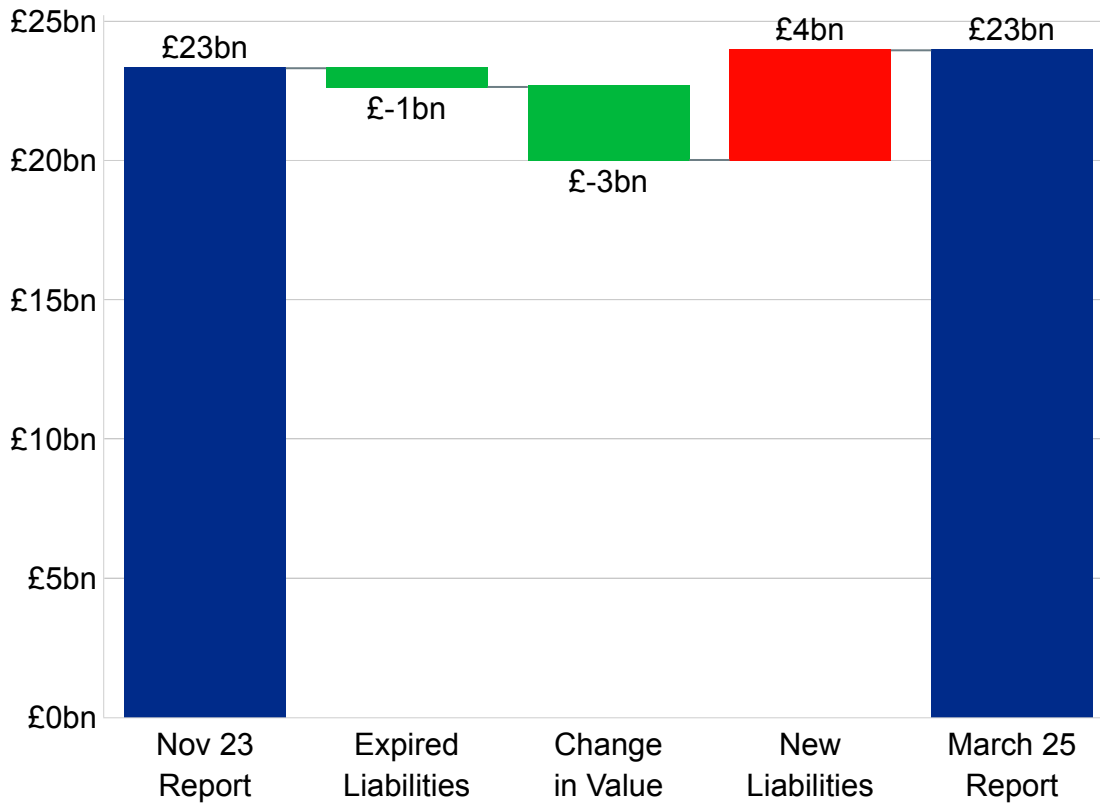
## Off-Budget Portfolio Overview

**Figure 22: The change to the expected cost of the off-budget liabilities from March 2023 to March 2024**

Type	Off-Budget (£bn)		
	2024	2023	Change
Government Responsibilities	17	15	2
Government as Insurer	5	6	-1
Government as Guarantor	1	2	-1
Total	23	23	0

Across government we have identified over 800 active off-budget liabilities as of 31 March 2024. When their expected cost ranges are aggregated they have an expected cost ranging from £9bn to £38bn and a mid-point estimate of 23bn. **Figure 22** shows that the expected cost of the portfolio has remained broadly stable since our last analysis.

**Figure 23: An analysis of the change to the total Off-Budget Liabilities between 31 March 2023 (CLCC's last report) and 31 March 2024**

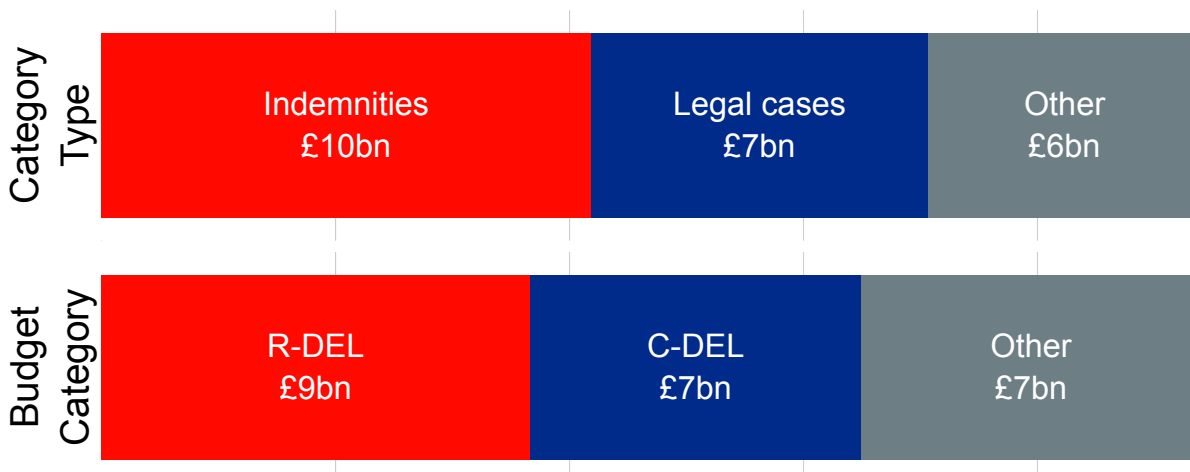


**Figure 23** demonstrates how the value of new liabilities has been offset by those that have changed in value or expired since our last report. The result of this is that the overall expected cost has remained broadly stable.

Compared to the on-budget liabilities the existing off-budget liabilities have experienced much smaller relative changes in value. This is because their cost measurement, classed as management information, is not subject to the same prescribed changes to the discount rate.

## Key Characteristics

**Figure 24: The total off-budget liabilities as of March 2024 by category and budget type**



Off-budget liabilities are diverse, and their sources of risks can be viewed through multiple lenses. They can be categorised in line with the types of products or the type of government spending they represent.

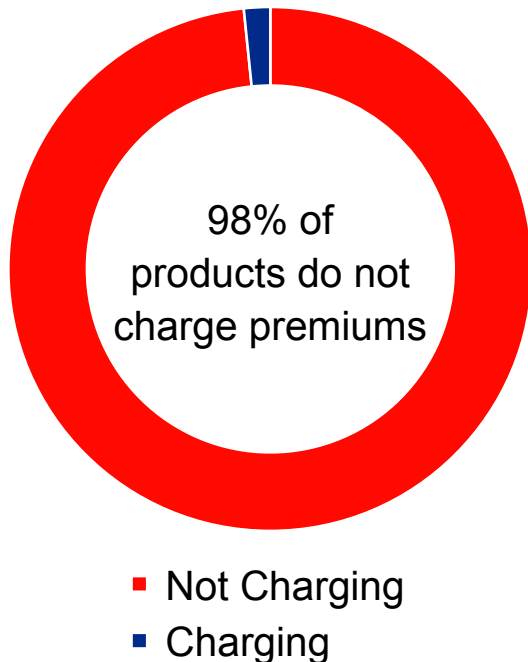
The breakdown of the off-budget portfolio shown in **Figure 24** helps describe two important characteristics of the items considered.

First, it shows that most liabilities (£17bn) are either indemnities or legal cases. This means that the highest risk of crystallisation is from these types of liabilities. This is consistent with the findings in our previous report.

As set out in **Chapter 3**, departmental spending limits are provided in terms of Departmental Expenditure Limits (DEL) and can either be resource (RDEL) which is day-to-day spending or capital (CDEL), which is longer-term investment. As can be seen in **Figure 24**, any crystallisation of off-budget liabilities would mainly fall into one of these two categories. Most liabilities would therefore create departmental expenditure pressures should they crystallise. It is important that departments monitor these risks a source of pressure on departmental budgets and consider appropriate mitigation strategies. The remainder of the portfolio is spread thinly across AME and other types of departmental budgeting, meaning that it is less significant for each budget type.

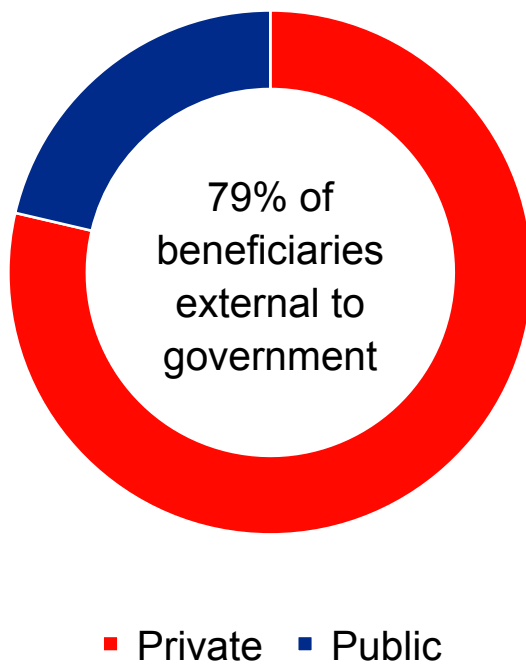
## Beneficiaries and Charging

**Figure 25A: The proportion of off-budget liabilities that charge a fee or premium, as of 31 March 2024**



Managing Public Money requires a risk-based fee to be charged where appropriate and possible when risk is transferred from the private to the public sector. **Figure 25A** shows that for the off-budget sub-portfolio, most liabilities do not charge a premium. This is consistent with our findings in our previous report. It should be noted that by considering the counterparty and type of liability government has entered into, charging may not be appropriate in most cases.

**Figure 25B: The proportion of off-budget liabilities that have a public or private sector beneficiary, as of 31 March 2024**



**Figure 25B** shows that off-budget liabilities are predominantly used by government work with private sector organisations to support wider policy aims. This helps the government understand where this sub-portfolio sits strategically and indicates where any crystallisations are likely to occur.

## Risk and Vulnerabilities

### Risk Concentration

**Figure 26: Summary of off-budget liabilities by cumulative expected costs**

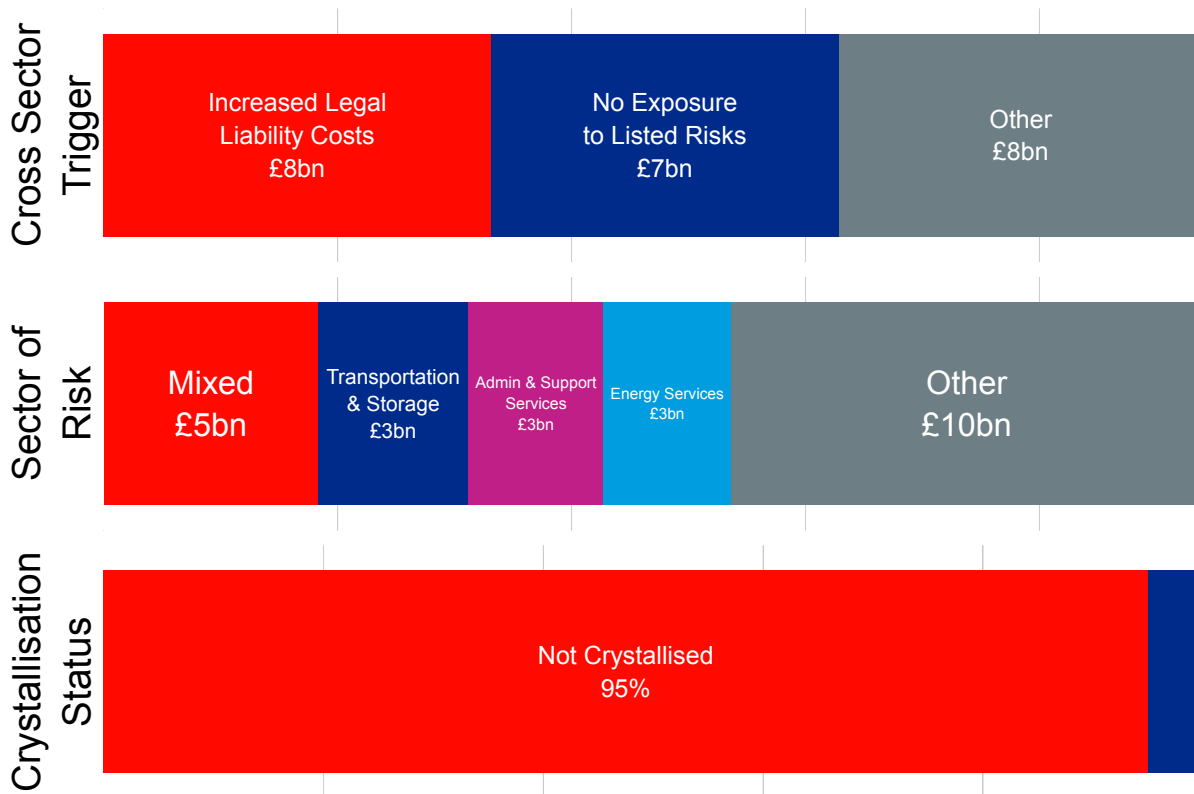


**Figure 26** shows the cumulative expected costs of the off-budget sub-portfolio. Our analysis indicated that most of the expected cost is represented by a relatively small number of contingent liabilities. Notably, 11 items have an expected cost greater than £500m each and comprise 59% of the total expected cost. Thus, most of the exposure is concentrated in a relatively small part of the sub-portfolio. Better understanding of potential changes and drivers of risk for a low number of liabilities can enable the government to understand a significant portion of its entire off-budget sub-portfolio.

UKGI will work with departments and concentrate management efforts on off-budget liabilities with an expected cost greater than £500m. In addition, material new contingent liability proposals are subject to robust evaluation through the Contingent Liability Approval Framework. By focussing management efforts on the largest liabilities, the government can maximise the benefits to the taxpayer by managing the off-budget liabilities proportionally and efficiently.

## Cross-sector Trigger and Sector of Risk

**Figure 27: Off-Budget Liabilities split by cross-sector triggers and sectors of risk**



As discussed in **Chapter 2** the analysis of cross-sector triggers helps identify the type of events that could cause crystallisations of these liabilities.

**Figure 27** shows that the sectors from which the risk of crystallisation originates are well diversified. Simultaneously, the analysis shows that around a third the off-budget sub-portfolio can be linked to “increased legal liability costs” as a trigger, with the remainder spread across a diverse range of cross-sector triggers. The diversification of government’s risk exposure through triggers and economic sectors is an area that will continue to be monitored and reported on as the portfolio evolves so that government can actively consider changes to its risk profile. Monitoring these changes will inform decisions on new liability proposals and risk management efforts to address vulnerabilities.

### Crystallisation

Since our last report, some of the off-budget contingent liabilities are grouped in different ways. This means that the 21% of the sub-portfolio that was reported as crystallised in the financial year ending 31 March 2023 is equivalent to less than 8% of the current sub-portfolio, when normalising these groupings.

This compares to 4% of the off-budget sub-portfolio that has crystallised in the financial year ending 31 March 2024, showing that has halved since the last report. This means that the rate of new off-budget liabilities being created outstripped the rate at which crystallisation occurred.

Since our previous report, there has been an additional £0.5bn of crystallisation from off-budget liabilities. This increases the lifetime crystallisation costs of the sub-

portfolio by 2%. Whilst this is not sufficient to determine overall trends at this stage, as we continue to collect this data and produce this report, we will be able to determine how the sub-portfolio changes year-on-year.

Additionally, our future work will enable us to characterise the sub-portfolio in the same way that **Chapter 2** characterises on-budget liabilities. Over time, we will be able to determine which items are the biggest source of crystallisation and understand if these are stable over a longer period. This will help the government to determine the plausible range of costs that arise from off-budget liabilities.

# Chapter 6: Sub-Portfolio Stress Scenario

## Summary

- This chapter explores how a major shock in the economy or financial markets could create additional cost to the public purse by considering how the expected cost of a subset of the government’s contingent liability portfolio could change.
- Better understanding of such shocks could help inform the government’s view of the risk it holds and its fiscal planning.
- The stress scenario only considers liabilities subject to the cross-sector trigger of a “major economic or financial downturn”. These liabilities share common traits. The risk underpinning them is mainly driven by counterparty ability to service debts and payments.
- We quantify an order of magnitude of potential additional cost to the portfolio should such a shock occur and result in a significant deterioration in the creditworthiness of counterparties. When the portfolio was stressed in this way, an estimated £10bn additional cost emerged.
- The model developed provides valuable insight, but it is a novel and experimental approach with some limitations. Therefore, UKGI will continue to develop the approach and increase the robustness of the analysis.
- Improving the quality of raw data and modelling available for liabilities that make up a significant proportion of the risk will be critical.

## Introduction

Throughout the preceding chapters, the focus has been on the expected cost of reported liabilities as they currently stand. This is a best estimate of the costs that could occur, but in practice costs could turn out to be higher, or lower. For instance, **Chapter 2** provided detail on cross-sector triggers, where the portfolio of the government’s contingent liabilities could see more frequent or larger scale crystallisations in response to specific events. The trigger that could impact the largest range of contingent liabilities through a single event is a major economic or financial downturn.<sup>26</sup>

By providing an analysis of how the sub-portfolio specifically linked to this trigger would react to an external shock, the government will be able to understand how its existing contingent liability commitments may constrain its financial flexibility to respond to a crisis, as well as any additional implicit risks, that could materialise in the future.

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<sup>26</sup> Throughout this chapter, a “Major Financial and Economic Downturn” will be referred to as “A shock”.



## Scenario

We have chosen to consider the impact of this shock, as if it were to occur organisations may find themselves unable to service their debts, for example due to a reduction in income. When this has happened in the past, government-backed financial guarantees have been called upon to a greater extent. Moreover, such an economic environment could mean that non-guarantee liabilities see increased costs where the underlying risk relates to

the ability of third parties to service debts and payments.

In both instances, an external shock impacts government expenditure by increasing both the frequency and extent to which contingent liabilities crystallise. A 'stress scenario' has been constructed which seeks to explore the possible financial impact of such an event. The specific scenario considered is set out in

**Figure 28.**<sup>27</sup>

### Figure 28: Stress scenario studied - Major Economic or Financial Downturn

A one-year external shock that causes an increase in the extent, and frequency, of crystallisations of contingent liabilities with counterparty credit risks. Additional losses on liabilities arise from a deterioration in the creditworthiness of these counterparties leaving them unable to service their debt obligations and the government then stepping in. This would result in an increase in the number of defaults and hence the cost incurred for these liabilities.

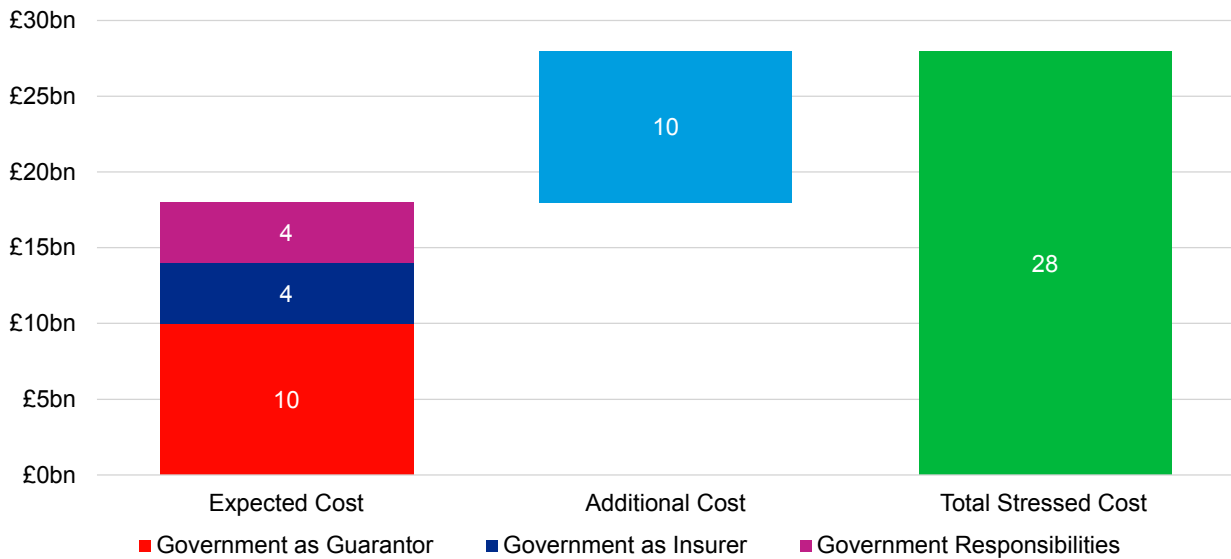
This scenario considers all liabilities that have an explicit link to additional losses being incurred in response to a major economic or financial downturn. In this scenario no secondary impacts to other sectors or parts of the portfolio are considered. Other major macroeconomic or policy intervention impacts are also assumed to occur in parallel but with no further impact on existing items within the sub-portfolio.

This chapter focusses on subjecting only the existing portfolio of contingent liabilities to an external shock. This will enable the government to understand its current level of risk and vulnerability. This analysis does not account for the creation of new contingent liabilities or other stabilisation interventions in response to a major economic or financial downturn and should not be seen as an indication of the whole cost to government in the event of such a shock.

<sup>27</sup> This shock has not been assigned a likelihood or cross comparison with historical events.

## Characterisation of the Sub-Portfolio

**Figure 29: A breakdown of contingent liabilities that share “major economic or financial downturn” as a cross-sector trigger and the impact of this shock (rounded to the nearest billion)**



This stress scenario is limited to liabilities that are subject to the cross-sector trigger of a major economic or financial downturn, from both the on- and off-budget parts of the portfolio. These liabilities form a sub-portfolio with a current expected cost totalling £18bn which can be seen in the **Figure 29**. As seen in **Annex E**, a previous review showed that 90% of the liabilities in the sub-portfolio are either guarantees or other products that are underpinned by a counterparty creditworthiness risk.

### Interpretation of Analytical Findings

When subjected to the stress scenario, the sub-portfolio incurred £10bn of additional cost as seen in **Figure 29**.

When interpreting this result, it is important to consider the scale of the change relative to the overall expected cost of the

entire portfolio and how this relates to the fiscal picture.

The HMT Treasury reserves for next financial year, as stated in October 2024, were forecast to be £6.8bn<sup>28</sup>. Although this cannot be taken as an exact amount, and the costs arising from our stress scenario may be spread over multiple years, we can see that the additional expected cost generated by this shock would be of a similar, if not greater, magnitude to this figure. Therefore, we can conclude that should this kind of shock occur, the impact on budgets could be relevant unless departments are able to absorb these additional costs. By establishing the order of magnitude that the expected cost of the portfolio could increase by in response to this kind of shock, policy makers can consider their risk appetite for further contingent liabilities with similar characteristics. Trade-offs between

<sup>28</sup> [Autumn Statement and Spending Round 2024, Table 1.8](#)

different segments of the portfolio can also be considered. For example, the additional cost in this stress scenario is less than the increase in underlying cost for nuclear decommissioning and NHS clinical negligence over the past two years.

It should be noted that this report has considered this type of shock and its impact on the existing contingent liability portfolio in isolation. Wider, more significant, fiscal impacts would be expected to arise in response to a major financial or economic downturn. Therefore, the findings must be viewed considering the historical trends and limitations.

## Methodology

This section outlines the high-level approach for the stress scenario. It consists of three main steps: setting the scenario, the high-level method of determining additional costs, and the bespoke treatment applied to certain items. A full breakdown of this methodology is included in **Annex E**.

## Setting the Scenario

We have illustrated a scenario whereby a shock leads to a worsening of the financial positions of private sector counterparties. This means that it is assumed that the extent, and frequency, of relevant contingent liabilities crystallising increases. This is an external shock that persists for one year only and is only applied to those items which have a cross-sector trigger of a major economic or financial downturn. For a full description of the scenario considered see **Figure 28**.

## High Level Methodology for Determining Additional Costs

For each relevant liability, a stressed cost is estimated by utilising the internal ratings-based approach from the Basel III framework.<sup>29</sup> In essence, for each item a notional credit rating is assigned, and a corresponding stress factor is applied. These factors broadly represent the additional costs a bank may be subject to due to an increase in losses due to defaults. This gives an estimate of the additional cost that may occur across the sub-portfolio. A full breakdown of this methodology is included in **Annex E**.

## Sense Checking Outputs Using Material Items

When analysing the sub-portfolio, we identified that a few liabilities were significantly more material than others in terms of their impact on the model outcomes. For these liabilities, we carried out further work to check whether our approach produced appropriate results for them. We received a bespoke estimate for a stressed cost, given the stress scenario at hand, that was based on more sophisticated and bespoke modelling, from the owners of these liabilities. When selecting which liabilities to explore further, we therefore considered not only materiality, but also the relevant organisation's modelling capabilities. There was a c£2bn difference between the bespoke estimates provided and our stress scenario methodology results. This provides reassurance the outputs of the stress scenario are reasonable for the purposes of providing an order of magnitude estimate.

<sup>29</sup> For further detail of this approach please consult the [BIS Basel Framework standards on IRB RWA calculations](#).

## Assumptions, Limitations and Risks

As previously mentioned, the sub-portfolio is mainly driven by counterparty credit risk.

Further to this assumption, there are a significant number of methodological considerations that have been worked through during the development of this stress scenario. For a full picture of the approach development, considerations, risks, limitations, and quality assurance, please consult the supplementary **Annex E**.

For key assumptions and limitations please see **Figure 30**.

The model developed is a novel and experimental approach with key limitations. Therefore, UKGI will seek to continue to develop the approach and increase the robustness of the analysis. It has undergone a quality assurance review undertaken by the Government's Actuary's Department.

Improving the quality of raw data and the capability of downside loss modelling across government is required to improve the robustness of stress testing on the portfolio.

### Figure 30: Limitations of our stress-test methodology

There are some key limitations that prevent the stress scenario from fully capturing the complexity of the real portfolio, or the wider impact of a major economic or financial downturn. These include, but are not limited to:

- The result contained in this chapter should be considered as an illustrative order of magnitude possibility of what increased costs may be incurred to the existing sub-portfolio in the event of a major economic or financial downturn.
- The output is heavily based on the expected costs reported, which, as noted in **Chapter 2**, may significantly vary year-on-year. Therefore, it is reasonable to conclude that any modelling based on the present conditions has limited ability to tell the reader about future possibilities.
- The additional cost reported represents one possible scenario. Other scenarios may occur.
- Detailed modelling of each underlying contingent liability has not been carried out.
- No secondary impacts on liabilities subject to other primary cross-sector triggers have been allowed for.
- Implicit liabilities, parallel policy responses, and creation of new contingent liabilities due to an external shock have not been considered; and
- This scenario modelling is a novel and experimental approach and should be considered a stepping-stone to further develop our understanding of how to study contingent liability portfolios in the future.

# Chapter 7: Summary and Next Steps

## Government's Contingent Liability Risk

This report has provided an overview of the UK Government's portfolio of contingent liabilities. The expected cost of the total portfolio sums to £250bn, with £227bn considered on-budget and £23bn considered off-budget.

In reviewing these items, we have analysed public data and supplemented with departmental information to build knowledge around areas that will better inform government on these risks. There are two new strands of analysis: review of the potential impact of a stress scenario, and the net expected cost of guarantee schemes.

Analysis that considers the additional cost that may arise directly in the sub-portfolio in the event of a major economic and financial downturn suggests that the sub-portfolio would increase by c.£10bn in this scenario, putting considerable strain on government finances.

While we recognise that in many cases government departments will monitor and publish data on their own liabilities, for the first time, the UK Government now has more information on the net expected cost position across all major financial guarantee schemes in central government. Looking at schemes through this lens allows the government to fairly evaluate the relative

financial outcomes of government policy towards this kind of guarantee scheme and crucially develop a risk appetite for schemes that are not able to cover the risk via fee-charging.

Overall, the value of this report is in its ability to enable the government to consider the impact that new policy decisions can have on the entire portfolio. The insights included within this report; setting out the diversification of risk, expiry of liabilities and impacts of accounting treatment relative to underlying cost provide a series of metrics that could be used in a similar way to key performance indicators.

With this information and a better understanding of potential losses in a downside scenario UKGI will work with policy makers to explore how contingent liabilities can continue to be managed effectively. Following this approach, informed decisions can be made on government's contingent liability risk appetite statement and risk management strategy.

## Management of Contingent Liabilities Portfolio

UKGI's inaugural contingent liabilities report in 2022 identified three key themes that would assist the government in managing contingent liabilities effectively:<sup>30</sup>

- Improving the availability of reliable data on contingent liabilities.

30 <https://www.ukgi.org.uk/2022/06/23/the-contingent-liability-central-capability-exploring-the-uk-governments-contingent-liabilities/>

- Analysing and carrying out a stress scenario for the portfolio of contingent liabilities; and
- Promoting and supporting the responsible and appropriate management of contingent liabilities.

The 2022 and 2023 reports focussed on describing the portfolio of contingent liabilities to provide a baseline level of understanding across government. This report has standardised the aggregation and analysis of government’s on- and off-budget liabilities, allowing portfolio level analysis to be undertaken, such as testing the whole portfolio against specific triggers.

Looking forward, UKGI will continue to promote best practice in valuing, pricing and managing contingent liabilities with our partners across departments. The government has made important progress on its management, reporting and understanding of contingent liabilities. These lessons are informing the monitoring, reporting and management of government’s financial transactions, operationalising the Financial Transaction Control Framework, [announced at Autumn Budget 2024/ published in updated form at Spring Statement alongside this report].<sup>31</sup>

To inform the management of its assets and liabilities as a portfolio government needs to understand the factors that influence change across the portfolio and how to manage these. To help achieve this UKGI will:

### **Goal One – Data Transparency:**

Continue to improve the data available on government’s portfolio of contingent liabilities and maintain transparency around

this. Identify efficiencies across government that could be realised by optimising and simplifying data collection processes, embedding these into normal accounting practices. This data should be used to develop new tools that allow greater information sharing between departments on different liabilities.

### **Goal Two – Management of Contingent**

**Liabilities:** Successive reports have now “described” the portfolio of liabilities and “diagnosed” the key areas of risk. UKGI will continue to promote best-practice frameworks and act as a specialist advisor to government departments to help reduce the risk arising from new policies.

### **Goal Three – Future Scope:**

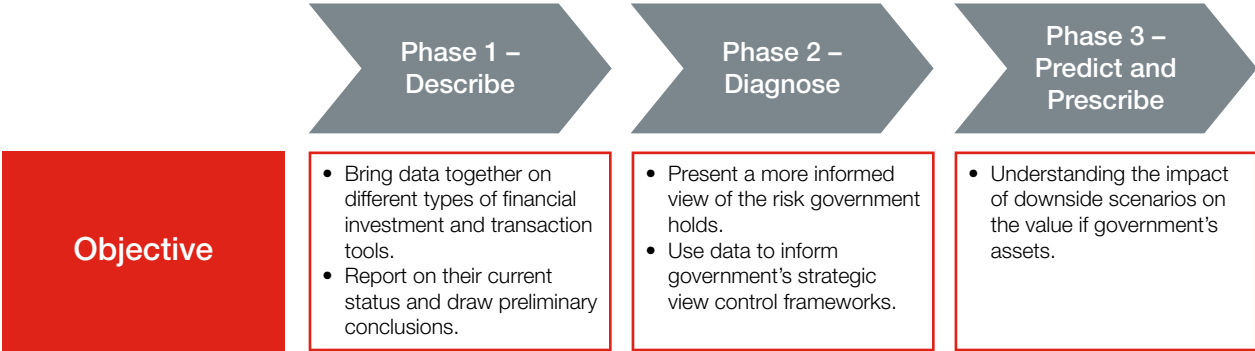
Over time assets and liabilities across government’s balance sheet should be managed as a portfolio. Operationalising government’s Financial Transactions Control Framework is based on the principles and lessons from contingent liabilities and financial guarantees. UKGI will provide support to departments that seek to apply these lessons to other financial instruments, such as government loans and equities.

To support government in achieving these goals, the Contingent Liability Central Capability will expand to form UK Government Investment’s Financial Instruments & Transactions Advisory Group (UKGI FinTAG). This group will support government in managing its contingent liabilities and financial transactions by:

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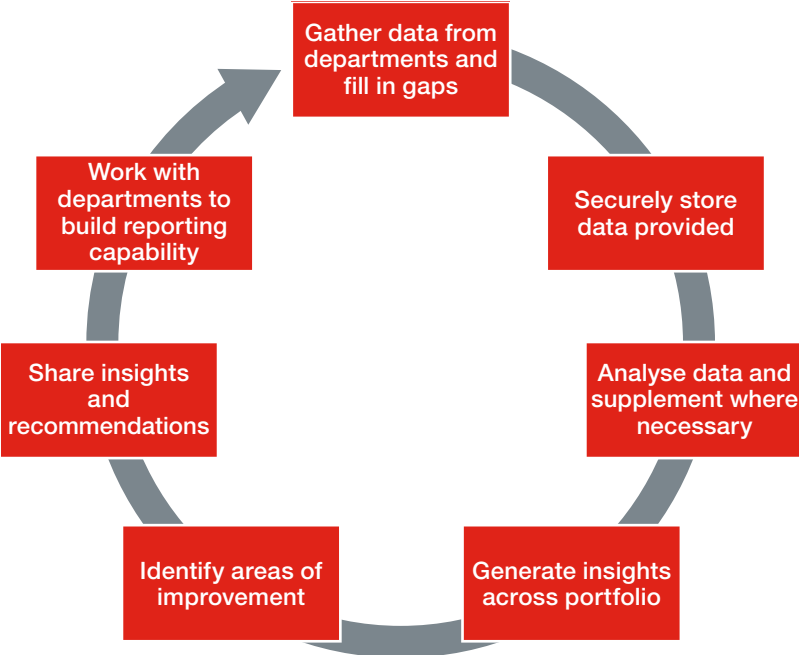
31 [https://assets.publishing.service.gov.uk/media/672141e13ce5634f5f6ef44d/Financial\\_Transaction\\_Control\\_Framework.pdf](https://assets.publishing.service.gov.uk/media/672141e13ce5634f5f6ef44d/Financial_Transaction_Control_Framework.pdf)

**Figure 31: Phased delivery against goals**



Based on this, the first phase will require strong processes in place to identify the composition of value and risk so that we can best inform future decisions on the portfolio and its management. Therefore, building on the lessons from building capability across the contingent liability portfolio, we will put in place a similar operating model for financial transactions, outlined in **Figure 32**:

**Figure 32: Reviewing stock operating model**



These will be the first steps in bringing together the expertise and experience of the team on a subset of the fiscal tools being used by the government (contingent liabilities) and applying that to a wider scope of financial transactions. Ultimately, the team will aim to promote transparency of data, best practice and workflow case advice, and the management of the wider portfolio.

This report demonstrates how the expertise of UKGI can be utilised by the government to understand key areas of its balance sheet. The capability of the new Financial Instruments and Transactions Advisory Group will deliver further analysis to achieve these stated objectives.

# Annex A: Definitions

#	Term	Definition
1	<b>Additional Cost (AC)</b>	All future costs that are anticipated to occur when the contingent liability portfolio is subjected to the stress scenario, in addition to the expected costs under the baseline scenario.
2	<b>Active Portfolio Management (APM)</b>	An approach to manage the fiscal risk of contingent liabilities by considering a range of risk metrics to better understand possible fiscal implications and inform the appetite to entering into new contingent liabilities and develop management strategies.
3	<b>Amount of Risk</b>	The outstanding amount due from an obligor, on a liability (net of all repayments made to date, and value of any security or reserves held against that liability), over a specific period.
4	<b>Beneficiary</b>	The entity that will directly receive government funds if the contingent liability crystallises. For example, the entity indemnified, the entity providing the loan that is guaranteed, or the entity that is in opposition to government in a legal case.
5	<b>Bounce Back Loans Scheme</b>	A scheme introduced to support smaller businesses with a fully guaranteed loan (up to £50k) in the wake of the COVID-19 pandemic.
6	<b>Contingent Liability (CL)</b>	Defined by the government as fiscal commitments undertaken by the government that are uncertain in terms of timing and quantum and lead to future spending if certain discrete event(s) occur. Note, this is a broader definition than that used for accounting purposes and aligns with the definition with the UKGI annual report on contingent liabilities.
7	<b>Counterparty</b>	The other party (a person(s), entity, or collection of entities) that participates in a contract or financial transaction.
8	<b>Credit Rating</b>	An independent assessment of an obligor's (legal entity, government, or government related entity) creditworthiness in general terms or with respect to a particular debt instrument or financial obligation. Credit ratings are issued by credit rating agencies based on <a href="#">issuer default ratings scale</a> ranging from 'AAA' (reflecting the strongest credit quality with the lowest Probability of Default) to 'D' (reflecting the lowest credit quality with the highest Probability of Default).



#	Term	Definition
9	<b>Cross-Sector Trigger</b>	An event which could increase the probability or size of future crystallisations across the portfolio of risks.
10	<b>Crystallisation</b>	The point at which a contingent liability is realised and there is an obligation to pay.
11	<b>Crystallisations to Date</b>	The total value of payments made by government in relation to this liability, as at reporting date.
12	<b>Discount Rate/ Public Expenditure System (PES) rate</b>	A financial assumption used to determine the present value of future payments. For the purposes of preparing government departments' financial accounts, discount rates are prescribed by HM Treasury, and vary across provisions, financial instruments, and pensions. For provisions, the rates issued by HMT are based on Bank of England yield curves of conventional government bonds (UK Gilts).
13	<b>End Date</b>	An estimate of when government will no longer be exposed to the risk. This includes liabilities without a fixed expiry date, based on an understanding of the risk.
14	<b>Expected Cost (EC)</b>	An amount, in relation to a contingent liability, which is the best estimate of cost to the risk holder for the duration of the risk being held. This reflects the estimated accrued future cost over the liability's future lifetime, without deducting any premiums collected.
15	<b>Exposure at Default (EAD)</b>	The total value the liability holder is exposed to when the liability defaults.
16	<b>Fee Charging</b>	A sub-categorisation of insurer/guarantor of last resort, to denote whether there is a charge being applied to this respective liability.
17	<b>Financial Guarantee</b>	An agreement that guarantees a financial obligation (debt) will be repaid to a lender by a third party (the guarantor) if the counterparty (the borrower) defaults
18	<b>Government as Guarantor</b>	Instances where, to achieve its objectives, the government chooses to offer a guarantee where the private sector is unwilling or unable to cover the risk.
19	<b>Government as Insurer</b>	Instances where, to achieve its objectives, the government offers an indemnity because the private sector is unwilling or unable to cover the risk.

#	Term	Definition
20	<b>Government Responsibilities</b>	Represents future contingent or uncertain expenditure that the government is legally or contractually committed to incur because of past activities. The commitments arise from activities that the public view as government's responsibility. This includes inter-public sector agreements, legal cases, and historical environmental decommissioning.
21	<b>His Majesty's Treasury (HMT)</b>	A ministerial government department responsible for developing and executing the government's public finance and economic policy.
22	<b>Internal Rating-Based (IRB) Approach</b>	A method that banks use to calculate risk-weighted assets (RWA) and regulatory capital requirements for credit risks.
23	<b>Loss Given Default (LGD)</b>	The estimated proportion of money a bank or other financial institution loses when a borrower defaults.
24	<b>Management Information (MI)</b>	Operationally relevant data relating to a business function or activity.
25	<b>Net Expected Cost</b>	Amount representing the overall financial impact on the government from providing a financial guarantee. Reflects the net of the lifetime premiums and fees with the crystallisations to date and expected cost.
26	<b>Obligor</b>	An entity that is legally or contractually obliged to provide a benefit or payment to another party.
27	<b>Office for Budget Responsibility (OBR)</b>	A non-departmental public body funded by HMT that provides independent economic forecasts and independent analysis of the public finances.
28	<b>Off-Budget Liability</b>	A liability that is, in accordance with accounting standards, disclosed in the notes to accounts with limited financial information. In accounting terminology, these are known as contingent liabilities and remote contingent liabilities.
29	<b>On-Budget Liability</b>	A liability that is, in accordance with accounting standards, included in financial accounts. In accounting terminology, these are provisions, financial guarantees, or insurance liabilities.
30	<b>Outstanding Lifetime (OL)</b>	The remaining lifetime of the liability as counted in years from today.
31	<b>Probability of Crystallisation (PC)</b>	The probability that the liability will incur costs for the risk holder at any point over its future lifetime, as at the reporting date.
32	<b>Probability of Default (PD)</b>	The likelihood that a counterparty (borrower) will fail to meet its financial obligation on a certain debt.

#	Term	Definition
33	<b>Provisions</b>	<p>Future funds required by an organisation to cover expected future expenses arising from a specified past event, where the expenses have a greater than 50% likelihood of being incurred. In accordance with accounting standards, these are included in financial accounts.</p> <p><i>For the purposes of this report, provisions made by government departments are largely considered as part of Government responsibilities.</i></p>
34	<b>Reasonable Worst-Case (RWC)</b>	A loss event considered very unlikely to occur but not implausible. The value is measured across the lifetime of the liability.
35	<b>Regulatory Capital Requirements</b>	The amount of capital a financial institution must hold as mandated by its financial regulator.
36	<b>Risk Appetite</b>	The maximum amount of risk (after controls and other measures have been put in place) that an organisation is willing to take in pursuit of objectives it deems have value.
37	<b>Risk Weighted Asset (RWA)</b>	A method that is used as part of Basel II and III to determine how much capital a bank needs to cover its risks should a credit risk undergo an external shock. This approach is prescribed by the Basel Framework.
38	<b>Underlying Cost</b>	The cost of the portfolio, or a part of the portfolio, when a change in discount rate has not been taken into consideration.

# Annex B: Data Sources

The analysis included within this report should be treated as unaudited administrative data and should not be considered as national or official statistics.

## On-Budget and Off-Budget Liabilities

The 2023 CLCC Report used on-budget data captured from departmental annual report and accounts (ARA) and supplemented this with new management information for off-budget liabilities that was aggregated by working across departments. In contrast with the approach taken to inform the 2023 CLCC Report, this report uses information for on-budget and off-budget liabilities that has been gathered by working across departments.

Some of the on-budget data aggregated reflects what will be included in departments' annual report and accounts, and this has been supplemented with additional management information relating to these items.

## Data Exclusions

We have excluded 'implicit' liabilities which, rather than arising explicitly through law or contractual obligations, represent obligations that potentially arise through public expectation, political pressure, or the role of the state as society understands it.

We received data pertaining to a total of 960 contingent liabilities. Through our data validation process (see **Annex D**) this was reduced to 803 active liabilities. From these only 8 more were excluded for reasons other than expiration. The **8** excluded

liabilities represent less than 1% of the total portfolio of liabilities by count.

Our data validation process identified liabilities to be excluded from our analysis based on the following criteria:

- Liabilities where no expected accrued future cost was provided.
- Off-budget liabilities that are linked to an on-budget liability are excluded from off-budget analysis and dealt wholly within on-budget.
- In contrast to the CLCC Report 2023, this report includes analysis on expired liabilities to identify year-on-year changes. Expired liabilities remained excluded from end of year totals however.

Exclusions were made for specific charts in our data visualisation to ensure clarity. If certain liabilities met the validation criteria but lacked necessary information, they were omitted from the chart. It is important to note that these exclusions did not impact the overall conclusions and do not represent a substantial proportion of the overall population.

## Financial Guarantees

The Financial Guarantees chapter provides an overview of the government's portfolio of financial guarantees. The data used in the analysis in this chapter was also aggregated by working across departments.

This is explored further in **Annex F**.

## Analysis of FY 2022/23 and Historical Data

### Analysis of FY 2022/23

The CLCC Report published in November 2023 used on-budget data as reported by end of FY 2021/22. This was done as this was the last period for which annual reports and accounts had been published by each of the government departments. This report covers both on- and off-budget data as of end of FY 2023/24 as this time both on- and off-budget data was aggregated working across departments.

The interim year of accounting data for on-budget liabilities FY2022/23 has also been collected as part of this. This information was gathered using departments annual reports and accounts as was done in preceding years.

### Analysis of Historical Data

We have conducted analysis of on-budget data dating back to FY 2011/12. This, alongside data on the discount rate used by departments for accounting purposes, has been used to understand historical trends in the on-budget portfolio.

Going forward CLCC's report on government's contingent liabilities will be based on data from the previous financial year.

## Government Departments

For this report, data has been aggregated from the following government departments -

### Department Name

Cabinet Office
Department for Business and Trade
Department for Culture, Media and Sports
Department for Food and Rural Affairs
Department for Energy Security and Net Zero
Department for Education
Department for Transport
Department for Science, Innovation and Technology
Department for Work and Pensions
Department of Health and Social Care
Foreign, Commonwealth and Development Office
His Majesty's Revenue and Customs
His Majesty's Treasury
Home Office
Ministry of Defence
Ministry of Housing, Communities and Local Government
Ministry of Justice
UK Export Finance

## Organisations Excluded

This report does not consider contingent liabilities held by the public sector beyond our remit, which currently does not include devolved administrations or local authorities. In addition, ministerial departments with no identified, or material, contingent liabilities are not included within this report. The Whole of Government Accounts reports on business-as-usual spending and contingent liabilities for Local Authorities. Therefore, this information will not be analysed within this report.

# Annex C: Data Limitations

## Data Limitations and Sensitivity Analysis

The purpose of this report is to analyse liability data on an aggregate portfolio level. The data used consists of self-reported management information, which is of limited quality and not formally audited. This is particularly true for some data, such as reasonable worst-case values. Although there are clear limitations of what can be done with respect to this in the short term. Longer term, UKGI will aim to work with departments to iteratively improve the data collected.

There is an additional limitation in that we are assuming nominal values for all items. It is possible that for off-budget items there is a variation in terms of which year is used for the price basis. For on-budget this should be less of an issue as Departments

supply values that will support their current year's annual report and accounts.

A notable limitation to the data collected is that it does not meet the quality thresholds under accounting standards and therefore analysis of individual items is not appropriate. It also means that reconciliation of total values between our dataset, and published annual reports and accounts should not be expected to be possible and such an exercise is not undertaken.

The data gathered used range estimates of expected costs for off-budget items, and exact values for on-budget items. Range estimates for off-budget items have been used on the basis that having some (albeit limited and uncertain) information on these items is deemed more valuable than seeking more precise information that would not be available for as many items.

**Figure 1: Table of expected cost ranges departments could choose from in the off-budget part of the data collection**

Expected Cost Ranges						
<£1m	£1m to £5m	£5m to £10m	£10m to £50m	£50m to £100m	£100m to £500m	>£500m

A process of four independent steps of quality assurance on the underlying data was undertaken (see **Annex D**). Due to the volume and nature of this data, however, it has not been possible to scrutinise every single data point in detail. As this was the first time both on-budget and off-budget data has been collected, gaps and limitations in the data gathered were expected. We will work with departments to further improve the information collected for subsequent reports.

## Use of Counts

This report includes counts of liabilities as a measure of quantification. We allowed departments to group liability types that contained similar, small liabilities, such as legal cases, into single line items to reduce the burden of work. For this reason, the total number of liabilities may be understated, and rates derived from counts may not be comparable between different years.

Despite these limitations, grouping benefits accuracy, especially when dealing with small cases well below the threshold of our minimum expected loss category. By doing this, we can reduce the overestimation of risk caused by having large expected loss ranges.

## Expected Cost

Defined in **Annex A**.

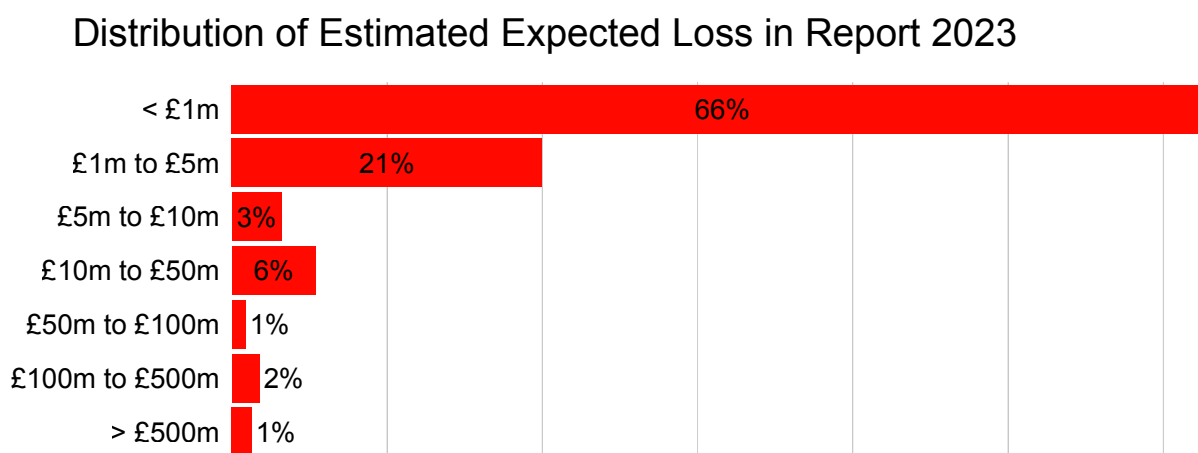
For on-budget liabilities this reflects a point estimate over the liability's future lifetime, without deducting any premiums collected, while for off-budget liabilities this is reflected as a cost range.

Departments were asked to quantify the "Expected Cost" for all off-budget liabilities. We decided to collect this data as ranges, rather than point estimates.

The top range is defined as "> £500m" with no upper limit given. Based on our understanding of the liabilities we assumed an upper end of £2bn. This creates a limitation that the upper end assumption may need to be reconsidered during future years.

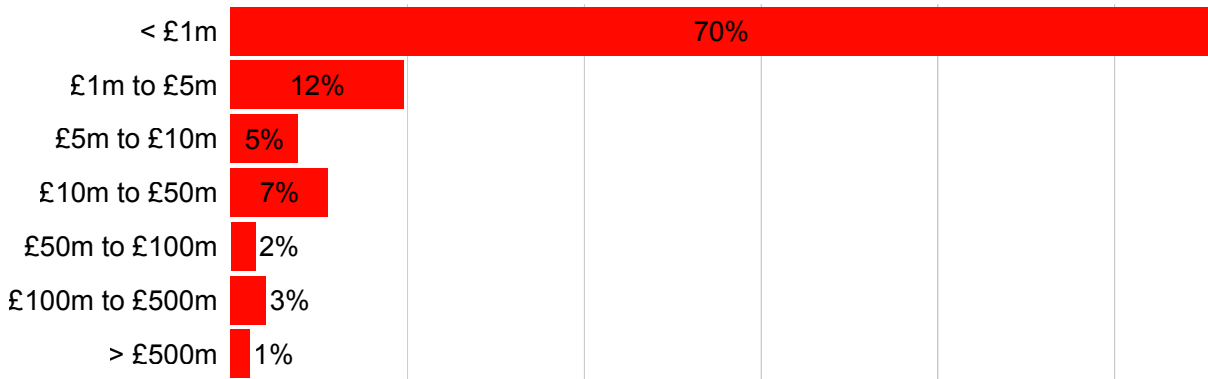
Last year we tested this assumption with a sensitivity analysis looking at the effect of changing the upper limit of the top expected cost category, as well as what would happen if all estimates shifted up a category. For this report, we have compared the distribution of information on liabilities aggregated this year to the data collected to inform the 2023 CLCC Report, to test whether they are the same. This also helped us test whether the sensitivity would be the same, whilst also understanding how similar the portfolio structure is.

**Figure 2: Distribution of off-budget expected cost values in the data collected FYE2023 versus FYE2024**



**FYE 2023**

**Distribution of Estimated Expected Loss in Report 2025**



**FYE 2024**

In this report we use two types of counts, one that counts by individual rows of data and another that uses an internal system to group related rows (this is to ensure that groupings are kept the same year to year). The figures above use the grouped counts.

The graphs in Figure 2 suggest that the distribution throughout the expected cost brackets are extremely similar to last year and this indicates that sensitivity effects associated with these brackets will also remain the same.

The only difference is a decrease in the 2<sup>nd</sup> smallest bracket, but this is mostly from a change in the grouping (i.e. where smaller liabilities have been grouped together) of certain liabilities rather than a real reduction in liability.

**Reasonable Worst-Case Scenario Exposure**

Defined in **Annex A**.

This reflects a loss event the occurrence of which is very unlikely but not implausible. This measure should be based on the exposure to government from the

liability over its future lifetime as at the reporting date.

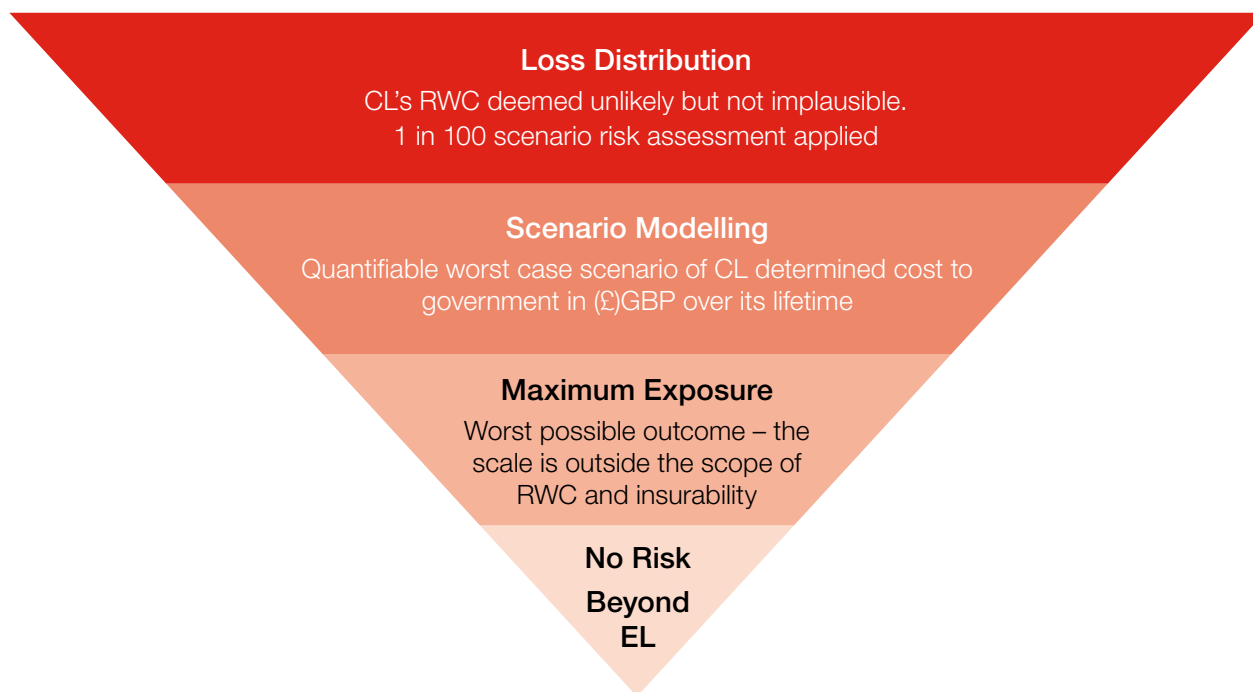
As Figure 3 demonstrates, the highest quality estimate of reasonable worst-case is generated by understanding the loss distribution of a liability and calculating the impact of a 1 in 100 event occurring. If this is not possible, the reasonable worst-case can be estimated across the CL’s lifetime including its future. If neither is possible then a maximum exposure can be provided and finally beyond that there is no data provided beyond the expected loss. This final option means we would only understand the mean loss and not the shape of the loss distribution for that liability.

Where new data was gathered (including new exposure estimates for items) to feed into this report, we used a broad definition of ‘reasonable worst-case’. This acknowledged the challenges in estimating exposures. Respondents were able to determine these values using the definitions outlined in **Annex A**.



For this report, the primary goal was to acquire this measure for every contingent liability. However, a special emphasis was placed on extra checks on quality reporting for liabilities linked to the trigger Major Economic or Financial Downturn as the reasonable worst-case data was used, in a limited capacity, for the Stress Scenario model.

**Figure 3: Pyramid table of loss distribution and outcomes when quantifying contingent liabilities in order of likelihood from reasonable worst-case to no risk**



We have spent extra time working with departments this year to improve the reporting of this metric, and this has resulted in the number of responses that were blank or 0 reducing from 48 in 2023 to 38 this year.

As discussed in the report, while the use of the reasonable worst-case exposure is valuable when considered individually against each item's estimated accrued future cost, it can create an impression of an inflated level of risk when aggregated across the entire portfolio. The estimated accrued future cost (expected cost) is a more significant measure when assessing the portfolio as a whole, and consequently, more attention has been devoted to it when performing the analysis for this report.

## Start / End Date

There are many different reasonable definitions that could refer to the start or end of a liability. For example, the date the liability first existed, the date it was recorded on departmental minutes, or the date it was recorded on parliamentary minutes. This, combined with the diverse nature of contingent liabilities, means that even within departments there are likely to be liabilities with different date definitions.

Trying to capture all of these for all liabilities would be very onerous and add little value. We have captured the best date organisations had (and if none is available a best estimate). This does mean that individual liabilities will use different date definitions, but in aggregate this will be

smoothed out, and we took the approach that some information is better than none.

Where there were gaps (usually in the case of perpetual liabilities with no end date) we have used assumptions. We did not perform any sensitivity analysis on these as we have not included any second order analysis of dates such as cashflows that would be affected meaningfully by changes to the assumptions.

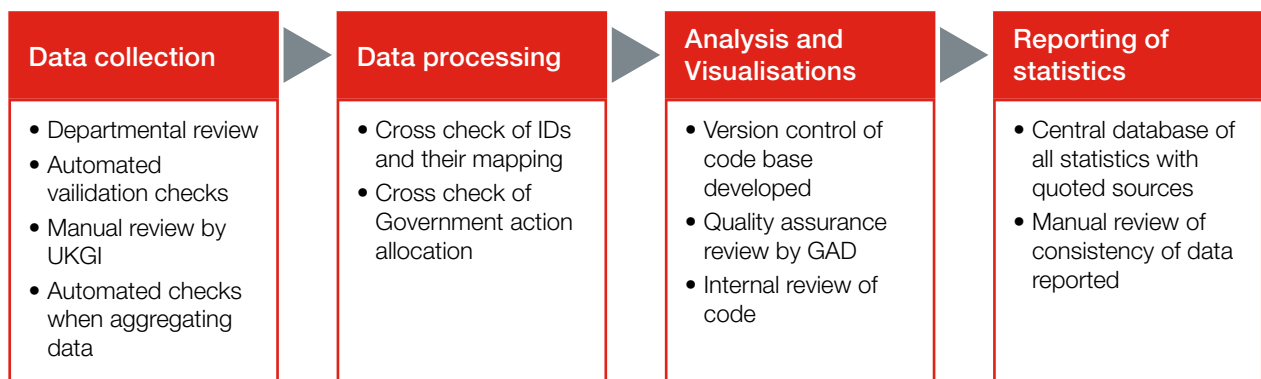
These dates aim to roughly bound the period over which expenditure could potentially be expected. However, we can't say any more specifically when payment(s) could fall.

# Annex D: Consistency and Quality Assurance

## On-Budget and Off-Budget Liabilities

Quality assurance checks are embedded in every key stage of producing this report. This includes steps such as data collection, data processing, analysis and visualisation as well as reporting. At a high level, these checks are summarised in Figure 4 below. This section sets out, in detail, the checks applied at each step.

**Figure 4: This figure sets out the four main phases of the data lifecycle and the associated checks, quality assurance reviews, and approaches to ensure robust and reliable data reporting**



## Data Collection

We collected on-budget and off-budget data from 18 departments across government (listed under **Annex B**). It is important to note that although the data we receive goes through a quality assurance process, ultimately the departments are responsible for the accuracy of the data they provide and therefore we have relied on the data being correct. The data we gathered went through several stages of checking to ensure completeness and quality.

The first stage of checking was built into the template we used to aggregate this information, in the form of input validation, to ensure cells had the correct data type in them, as well as error checks on each

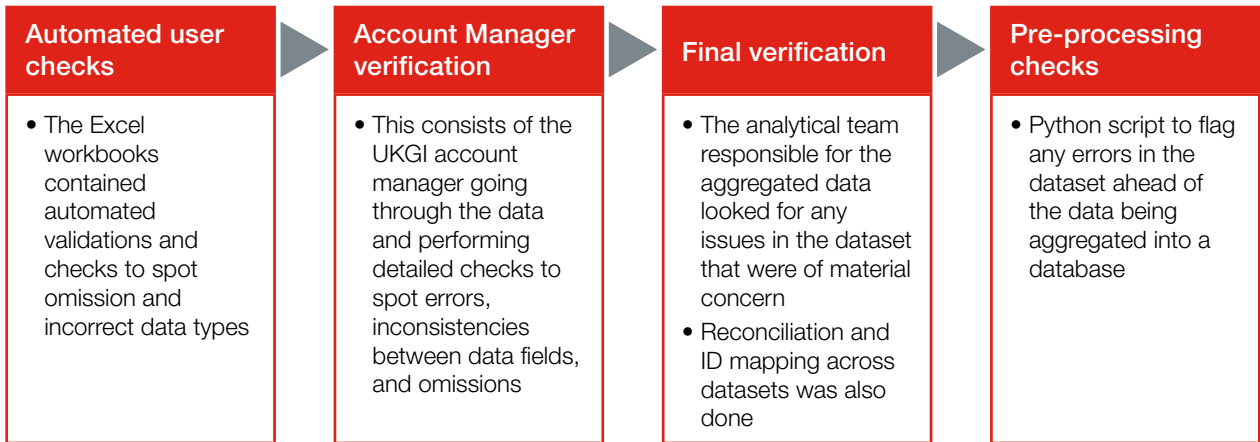
column and row to alert the user to any key issues. Upon receiving each completed template, the member of the CLCC team responsible for each department manually checked the data provided and queried possible errors with departments.

The second stage involved members of the CLCC analytical team, responsible for the data commission, checking the data for any obvious errors, checking items for self-consistency with other items provided, and carrying out a reconciliation of items provided in this year's data set with that provided last year. The reconciliation included mapping Identifiers from the data set that informed the 2023 CLCC Report to Identifiers supplied for this report, which in many cases had been changed by

departments. By carrying out this mapping exercise we will be able to track items over time. The reconciliation also revealed some

missing items which were queried with departments.

**Figure 5: This figure sets out the different stages within the data collection phase**



The third stage used a Python script to combine data gathered into one combined data set. The script then cleansed and added to the data with the following steps:

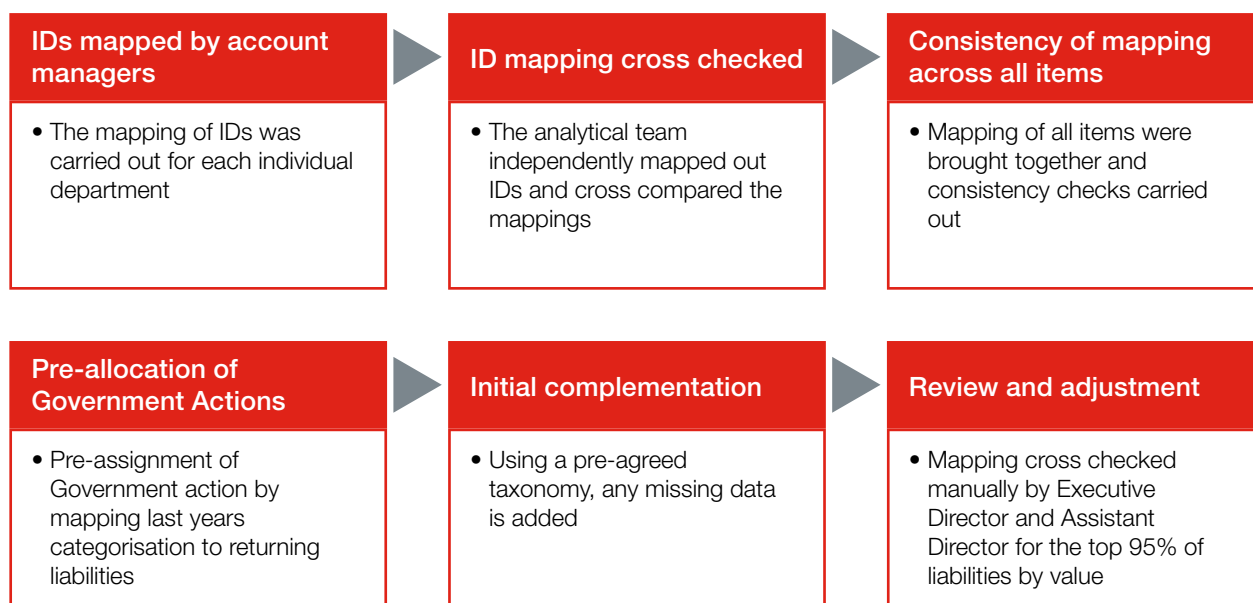
- Set datatypes of columns and coerce values into the correct type
- Input assumptions for missing dates
- Add columns for:
  - Numerical values of range inputs
  - Binary flags summarising categories
  - Second order information such as the duration between start and end date
  - Sensitivity checks

This data was then displayed in a Python dashboard, as well as being queried into an Excel spreadsheet with calculations being cross-checked independently in both tools.

## Data processing

When the data was aggregated using the above step, there was also a need to cross check the unique IDs of the reported liabilities and ensure the correct assignments of the Government Actions (Responsibilities, Insurer, Guarantor). In both cases a three-step process was used as seen in the figure below.

## Figures 6 and 7: These figures set out the different stages within the data processing and cross-checking phase



This approach means that the mapping of IDs, and the assignment of Government Action has been through three layers of checking so that we can be as certain as possible the information is accurate. There may however, be outstanding data errors despite this process.

## Quality Assurance of Analysis and Visualisations

A quality assurance review of our Python scripts was performed by Government Actuary's Department (GAD). The scripts were split into 2 main functions:

- To combine and clean the Excel templates into a csv format dataset.
- To create a dashboard in Python using Dash.

The primary scope of this quality assurance was to review the code, looking for obvious errors and anywhere that best practice was not being followed, and to test that the code functioned as expected by running test cases through it.

The review also looked at the visuals produced by the dashboard and compared this to a specification we'd provided to check that we'd followed the methodology we'd stated to produce those visuals.

An internal review was performed by members of the CLCC on the classification of the items into government responsibility, government as guarantor and government as insurer groupings.

## Consistency Checking of Reported Data and Statistics

As we produced the report we created a database of statistics used. This database contained citation and links to the underlying sources and flagged if there were any inconsistencies across the report. This was maintained and updated on an ongoing basis as the report was drafted. This way we could ensure we minimised the likelihood of any manual or human errors entering into the drafting process.

# Annex E: Sub-portfolio Stress Scenario Methodology

## Background

**Chapter 6** explores a stress scenario for the government's contingent liability portfolio. Specifically, it considers the potential additional cost should the portfolio be subjected to a **Major Economic or Financial Downturn** scenario as seen in the [section below](#). By studying the potential behaviour of the portfolio, should such an external shock occur, government can better understand the risks it holds. Quantifying the order of magnitude of potential costs could further the government's understanding of portfolio risk and help inform fiscal planning.

This annex covers the approach used and key considerations that sit behind it. As you work through this methodology, you can find a worked example [here](#).

## Aims, Problem-Statement, and Background Research

### The aim for the stress scenario is to:

- Understand the behaviour of the existing portfolio when subjected to a *Major Economic or Financial Downturn*; and
- Provide a high-level, order of magnitude, estimate of the plausible downside cost of the existing portfolio.

### The problem statement for this stress scenario is:

To understand how much additional cost could arise from the portfolio, based on a hypothetical one-year stress scenario. The scenario is only applied to the subset of the portfolio linked to the trigger *Major Economic or Financial Downturn*<sup>32</sup>. Therefore, the question that needs answering is:

- 1.1 if X% of the portfolio, by expected cost, linked to a specific trigger, undergoes an external shock, then an outcome could be that there are £Ybn additional costs.

The [key limitations](#) are covered in a section below. It is important to note that this scenario modelling is a novel and experimental piece of analysis that should be considered a first step to further develop our understanding of how to study contingent liability portfolios in the future.

## Background Research

To establish best practice, credible sources, and support developing the methodology, a range of activities were undertaken:

- Ongoing literature review to find academic and institutional publications that establish approaches, findings, and parametrisations backed up by evidence;

<sup>32</sup> In this document the term sub-portfolio is used for this specific subset unless otherwise specified.

- Stakeholder engagement to learn best practice as well as sense checking the reasonableness of the proposed approach;
- Studying our portfolio characteristics to understand what is applicable and not; and
- A quality assurance review by the Government's Actuary's Department.

## Scenario

The sub-portfolio mainly consists of guarantee products and insurance products whose cost is driven by an underlying counterparty credit risk. Therefore, the scenario studied needs to reflect the risks associated with these liabilities. At a high level, the scenario chosen is:

1.1 We are carrying out further analysis on the sub-portfolio of liabilities that are mapped to the cross-sector trigger Major Economic or Financial Downturn. On inspection of these items, the majority are guarantee products. Those that are not are almost all still susceptible to an underlying risk driven by counterparty credit worthiness. We consider a one-year external shock that causes a widespread crystallisation, or increase in cost, of contingent liabilities with clear counterparty risks. The additional losses of these liabilities arise from the creditworthiness of these counterparties reducing which causes an inability for them to service their obligations. This would result in an increase in the number of defaults and hence the cost incurred for these liabilities.

## High level summary of approach

When using this approach, it is important to remember that for all liabilities, there are multiple type of products within the portfolio. Therefore, we characterised the portfolio as seen in Figure 8 to ensure the methodology developed is appropriate.

### High Level Approach

This approach translates into the following steps being taken:

Annualise the Expected Cost and probability of default (PD) for all liabilities.

Each liability is assigned a notional credit rating based on the probability of crystallisation and the outstanding lifetime (OL) using the Management Information (MI) data UKGI holds.

The annualised expected cost is then stressed by a factor specific for each credit rating. These factors are Internal Ratings-Based (IRB) Risk Weighted-Asset (RWA) factors used within the Basel III Framework which broadly represent an increase in losses due to an increase in defaults.

Once the stressed expected cost has been estimated, the additional cost can be calculated by subtracting the pre-stressed expected cost from the post-stressed expected cost. However, the additional cost is capped so that the sum of the additional cost and expected cost do not exceed the Reasonable Worst Case (RWC) cost provided by departments.

Once this process has been carried out for all items, the additional costs and summed to provide an aggregate portfolio level additional cost.

For liabilities that are significantly material, and that have more refined underlying modelling, we work with the relevant organisations to cross check our findings. This constitutes a sense check of the model outputs.

## Data

To properly inform the methodology, we first must consider the scope of the portfolio, its characteristics, the aim of the model to be developed, and the data quality limitations. With the term scope, we mean both the type of items that are included in the modelling as well as the data availability for those items. The scope selected has been highly influenced by the availability of data, which is constrained by the annual CLCC MI data collection.

- Specifically, the scope of what is being considered is all liabilities that satisfy all of the following criteria:
- All contingent liabilities (CLs), within the accounting boundary, from the 18 government departments covered by our report;
- Both on- and off budget items; and
- Liabilities that have been linked to the cross-sectoral trigger Major Economic or Financial Downturn.

Internally held data in scope to use is:

- Description,
- End date<sup>33</sup>,
- Department,
- Expected Cost (EC),
- Reasonable Worst-Case Scenario (RWC),

- Probability of Crystallisation (PC), and
- Category.

It is important to remember that all quantified liability data provided to UKGI through the annual data commission is reported on a lifetime basis. As highlighted previously, this is not audited information and should therefore only be considered MI data.

Our approach is also supported by externally obtained data and formulae, such as:

- Credit ratings mapped to probability of default (PD) and outstanding lifetime (OL);
- Basel III Internal Rating-Based approach; and
- Any additional information needed to better understand the largest items one-year stressed expected cost.

It is important to state upfront that the definition of the additional cost is all future losses that are additional to the normal scenario expected cost when the sub-portfolio is subjected to the stress scenario. This is because a shock occurring in one year can lead to an increase in counterparty defaults for multiple years. This would in turn mean increased costs beyond the period of the shock.

The additional cost relate specifically to those caused by a single hypothetical external shock as described by our scenario and will be applied to the CLCC portfolio of liabilities as it stands as of March 2024.

<sup>33</sup> Where liabilities are particularly material, we review if the end date, and therefore the outstanding lifetime of the liability, is sensible.



As described in earlier sections, a key assumption is that all items behave like credit risks. Therefore, we need to establish if this is a reasonable assumption or not. When looking at the insurance products related to the trigger, for the 2022/2023 off-budget data, most are not traditional insurance products as such but are structured commitments linked to counterparties' financial circumstances. An initial assessment of off-budget, non-guarantee, only liabilities shows that approximately 80%, by expected cost relate to creditworthiness as seen in figure 8 below.

This self-selection has occurred naturally with respect to liabilities that face financial or economic risks. Therefore, as 91%, by expected cost, are either guarantee or classed as a credit risk, we assessed that it was appropriate to treat all items like guarantee items. There are some items which do not seem like they will behave in the same way as a traditional credit risk, however they are quite specific/unique items and would not appear to behave like traditional insurance either. Treating these items in the same way as guarantee items regardless is a pragmatic approach which prevents an over-engineered methodology without any material loss of robustness.

**Figure 8: This table shows an initial analysis carried out to characterise off-budget contingent liabilities from the 2022/2023 dataset. It shows that the majority of contingent liabilities linked to the trigger Major Economic or Financial Downturn are either guarantee items or classed as being driven by credit risks. Note that this was last year's data, but we had to do this analysis ahead of this year's data having been collected.**

Type of liability		Count	By EC (£bn)	Proportion (by EC)
Guarantees		39	2.1	51%
Non-Guarantees	Classed as credit risk	28	1.6	40%
	Not classed as credit risk	14	0.4	9%
Total		81	4.0	100%

## Quality assurance

As with any model development, a strong process of quality assurance aligned with the Aqua Book is required. For the stress scenario model this consisted of two individuals pieces of work, namely the quality assurance of: the methodology itself; and that the model that implements the methodology.

## Methodology

The methodology was developed using literature and stakeholder engagement

as set out earlier in the annex. Following this, extensive internal reviews and sense checks were undertaken. As the final step, the Government's Actuary's Department conducted a quality assurance review. This review resulted in specific recommendations and comments which were then subsequently implemented.

## Model

The model itself was structured in accordance with best practice on model building within the governments analytical function as well as containing

a quality assurance log, version control and supporting documentation. From a final quality assurance step, independent reviews from two internal technical experts were undertaken and then any resulting recommendations and comments were acted on.

## Internal Ratings-Based Approach

Throughout this methodology we will be making use of the Internal Ratings-Based (IRB) approach from the Basel III framework. The approach is part of a regulatory regime that informs the capital requirements for financial institutions.

In simple terms the capital requirement represents the capital a bank would need to hold to survive a downturn scenario whereby it incurs substantial losses (i.e., the additional cost) on its financial products. For our purposes, this capital requirement can read across to represent the additional cost government could incur from a downside scenario.

If UKGI had detailed and robust data on the exposures and resources available, we could seek to develop its own credit model that calculated this additional cost using a model parameterised on its own data. Given the purpose of UKGI's stress scenario, we have taken a proportional approach by utilising the credit modelling that underpins the Basel III framework and is deemed fit for purpose for regulating financial institutions. Recognising that this approach is not designed for our specific portfolio, we consider it sufficient for the purposes of the stress scenario test. In addition, we sought additional reassurance on the appropriateness of the outputs for the largest items by using a bespoke approach that utilises the expertise from government

departments and their ALBs. These were then used to sense check the results.

UKGI has used the IRB approach to derive *IRB factors*. Our IRB factors represent multiplying factors that are applied to an annualised EL of an item to calculate the stressed loss for that item. The factors are referred to as IRB factors throughout this document unless otherwise specified. These factors are based on a rearrangement of the mathematical formula that underpins the IRB approach. The rearrangement utilises our EL estimates and removes the need to have Loss Given Default (LGD) and Exposure at Default (EAD) data as seen in box 2 below. This relies on an assumption that LGD and EAD are kept constant.

Key points to note regarding how the calculation has been derived:

- The formula has been adjusted to represent the 99th percentile rather than the 99.9th percentile as prescribed by the framework;
- The approach assumes that the LGD and EAD remain unchanged between normal conditions and the stressed conditions;
- The parameters are based on the Basel III framework and specifically we use corporate exposures; and
- The parameterisation of the IRB factors allows for cross-correlations between exposures. The cross-correlation is representative of a large, well-diversified, bank.

The prescriptive formulation of the functions, and how they are empirically parameterised can be seen in the Bank of International Settlements, Basel Committee on Banking Supervision Framework [chapter CRE31](#).

It is important to note that we use an amended version of the formula as follows:

### Box 1: Simplification of the IRB factors

We assume that:

$$EAD_{normal\ conditions} = EAD_{stressed\ conditions}$$

$$LGD_{normal\ conditions} = LGD_{stressed\ conditions}$$

Given that:

$$EC = PD \cdot LGD_{normal\ conditions} \cdot EAD_{normal\ conditions}$$

This means that:

$$\frac{EC}{PD} = LGD_{normal\ conditions} \cdot EAD_{normal\ conditions} = LGD_{stressed\ conditions} \cdot EAD_{stressed\ conditions}$$

At the same time, the formula stating the required capital, as set out in the *Banking Supervision Framework* is:

$$Required\ Capital = 8\% \cdot RWA = 8\% \cdot 12.5 \cdot EAD_{stressed\ conditions} \cdot K$$

Where “Required Capital”, which can be viewed as our AC, and the formula:

$$K = \left[ LGD \cdot N \left[ \frac{G(PD)}{\sqrt{(1-R)}} + \sqrt{\frac{R}{1-R}} \cdot G(0.999) \right] - PD \cdot LGD \right] \cdot \frac{(1 + (M - 2.5) \cdot b)}{(1 - 1.5 \cdot b)}$$

Can be further simplified to:

$$K = LGD_{stressed\ conditions} \cdot f(PD, M, b, R)$$

Where:

- $PD$  – One year probability default
- $M$  – Effective maturity of the portfolio, set to 5 as informed by a weighted average maturity of our portfolio and capped as per *Banking Supervision Framework*
- $b$  – Prescribed parameter based on corporate exposures
- $R$  – Prescribed parameter based on corporate exposures
- 0.999 – this percentile is changed to 0.99 to meet our purposes
- $N(x)$  – the cumulative distribution function for a standard normal random variable
- $G(x)$  – the inverse cumulative distribution function for a standard normal random variable

Rearranging, and using the aforementioned expression for the EC/PD, and then simplifying gives:

$$AC = \frac{EC}{PD} f(PD, M, b, R)$$

Then our stressed one-year loss is:

$$AC + EC = EC + \frac{EC}{PD} f(PD, M, b, R)$$

$$AC + EC = EC \cdot \left( \frac{PD + f(PD, M, b, R)}{PD} \right)$$

For the purposes of our calculation, the IRB factors which we multiply by our EC are:

$$\text{IRB factors} = \frac{PD + f(PD, M, b, R)}{PD}$$

## Methodology and Key Parameters

Before going into the details of the stress scenario, it is important to note the time aspect elements of the underlying data and what the stress scenario is seeking to achieve. For this discussion, please see the box below.

### Details of lifetime values and one-year values:

All quantified CL data provided to UKGI is reported on a lifetime basis. This means that all EC and PC values represent the position across the remainder of the CL's lifetime. However, the scenario analysis is performed as a one-off, one-year, external shock event. Therefore, it is important to ensure that we can move between lifetime and one-year costs timeframes so that appropriate modelling can be undertaken.

### How We Annualise PDs:

The outstanding lifetime of the CL and its lifetime PC are used to identify an appropriate credit rating. This is done by:

- Identify a PD based on the OL of the CL;
- Establish the equivalent PD for the same credit rating;
- This gives you the one-year (annualised) PD for the CL.

### How We Annualise ECs:

The ratio of the one-year PD identified above is divided by the original PD for the original OL. This ratio is then applied to the lifetime EC and the one-year EC is obtained.

## Approach for Stress Scenario of the Contingent Liability Portfolio

How the post-stressed EC for liabilities can be seen below.

### Step 1.1 – Setting up the parameterisation

The key components for parameterisation of the model are:

- Selecting an appropriate nominal credit rating; and
- Annualising the PC and EC in accordance with Box 3

Our IRB factors, representing the extent to which losses crystallise during an external shock calibrated to be equivalent to a 1 in 100-year event, are then selected based on the assigned credit rating. The IRB factors are presented in Figure 9 below, and the derivation is described in the Internal Ratings-Based Approach section.

**Figure 9: This table shows the associated IRB factor that is used for each credit rating.**

Credit Rating	IRB Factor (99%)
AAA	69.04
AA	53.23
A	38.54
BBB	26.83
BB	15.32
B	6.44
CCC/C	2.37

### Step 1.2 – Approach to calculate each liability’s additional cost

As mentioned earlier in the document, the definition of the AC is all future losses that are additional to the normal scenario EC when the sub-portfolio is subjected to the stress scenario. This is because whilst the shock only occurs for one year, it could lead to an increase in counterparty defaults for multiple years. This would in turn mean increased costs beyond the period of the shock. This is consistent with our understanding of how the IRB factors operate – i.e., the factors account not only for defaults during the year but also for potential future losses arising from shifts in expectations incorporated into their one-in-one-hundred-year scenario, but as per the IRB formula the factors are applied to annual cashflows.

The IRB factor is multiplied by the pre-stressed annualised EC to calculate the initial post-stressed annualised EC.

- The difference between the post stressed annualised EC and the pre-stressed annualised EC is the AC.
- Cross-compare the AC and lifetime EC with the liability’s RWC:

- The sum of the AC and lifetime EC cannot be greater than the RWC;
- If it is, the AC is set to be the RWC minus the lifetime EC.

The sum of the AC and the EC is capped at the RWC cost. This recognises:

- Some items will have specified maximum exposure limits as their RWC and it would be unreasonable for our stressed EC to exceed these caps, as it’s not possible in practice; and
- Departments have provided lifetime reasonable worst-case scenario for each item, and we want our approach to be informed by this information to avoid overestimating the risk from items.

We reviewed the outputs of the model to identify items which have been materially capped by the RWC to ensure it is reasonable.

### Step 2 – Calculation of portfolio level AC

To calculate the portfolio level AC, all the ACs for all items are added together.

### Step 3 – Cross checking of some of the material

Given the relative size, and properties, of a few items, they have an especially large impact on the overall outputs. Therefore, we will seek to treat these items in a bespoke way to obtain a means to cross-check our modelling findings. The rationale below is used to ensure a pragmatic approach to identify which items should be considered bespoke:

- Looking at the largest items by value, and applying judgement as to whether:
  - The AC impacts the total output significantly;
  - The relevant organisation is likely to be able to provide better information based on their own internal modelling capabilities; and
  - Have properties deemed to be relevant for a bespoke or more detailed treatment.
- Any number of properties listed above can be considered and/or may be relevant;
- The number of items that are selected for a bespoke treatment is whichever of the below options that gives the smallest number of bespoke items<sup>34</sup>:
  - Cumulatively represent over 50% of the total AC; or
  - A maximum of three; and
- The final selected items are then classified as bespoke items to be studied further to sense check the model.

It should be noted that if a 99% one-year EC that is not a cross-comparable like for like value is obtained from the relevant organisations that the bespoke items relate to, it would have the following impacts:

- Not comparing a like-for-like value limits our ability to have a meaningful sensitivity check; and
- It means that the cross correlations are not accounted for, which means that there is a further risk of a discrepancy with the one-year stressed EC.

For the liabilities that we selected in accordance with the above, we worked with the relevant departments and specifically quality assured the trigger mapping and sought to obtain a tailored value. This consisted of working with the policy teams, and their associated analytical and finance teams, that are responsible for the maintenance of these CLs and further interrogating the data supplied to us. The following themes were covered:

- Are they absolutely certain that the mapping to the trigger *Major Economic or Financial Downturn* is accurate, especially in light of how the scenario has been defined?;
- How would they estimate the one-year stressed EC in light of the external shock considered?; and
- Considering the other bespoke items that are being considered for the scenario, are there any additional cascading failures, or other additional interdependencies, that the liability owners want to consider and therefore adjust the stressed EC further?

<sup>34</sup> This approach will always yield bespoke items in the range of one to three items.

Once a satisfactory response was received, we cross checked the model outputs with the obtained values.

### A Simple Worked Example:

We have an off-budget guarantee with the following properties:

- EC = £8.00m
- RWC = £300.00m
- PC = 2.5%
- Trigger = Major Economic or Financial Downturn
- OL= 8 years left.

Assign a nominal credit rating by comparing the PC, 2.5%, at the OL of 8 years against a credit agency's probability default table. We then find that the closest match is a PD of 2.33% which is used for the purposes of the calculation. We therefore have a credit rating estimate of BBB (based on the PC and OL).

Infer the one-year PD based on the credit agency's probability default table. In this case 0.14%.

Therefore, the annualised PD and EC is:

- PD = 0.14%; and
- EC (annualised) =  $0.14\%/2.33\% \times £8.00m = £0.48m$
- The one-year IRB factor for a credit rating of BBB is 26.83

Therefore, the estimated post-stressed annualised EC is  $£0.48m \times 26.83 = £12.88m$ .

The AC is therefore  $£12.88m - £0.48m = £12.40m$ . A check is carried out to ensure that the sum of the AC and lifetime EC does not exceed the RWC.  $£12.40m + £8.00m = £20.40m < £300.00m$ . Therefore, the AC is acceptable.

AC for this CL for this liability under the scenario is £12.40m.

### Key Limitations

There are some key limitations and biases that prevent the model from fully capturing the complexity of the real portfolio.

These include, but are not limited to:

- The transformation between lifetime costs and annualised costs is approximate;
- The result contained in the report chapter should be considered as an illustrative order of magnitude possibility of what increased costs may be incurred in the event of a *Major Economic or Financial Downturn*;
- The additional cost is in relation to those items with a cross-sector trigger of *Major Economic or Financial Downturn* only. However, the data collected only maps one trigger to each liability. Therefore, the stress scenario does not include those items that may be affected by such a downturn but have a different primary cross-sector trigger.
- The stress scenario studied only represents one possible scenario. Other scenarios may occur that are either a *Major Economic or Financial Downturn* or not;
- Detailed modelling of each underlying liability has not been carried out;
- Implicit liabilities, creation of new liabilities, parallel policy responses, second-order economic factors, and creation of new contingent liabilities due to an external shock have not been considered; and

- This scenario modelling is a novel and experimental approach and should be considered a stepping-stone to further develop our understanding of how to study contingent liability portfolios in the future.



# Annex F: Guarantees

## Methodology

### Net Expected Cost Analysis

This year's report introduces a targeted analysis of the government's ability to cover the expected costs for its portfolio of on-budget financial guarantees and guarantee schemes through charging fees or premiums. This approach takes a long-term view on the sustainability of the portfolio.

Many liabilities transfer risk from the private sector to the public sector. This applies to the entire portfolio of financial guarantees analysed here. Managing Public Money stipulates that the starting basis in these cases should be that a risk-based fee is charged to the private sector (analogous to a guarantee fee for financial guarantees). Charging fees in this way ensures the private sector has an incentive to mitigate risk and reduces taxpayers' exposure to liabilities crystallising. It will not always be possible or desirable to charge the private sector a fee. For example, if the department does not have the legal power to do so, or because the policy intervention is counter-cyclical.

It should be noted that this analysis is for illustrative purposes only as the fee and premium income is not held in a segregated account, it is used for general government spending.

The analysis includes both non-fee and fee charging financial guarantees and guarantee schemes to understand how they reduce the buffer between premiums and fees charged against the expected

costs. By assessing the extent to which government is charging premiums and fees, we aim to understand whether it is being compensated adequately for the risks assumed. This analysis is critical to ensuring that government interventions remain fiscally prudent while supporting wider policy objectives.

The Net Expected Cost calculation approach evaluates whether a financial guarantee or scheme generates adequate fees and premiums to offset its Expected Cost, ensuring alignment with our focus on long-term sustainability. The analysis factors in any losses incurred to date (Crystallisations to Date) by offsetting the Lifetime Expected Premiums and Fees (defined as Premiums and Fees to Date plus Future Premiums and Fees), resulting in a Net Premium and Fees position. The Net Premium and Fees are then used to offset any Expected Cost, resulting in a net expected cost position.

This work represents a significant step forward in understanding how premiums and fees align with expected risks, offering valuable insights for future government fiscal planning.

In order to calculate a net expected cost position, we had to determine what data items Departments could reasonably supply to us in a consistent and reproducible way (this is especially important for data aggregation). Naturally, much of the information we used was obtained from widely available information from audited

departmental annual report and accounts. Where this data was not available, specialists within departmental Finance Teams supported us to provide such data.

The way in which this data was obtained and audited followed the same checks and balances for other data items collected.

**Figure 10: This table sets out the data items used for the analysis and a description.**

Data Item	Measure Type	Definition
Expected Cost	Forward <sup>35</sup> looking	A statistical measure that quantifies the potential loss to a guarantor caused by a <sup>36</sup> borrower not meeting its financial obligations.
Crystallisations to Date	Backwards <sup>37</sup> looking	The £ value of payments made to date by government to the beneficiary of a financial guarantee
Premiums and Fees to Date	Backwards looking	The £ value of fees and premiums paid to date by the beneficiary of a financial guarantee to government
Future Premiums and Fees	Forward looking	An estimate of the expected future premiums and fees to be paid to government by the beneficiary of a financial guarantee

Forward looking data points refer to events expected to occur in the future, and backward-looking data points reflect actual performance to date.

In developing an approach to quantify the level of ‘risk to reward’ for government’s participation in guarantee-related transactions, we first lean on existing formulas which are well established in financial literature, and then suitably adapt them to apply to the data items collected through this commission. Is it important to emphasise that government is not in the business of making a ‘profit’, but rather that it simply covers its Expected Cost. This means that from the four data items collected, and described above, we

can think of as representing the lifetime expected risk associated with either a facility or aggregate bucket of transactions, and, as representing the lifetime expected ‘income’ associated with either a facility or aggregate bucket of transactions. The relationship between these two (i.e., the former divided by the latter) gives a lifetime expected loss ratio not too dissimilar to that used by other financial institutions. Our approach and analysis do not intend to calculate an expected loss ratio as outlined above, but rather builds on this and evaluates the net expected cost, in £ terms, of on-budget guarantees by using the following two formulas:

<sup>35</sup> This refers to events expected to occur in the future.

<sup>36</sup> In the private sector, the term expected loss is used in relation of risks to profitability. The analogous concept is herein referred to as expected cost, reflecting a broader focus on fiscal spending.

<sup>37</sup> This refers to historical events that have occurred to date.

**Stage 1: Net Lifetime Expected**

**Premiums and Fees** = (Premiums and Fees to Date + Future Premiums and Fees) – Crystallisations to Date

**Stage 2: Net Expected Cost =**

Expected Cost – Net Lifetime Expected Premiums and Fees

The Stage 1 formula, Net Lifetime Expected Premiums and Fees seeks to quantify, in £ terms, the total residual premium income after adjusting for past crystallisations.

The Stage 2 formula, Net Expected Cost, builds on the Stage 1 formula and seeks to quantify the difference between future costs to government (that is Expected Cost) less the net Lifetime Expected Premiums and Fees. The result of this is essentially the residual risk left to government after premiums and fees have been deducted.

The variables in the formulae above have been used because they support lifetime calculations for the portfolio, aligning with our focus on assessing its long-term sustainability. However, these formulae present certain challenges, primarily the possibility of negative Net Lifetime Expected Premiums and Fees, which would lead to a wrong interpretation of the Net Expected Cost. To address these issues, we implemented the following rules:

- If the Net Lifetime Expected Premiums and Fees are  $\leq$  £0 it is shown as “0” in the table (as presented in **Figure 20B** of **Chapter 4** of the report) as it means Crystallisations to Date have been greater than the Lifetime Expected Premiums and Fees, meaning there is nothing available to offset against the Expected Cost. In that scenario the **Net**

**Expected Cost** equal the Expected **Cost**.

- Otherwise, if the Net Lifetime Expected Premiums and Fees are  $>$  £0 it means there is a surplus amount that can be used to cover some or all the Expected Cost.
- If the Net Lifetime Expected Premiums and Fees are greater than the Expected Cost, the Net Expected Cost are shown as zero in the table, meaning all the Expected cost can be fully offset with the available income.

Thus, net expected cost represents the balance that government would pay out over and above what will be recouped in premiums and fees across the lifetime of these schemes.

**Figure 11: This table shows an illustration of the methodology**

<b>Guarantee Scheme</b>	<b>Expected Costs – (£m)</b>	<b>Premiums and Fees to date – (£m)</b>	<b>Future Premiums and Fees – (£m)</b>	<b>Crystallisation to date – (£m)</b>	<b>Net Premiums and Fees – (£m)</b>	<b>Net Expected Costs – (£m)</b>	<b>Fee Coverage</b>
<b>Financial Guarantee 1.0</b>	500.0	80.0	72.0	200.0	0.0	500.0	0%
<b>Guarantee Scheme 1.0</b>	600.0	100.0	80.0	0.0	180.0	420.0	30%
<b>Guarantee Scheme 2.0</b>	30.0	186.0	0.0	0.0	186.0	0.0	620%

## Data Collection

The analysis incorporates data collected from 18 UK Government Departments (listed under **Annex B**) through our annual data commission, focusing on historical and future fee income, crystallisations to date, and expected costs.

The data we collected underwent multiple levels of verification to ensure completeness and quality. The first level of validation was integrated into the aggregation template itself, which included input validation to ensure cells contained the correct data types and error checks across columns and rows to flag potential issues. Once the completed templates were received, the CLCC team member assigned to each department manually reviewed the data, cross-checking for possible errors and consulting with departments as needed.

The second level of validation was carried out by the CLCC analytical team overseeing the data commission. They reviewed the data for obvious errors, verified internal consistency across items, and performed a reconciliation with data from the last time. This reconciliation involved mapping identifiers from the prior dataset to the current one, as many identifiers had been updated by departments. This mapping exercise enables the tracking of items over time and identified missing items, which were subsequently addressed with departments.

Additionally, this year's data commission included a new dataset on future premiums and fees, which was not part of the previous data commission. This dataset was incorporated into the net expected cost analysis to evaluate the profitability of the government's on-budget financial

guarantees portfolio and its ability to adequately cover its cost of risk associated with the portfolio. By accounting for lifetime expected premiums and fees (Premiums and Fees to Date plus Future Premiums and Fees), the analysis aims to assess whether these fees and premiums sufficiently offset incurred losses and expected costs.

## Limitations and Considerations

The analysis is subject to several limitations and considerations, which should be noted:

- **Non-Segregation of Fees:** It is normal government practise that fees and premiums collected are not held in a ring-fenced segregated account and are instead used for other government expenditures. This means the analysis is for illustrative purposes only.
- **Exclusion of Recoveries:** The analysis does not entirely account for potential recoveries from defaults, which, if included, could materially improve the financial position. In the case of schemes where collateral is held against the underlying loans, recoveries from defaults are factored into the Expected Cost calculations.
- **Data Reliability and Quality Assurance:** The methodology used for the net expected costs analysis did not undergo a separate quality assurance process as for this kind of analysis no model was developed, and no modelling assumptions were made. While the data collected from departments and used for this analysis underwent an internal quality assurance process as outlined in more detail in **Annex D**, ultimately departments are responsible for the

data they provided and therefore we have relied on the data being correct.

- **Labelling and Consistency:**  
The naming conventions, such as “Expected Costs” and “Net Expected Cost Analysis,” align with broader report definitions to ensure clarity and consistency across this and future reports.



