



UK Government
Investments

FINANCIAL INVESTMENT REPORT NOVEMBER 2025 TECHNICAL ANNEXES

Contents

Annex A: Definitions of Terms	3
Annex B: Loans and Equities Fact Sheets	6
Loans	6
Equities	8
Annex C: Data Scope and Validation	10
Departmental Data	10
Public Financial Institutions	11
Coverage of Public Sector Entities	11
Assets in Scope	11
Data Recency	12
Geographical Considerations	12
Private/Public Sector Classification	12
Data Exclusions	12
Data Validation	13
Annex D: Data Methodology	14
Analysis Scope	14
Quality Assurance	14
Application of Artificial Intelligence (AI)	15
Categorisation of Investments with Complex Investment Structures	16
Categorisation of Valuation Methodology	18
Categorisation by SIC Codes	18
Annex E: Comparison between ESA10 and IFRS Accounting Standards	20
Annex F: Valuation Methodologies	22
Fair Value Investments in the Portfolio	22
Cost-based (Historical Cost or Amortised Cost) Investments in the Portfolio	23
Equity Method Investments in the Portfolio	24

Annex G: Data and Methodology – Experimental Returns Analysis25

 Data25

 Methodology26

 Quality Assurance.....26

 Limitations to Return Metric Interpretation26

Annex H: Risk Modelling Approaches28

Annex A: Definitions of Terms

Figure A1: Table of defined terms

Term	Definition
Arms-length body	An organisation that operates at a distance from core government departments but is funded by and accountable to government, often delivering public services or regulatory functions (e.g. NHS Trusts, regulators).
Basel	International regulatory frameworks (Basel I, II, III) developed by the Basel Committee on Banking Supervision, aimed at strengthening the regulation, supervision, and risk management of banks. The framework sets minimum capital, risk, and liquidity standards for banks to promote financial stability.
Cost-based	A valuation or measurement approach that uses the historical or replacement cost of an asset or service, rather than its market or fair value.
Credit risk	The risk that a borrower or counterparty will fail to meet its contractual financial obligations in full and on time, resulting in financial loss to the lender or investor.
Currency risk	The risk of financial loss due to fluctuations in exchange rates affecting the value of assets, liabilities, or cash flows denominated in foreign currencies.
Defaults	Failures to meet the terms of a debt agreement, such as missing scheduled interest or principal payments, or breaching other key covenants.
Dividend	A distribution of distributable reserves by a company to its shareholders, typically paid in cash or additional shares.
Downside risk	Refers to the financial risk associated with the probability and magnitude of potential losses when asset returns fall below a specified threshold, such as expected return, target return, or zero. Focuses specifically on adverse scenarios and potential losses.
Economic capital modelling	A process used by financial institutions to estimate the amount of capital required to absorb potential losses from risks (credit, market, operational, etc.) over a specified time horizon and at a given confidence level. It helps ensure solvency and informs risk management and capital allocation decisions.
Equity investment	Ownership interest in an entity, typically in the form of shares, entitling the holder to a proportional claim on profits and assets.
Equity loan	Specifically referring to the Help to Buy scheme, it is a loan that can be issued to support a deposit for a new build property. It counts as a second charge on the property and must be repaid when the property is sold or the mortgage is redeemed. The first five years are interest free, with an interest rate applied in subsequent years.
Equity method	An accounting technique for recording the value of investments in associates or joint ventures. The investor initially records the value based on the cost of the transaction, and subsequently adjusts the value based on its share of the investee's profits/losses.
Equity transaction	Acquisition or disposal of residual interest in the assets of an entity after deducting its liabilities.

Term	Definition
Fair value	A measurement basis reflecting the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.
Financial asset	An item that has monetary value and is held either through a contractual right to receive something (e.g. dividends or interests) or an ownership claim on another entity (e.g. stocks and shares). In the context of this report, we often refer to equity investments and loans and not the wider range of investments that otherwise form part of this term.
Financial risk	A broad term encompassing the risk of loss due to fluctuations in financial markets, including credit risk, market risk (e.g., interest rate, currency, equity risk), liquidity risk, and operational risk.
Financial transaction	An agreement or action that results in the transfer of money or a financial asset between parties. Financial transactions include activities such as lending, borrowing, investing, purchasing, and settling obligations, and are recorded in the financial accounts of the entities involved. In the context of this report, we often refer exclusively to equity investments and loans and not the wider range of investments that otherwise form part of this term, such as guarantees.
Headroom	The difference between a limit (e.g. borrowing ceiling, risk appetite) and current utilisation, representing available capacity for further activity without breaching constraints.
Illiquid	Describes an asset that cannot be easily sold or exchanged for cash without a significant loss in value or delay.
Impairments	An impairment is an accounting adjustment made when the carrying amount (i.e. the value of an asset or liability as recorded on a company's balance sheet) of an asset exceeds its recoverable amount, indicating a decline in the asset's value.
Liquid	Describes an asset that can be easily sold or exchanged for cash without a significant loss in value or delay.
Liquidity	The ability to meet short-term obligations as they fall due, or to quickly convert assets into cash with minimal loss of value.
Loan	A financial asset resulting from a transaction in which a sum of money is lent by one party i.e., the lender(s) to the borrower under an agreement to be repaid, usually with interest, over a specified period. Loans may be secured or unsecured, with their terms and conditions governed by the loan agreement.
Management information	Operationally relevant data relating to a business function or activity.
Maturity	The date on which a financial instrument (e.g. loan, bond) becomes due for repayment of principal and any accrued interest.
Net investment return	The total return on an investment portfolio after deducting all fees, expenses, and taxes. It includes both income (e.g., interest, dividends) and capital gains/losses, realised and unrealised.
Outstanding balance	The amount of principal (and sometimes interest) that remains unpaid on a loan, credit facility, or other financial obligation at a specific point in time.

Term	Definition
Principal	The principal, short in this report for principal repayment, refers to scheduled repayments of an initial amount borrowed.
Public financial institution	A public financial institution is a government-owned or controlled entity whose main function is to provide financial services, and whose transactions are subject to the controls and reporting requirements set out in the <i>Financial Transaction Control Framework</i> .
Realised gains (losses)	Profits (or losses) that occur when an asset is sold for more (or less) than its purchase price. The value is reported in the accounts at the point of sale.
Return on capital	A measure of how efficiently a company generates profit from its total capital (both Debt and Equity). It shows how well a company is using its capital to generate returns.
Return on equity	A measure of financial performance calculated by dividing net income by shareholders' equity. It shows how effectively a company is using its equity base to generate profits.
Shareholding	The ownership of shares in a company, conferring rights such as voting and receipt of dividends.
Stochastic	Refers to processes or models that incorporate randomness or probability, often used in financial modelling and risk analysis.
Stress test	An analysis or simulation designed to assess how a financial entity or system would cope with adverse economic or financial scenarios.
Syndicated loan	The process where a group of lenders jointly provide funds to a single borrower, thereby spreading risk among multiple institutions.
Unrealised gains (losses)	The increase (or decrease) in value of an asset that is still held and has not yet been sold. These are "paper" gains or losses and can fluctuate until the asset is disposed of.

Annex B: Loans and Equities Fact Sheets

Loans

Loans are governed by contractual agreements (loan/lending agreements) that set out the key terms and conditions, containing details of the responsibilities of each party and the exact financial details (including loan amount, loan type, interest rate, period for repayments etc).

Loans are commonly used by businesses to finance expansions, acquisitions, working capital requirements or large infrastructure projects. Each loan arrangement is defined by a set of core characteristics, which can be combined in different ways depending on the specific borrowing and lending requirements. These are detailed below in **Figure A2**.

Figure A2: Understanding the characteristics of a loan

Characteristics	Detail
Borrower(s) and Lender(s)	A loan can have a single borrower and lender (bilateral) or multiple borrowers and lenders (syndicated).
Structure	A loan can be provided over a fixed time-period (term) or be considered a line of credit that can be re-drawn multiple times (revolving).
Purpose	A loan can be provided for multiple different purposes, including mergers and acquisitions (e.g. leveraged buyout), infrastructure or development projects (e.g. project finance) or other purposes.
Collateral Type	A loan can be secured against an asset deemed to be of sufficient value or unsecured.
Repayment Method	A loan can be repaid in full at the end of the term (bullet) or paid back gradually over a period (amortised).
Interest Rate Type	Interest rates can be fixed for the duration of the loan or variable and based on a national or international benchmark.

In the private sector, loans are often provided by lending institutions with an intention to achieve commercial profit. However, where the UK Government issues loans, another primary consideration is how it would help deliver on strategic policy objectives. This can mean entering into loans on less favorable commercial terms where there is a strong value-for-money case, such as wider socio-economic benefits. In addition, governments may provide loans to the private sector to promote wider investment in an industry or sector. This can be where there is a perceived risk by private lenders, and therefore government support provides more certainty and unlocks further lending or investment.

Figure A3: Key differences in structuring private vs public sector loans

Characteristic	Private Sector	Public Sector
Primary Objective	Return on capital.	Policy delivery / public value.
Pricing / Terms	Risk-based pricing with commercial margin.	Must either generate return above the government's cost of borrowing or may be concessional or below-market where costs are recognised transparently.
Risk Appetite	Limited and driven by credit risk and security.	Higher risk tolerance where justified by policy objectives. Often risks are taken that the private sector would not.
Security / Collateral	Essential to mitigate loss.	May be unsecured if collateral undermines access.
Assessment Approach	Commercial due diligence and credit rating focus.	Commercial due diligence, credit rating, alongside additional socio-economic, environmental and policy impact assessments.
Legal Terms & Covenants	Strictly enforced to protect lender rights.	May allow for flexibility in response to policy-related events.
Monitoring & Reporting	Based on financial performance and agreed reporting conditions.	May be impact- or milestone-based.
Exit Strategy / Time Horizon	Defined and commercial.	May be defined, open-ended or or linked to policy outcome.
Source of Funds / Cost of Capital	Private investor funds: higher cost reflecting risk and return profile.	Government or policy-driven finance: lower cost linked to sovereign borrowing rates.
Example Transaction	British Airways' £2bn syndicated loan facility, arranged with a consortium of around 11 major banks partially guaranteed by UK Export Finance which provided liquidity to support operations amid the COVID-19 recovery period.	Salix Finance: low-interest loans to public bodies for decarbonisation.

Equities

Equity investments are governed by legal agreements (such as shareholder agreements or otherwise) that outline the rights and responsibilities of each party, such as the type and class of shares issued, voting rights, dividend entitlements, and exit provisions.

Equity is used by businesses for a range of purposes. For example, it can be used to raise capital for further investments or to strengthen their balance sheets. Unlike loans, equity does not require repayment, but investors typically expect a return through dividends, capital appreciation, or the disposal of their shares in the future. Equity arrangements are defined by a set of core characteristics, which can vary widely depending on the nature of the investment and the strategic goals of the parties involved. These are detailed below in **Figure A4**.

Figure A4: Understanding the characteristics of equity investments

Characteristics	Detail
Investor(s)	A purchaser of the equity of a company. Private companies often raise money from a small number of investors through transactions referred to as private placements. Publicly-traded companies may raise money through public markets via public offerings, and may have a large number of investors.
Issuer(s) or Investee(s)	The entity that issued the equity and received the proceeds.
Structure	Equity can be structured through different types of shares (e.g. common shares, preferred shares etc.), each with different rights and obligations.
Purpose	Equity can be raised for various purposes, including startup funding (venture capital), business expansion (growth equity), to fund specific project initiatives, or for recapitalisation.
Control Rights	Equity may confer voting rights and influence over company decisions, or be non-voting depending on the share class.
Return Mechanism	Returns may be realised through capital gains, where the value of the investee company increases between the investment date and an exit event. Investors in more mature companies may also earn returns by receiving dividends, for example.
Exit Event	An opportunity for shareholders to sell their shares. Different types of exit events include share buybacks, secondary sales of outstanding shares, or an initial public offering (IPO) or acquisition of the investee.

In the private sector, investors - including individuals, corporations, pensions funds, private equity firms, and venture capitalists - invest in equities aiming to maximise returns according to their risk tolerance. However, when government invests and acquires an equity stake, it is often driven by national interests, strategic or policy objectives. This could include supporting growth through innovation, regional development, or catalysing private sector investment in underserved sectors. In such cases, economic and social impacts are a key consideration alongside commercial return. Government equity participation can also help

de-risk projects and attract further private investment by signalling confidence and long-term commitment.

Figure A5: Key Differences in Structuring Private vs Public Sector Equity Investments

Characteristic	Private Sector	Public Sector
Primary Objective	Return on capital and control.	Policy delivery / public value / ownership of strategic assets, while delivering value for money for taxpayers under the <i>Financial Transaction Control Framework</i> .
Pricing / Terms	Expected return-based pricing.	Case-dependent.
Risk Appetite	Varies, driven by investor's strategies.	May have higher risk tolerance where aligned to policy objectives.
Security / Collateral	N/A	N/A
Assessment Approach	Commercial due diligence.	Broader socio-economic, environmental and policy impact assessments.
Legal Terms & Covenants	Case-dependent.	May allow for flexibility in response to policy-related events.
Monitoring & Reporting	Performance and profit driven.	Often more multi-faceted monitoring and adopt metrics aligned to policy objectives.
Exit Strategy / Time Horizon	Defined, open-ended and commercial.	May be defined, open-ended or linked to policy outcome.
Source of Funds / Cost of Capital	From both retail and institutional investors.	Mainly from government but often partner with private investors.
Example Transaction	A Private Equity Fund buying out a company with a view to exit in a few years with a profit.	EutelSat: equity investment offers the government a Board seat and control of a strategic asset while influencing the future of UK's space industry to achieve policy objectives.

Annex C:

Data Scope and Validation

The analysis included within this report is based on data from both audited accounting information as well as unaudited management information. None of the data presented within it, should be considered as national or official statistics. The full list of organisations and parameters in scope for the data collection can be found at the end of this annex.

Departmental Data

Data on investments, including valuations, for financial year 2023/24 was commissioned from government departments. To ensure robustness, and timeliness, of data returns, only data produced as part of the auditing process was requested. This information would already have been shared with the National Audit Office for audit purposes for the production of departments' annual report and accounts for financial year 2023/24. As such, the departments already had the data accessible to them, therefore a pre-defined template was not used. The data received was cross checked and validated manually by UK Government Investments (UKGI) ahead of inclusion in this report. Some additional supplementation of the data was undertaken, for example, assigning a sector which the investment relates to.

Figure A6: List of the 18 government departments in scope for the report

Department Name	
Cabinet Office (CO)	Department of Health and Social Care (DHSC)
Department for Business and Trade (DBT)	Foreign, Commonwealth and Development Office (FCDO)
Department for Culture, Media and Sports (DCMS)	His Majesty's Revenue and Customs (HMRC)
Department for Food and Rural Affairs (DEFRA)	His Majesty's Treasury (HMT)
Department for Energy Security and Net Zero (DESNZ)	Home Office (HO)
Department for Education (DfE)	Ministry of Defence (MOD)
Department for Transport (DfT)	Ministry of Housing, Communities and Local Government (MHCLG)
Department for Science, Innovation and Technology (DSIT)	Ministry of Justice (MOJ)
Department for Work and Pensions (DWP)	UK Export Finance (UKEF)

Not all the 18 departments above are included in the data used in the report because they do not have any investments that are within scope. 2 of the 18 departments provided a nil return (HM Revenue and Customs and Home Office nil returns).

Public Financial Institutions

To establish an accurate baseline for the government's financial investments across the portfolio, UKGI also gathered data on investments from some of the designated and non-designated public financial institutions for the financial year 2024/25. This enabled UKGI to create a more up-to-date dataset for these investors. A pre-defined data template was sent to these organisations to populate. As this data had not gone through the auditing process at the point of the data collection, this data should be viewed as management information only. As was the case for departmental data, a number of checks and validations were undertaken by UKGI. Public financial institutions for which further data was not commissioned were still considered when gathering information about the wider public financial institutions landscape.

Figure A7: List of the designated public financial institutions for this report

Institution Name	Further data collection undertaken?
British Business Bank (BBB)	Yes
British International Investment (BII)	No
National Wealth Fund (NWF)	Yes
The Student Loans Company (SLC)	Yes
UK Export Finance (UKEF)	Yes

Figure A8: List of the non-designated public financial institutions for this report

Institution Name	Further data collection undertaken?
Great British Energy (GBE)	No
Homes England (HE)	Yes
National Housing Bank (NHB)	No

Coverage of Public Sector Entities

The scope is strictly limited to central government. Devolved administrations and local governments are explicitly excluded. Coverage extends to the 18 central government departments listed above and all organisations within their respective accounting boundaries. In addition, the scope specifically encompasses certain public financial institutions and similar bodies, a list of these institutions that are included in the scope of this report can also be found in **Figures A7 and A8**. Local government at all tiers, NHS trusts, and pension funds fall outside the scope of this exercise.

Assets in Scope

The report covers financial assets of the following types: equity, loans, convertible debt or loans (where conversion to equity is possible), funds (where underlying assets are equity or loans), long-term trade receivables classified as loans under [Consolidated Budget Guidance](#)

2025/26, limited partnership interests, and joint ventures. A broad range of asset types are excluded, notably: property, plant and equipment, cash and foreign exchange contracts, derivatives, provisions, trade receivables and payables, inventories, lease liabilities, overdrafts, guarantees, general fund holdings, pension assets, revaluation reserves, right-of-use and intangible assets, heritage assets, charitable and lottery funds, capital contribution reserves, and intellectual property. While guarantee positions for public financial institution will be restated, guarantees as a class of asset are not included within the primary scope.

Data Recency

Only assets held as at the end of the specified financial year are included. For central government departments and their boundary organisations, data was collected as of 31 March 2024. For public financial institutions and other relevant organisations, we obtained unaudited data as of 31 March 2025.

This annex provides a definitive statement of the data scope as it stands at the time of reporting, reflecting both formal documentation and the latest consensus among principal stakeholders.

Geographical Considerations

The geographical registration of assets is not a limiting factor; all relevant financial assets are considered irrespective of their geography of registration or economic activity.

Private/Public Sector Classification

Only entities classified as belonging to the private sector under European System of Accounts 2010 standards are included. Accordingly, public sector organisations, public corporations, and intra-public sector equity holdings or loans are excluded from consideration.

Data Exclusions

The data scope of the government's investment portfolio analysed within this report includes loans and equity investments into the private sector that are delivered by central government departments and any organisation within their accounting boundaries. The scope underpinning this report was developed iteratively, informed by evolving report specifications and a clearer understanding of practical constraints and opportunities.

The pre-defined scope meant that some departmental and public financial institution data returns were excluded. This is because some items were classified as public sector investments which fall outside our scope. Investments made by local authorities or NHS trusts were also excluded as these organisations sit outside the accounting boundaries of central government departments. Items were also excluded where departments could not determine whether investments were public or private sector. The Office for National Statistics reviewed the private and public classification of 99.9% of the portfolio value, which

confirmed that UKGI's exclusions were appropriate and enabled some classification of previously unidentified items. Additionally, investment types such as pensions funds, bonds, liquid deposits, and derivatives are not covered in this report.

Data Validation

In response to the returns, follow-ups were conducted on received datasets and additional reviews were undertaken on portfolio totals.

Handling of Specific Data Limitations

Line items in the returned data provided to UKGI from central government departments and public financial institutions sometimes contained certain nuances. For example, dividends included some negative values.¹ Moreover, interest charged on outstanding loans consisted of different accounting methods of reporting them. Specific issues like this were attempted to be resolved through further enquiries with the data providers on a record-by-record basis.

¹ In general, dividends themselves cannot be negative. However, there are situations that can feel similar in economic effect and/or accounting presentation, such as capital calls, where further investment may be required by shareholders in certain investment vehicles.

Annex D:

Data Methodology

Analysis Scope

Before the analysis was prepared, workshops were undertaken with subject matter experts to establish what potential analysis would be of most interest and benefit based on the data being collected.

Once the data had been received by UK Government Investments (UKGI), departmental returns were combined into a standardised dataset using common columns identified through an initial review of submissions. Where critical information was missing, departments were contacted directly to provide the required data. Further miscellaneous clarifications were also undertaken as all returns were manually reviewed.

Note that due to its significant size compared to other assets, the student loans portfolio is a statistical outlier and therefore excluded from most analytical outputs. This is because its overall value is so large that it would skew the results of any analysis undertaken and conclusions drawn across the portfolio.

Excel was selected as the primary analytical tool given the exploratory nature of this exercise. In the future, we may consider building a more permanent, code based, analytical pipeline to increase robustness and achieve efficiencies. Data was processed through Power Query to apply necessary exclusions, leading to the data only including items which are equity or loans, and are classified as private sector investments.

The analysis relied primarily on aggregated values based on categories as seen in the report, with pivot tables generating descriptive statistics and underlying data for visualisations. The charts produced included waterfall charts showing transaction flows, pie charts for categorical breakdowns, and horizontal bar charts for comparative analysis.

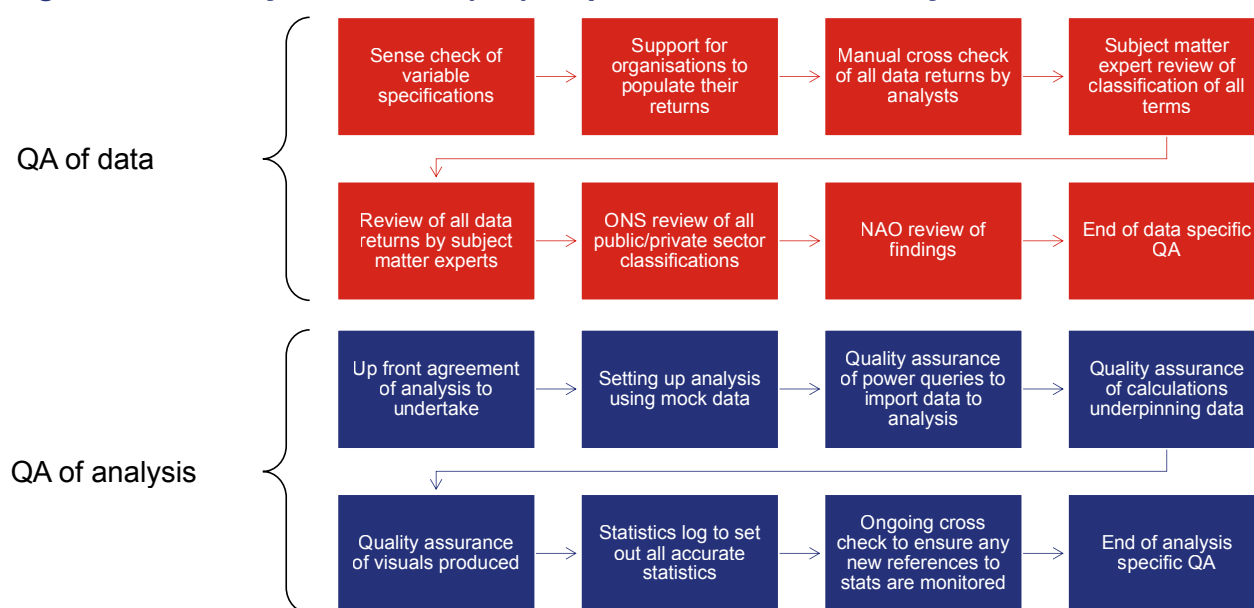
The same methodology was carried out for the public financial institutions unaudited management information as of 31 March 2025. However, as a standardised template was provided to these institutions, data aggregation was streamlined and there was improved data quality. This resulted in fewer missing entries, fewer instances of follow up, and increased consistency of structure across all returns.

Quality Assurance

Several steps have been taken to ensure quality and reliability of the dataset and analysis. All data underwent a multi-stage quality assurance process, internally and externally. Both the departmental commission return data, and public financial institution data were scrutinised and validated by subject matter experts at UKGI. Similarly, all Power Queries

and analytical outputs were subject to an in-depth quality assurance exercise to ensure accuracy and methodological consistency. The quality assurance of the analysis focused on the underlying data of the visuals and the structure of the analysis. In addition to the Office for National Statistics (ONS) reviewing the combined data, the National Audit Office (NAO) was consulted on the presentation of analysis within the report to ensure no information was misrepresented. Our full data quality assurance process can be seen in **Figure A9** below.

Figure A9: Quality Assurance (QA) steps of dataset and analysis



Application of Artificial Intelligence (AI)

To produce this report, internally available AI tools, compliant with the data security standards of our organisation, have been used in a limited way. Use of AI tools has been compliant with government's AI policy, standards and guidelines. Their use has mainly been experimental to explore use cases for our report production. In any instance that AI has been employed in relation to the report, we have taken the following steps to ensure data, drafting, and analysis is fit for purpose:

- In instances where data cleaning or supplementation has been proposed through AI tools, all AI-generated data has been manually reviewed by subject matter experts such that at least 99% of the portfolio by value has been cross checked and validated.
- In instances where AI has been used for drafting purposes, any text generated has been through multiple rounds of review by drafters and senior staff.
- In instances where AI has been used to propose aggregation of categorical data into super categories, the categorisation has been through multiple rounds of subject matter expert review and scrutiny.

All decisions on wording, or data values, have ultimately been made by a human unless the impact is demonstrably immaterial.

Categorisation of Investments with Complex Investment Structures

The underlying data for this report classifies each investment according to a number of different characteristics. Most of these classifications were supplied directly by departments via the data commission process, with a few being supplemented by UKGI. These characteristics include:

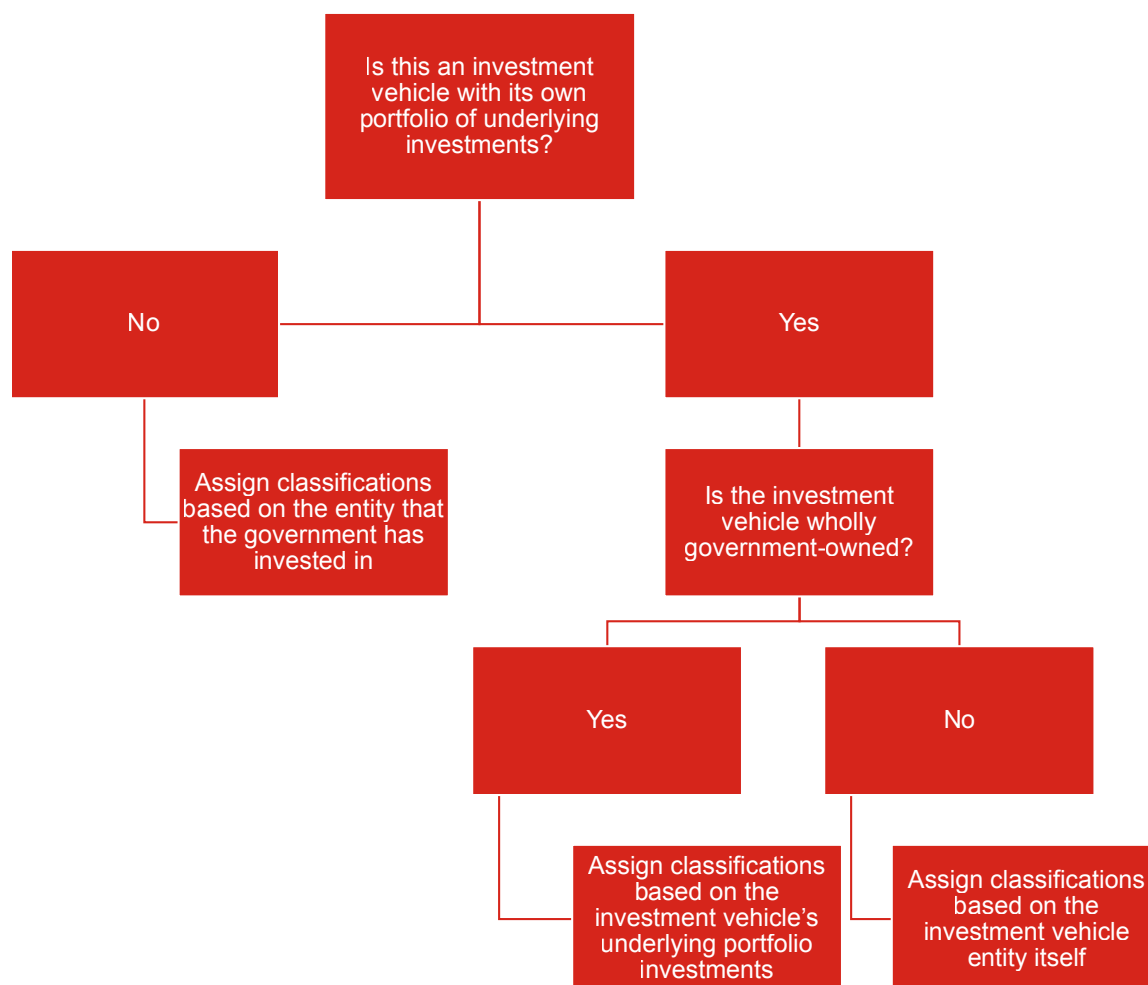
- Geographic focus;
- Valuation method;
- Sector (based on Standard Industrial Classification (SIC) codes); and
- Its classification as a public or private sector investment according to European System of Accounts 2010.

In some cases where data was supplemented by UKGI, verification from relevant organisations providing the data was sought.

Accurate classification of the investment data can be challenging as investees within the portfolio operate with different financial structures and operating models. For example, whilst classifying relevant SIC code or geography for a company producing a good or service is relatively straightforward, doing so for a fund that invests in multiple sectors or products may not be as straightforward.

Wholly government-owned investment vehicles like the public financial institutions fall into the latter category, as do investments in multilateral development banks such as the International Finance Corporation, where the UK government is one of multiple investors. Investments in these types of investment vehicles require distinguishing whether the characteristic label corresponds to the investment vehicle itself, or to its underlying investments.

For example, a UK-based fund could be assigned a geographic focus of “international” if its underlying investments are primarily outside of the UK. For this reason, UKGI adhered to a consistent structure when classifying investments in these types of investment vehicles, as detailed in **Figure A10**.

Figure A10: Structure UKGI used to classify investments with a complex structure

As shown above, for investment vehicles, that are wholly government-owned, characteristics of the investment were assigned based on the investment vehicle's underlying portfolio of investments. This was determined to be most appropriate as the investment vehicle effectively functions as a government capital pass-through. In these structures, the underlying portfolio investments best represent the intention of the investment and associated financial transaction. Conversely, investment vehicles which are not wholly government-owned are characterised at the level of the investment vehicle, given that the presence of other investors in the vehicle limits government's power to control and direct underlying investment portfolio decisions.

The decision structure described above was applied in determining each investment's geographic focus and SIC codes, as well as in classifying each investment as private- or public-sector, and identifying the valuation methodology used to value each investment. Further information relevant to these investment characteristics is outlined in the following paragraphs.

Categorisation of Valuation Methodology

Valuations of individual assets were provided to UKGI by departments and public financial institutions. The valuation methodologies reported to us were taken as given and the reported methodologies were taken as given. The only exception to this were instances where the return was ambiguous in which case we sought further clarification. No further validations were undertaken.

There are a range of methodologies and standards that can be applied based on the specific understanding and context of a loan or equity investment. This means there is complexity in terms of how to categorise the way assets have been valued.

To enable a more effective way of scrutinising the portfolio, a valuation methodology taxonomy was developed as to create aggregate categories for the methodologies. This was a taxonomy that was tested on numerous occasions with a range of equity and credit experts. Furthermore, the allocated high level valuation methods were also cross checked by three independent reviewers covering >99% of the portfolio by value. Therefore, there is an error rate of <1% for the valuation classifications which is not deemed big enough to impact any conclusions from the analysis.

However, for each valuation method, the quality of the underlying assumptions impact the accuracy of the valuation itself. The quality of the underlying assumptions is not something UKGI explored for the purposes of this report. This is deemed to be a bigger source of uncertainty in the aggregated value assessment than the classification factor. A breakdown of the different valuation methodologies can be seen in **Annex F**.

Therefore, while this report provides an aggregate view of valuations, the range, and difference, in methods applied to each item within the portfolio puts some constraints on the scope of reporting on a collective value of either set of assets.

This report is in its first iteration, and as such it is too soon to report on deeper analysis into limitations associated with set valuation methods. Future iterations of this report may consider analysis to explore this matter further. Looking forward, this can offer insights on the optimistic and pessimistic values of the portfolio and its sub-portfolios.

Categorisation by SIC Codes

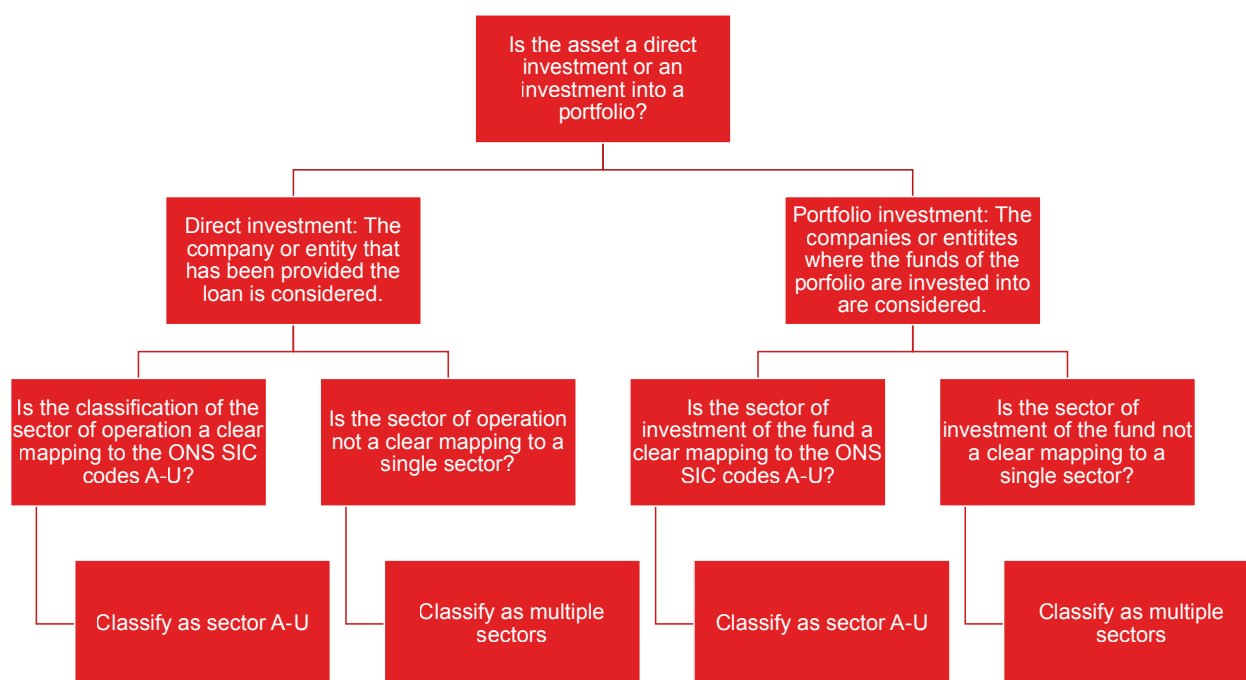
SIC codes were supplemented by UKGI for assets. This was done because sectoral composition is a highly relevant perspective to take, but it was out of scope of the data commission as SIC code classifications do not form part of the financial accounting process. We consider the SIC code allocation to be from the perspective of where the risk sits. For loans, this would be the sector in which the loan taker operates within and for equity it reflects the industry the company operates within. In either case, multiple sectors can be relevant and no single classification is possible.

This is an example where a use case for using AI was trialled. Using a secure and authorised generative AI tool available in house, SIC codes were allocated to each of the assets based on the information for each asset that already existed in the dataset. Upon review, the SIC codes proposed by the AI tool were not deemed to be sufficiently reliable, and therefore a manual review of the AI SIC code classifications was performed. The final SIC code classifications reflected in this report are the result of two subsequent reviews and revisions to the original AI-generated classifications. This is the same approach that UKGI uses when assigning classifications in other reports such as the Annual Report on Contingent Liabilities.

The manual review process was completed based on a structured approach to SIC code assignment. The dataset includes a large number of individual investment data points. Portfolio value is concentrated, with certain investments contributing the majority of value while many other investments are immaterial to the portfolio as a whole. The manual SIC code reviews described above were performed on the investments which account for >99% of the portfolio by value, which was considered to provide reasonable certainty around the accuracy of the final classifications, while remaining efficient. This means that there is a potential <1% error rate in the sector mapping data.

In future years, we may consider asking for the SIC code allocation of the asset from organisations directly. The decision tree employed to assign the SIC codes in the final round of classifications is outlined in **Figure A11**.

Figure A11: This decision tree shows how the classification of sectors of assets were undertaken. It shows how direct investments and funds are handled as well as how the term multiple sectors is defined.



Annex E: Comparison between ESA10 and IFRS Accounting Standards

European System of Accounts 2019 (ESA10) and International Financial Reporting Standards (IFRS) serve fundamentally different purposes and users, which therefore requires different rules and treatment of assets. ESA10, a statistical framework for compiling national accounts, supports macroeconomic analysis and enables comparisons across jurisdictions, while IFRS accounting standards supports organisation-level financial reporting. The table below illustrates key areas of difference between the two standards to provide clarity on how this can impact the figures reported.

Figure A12: Comparison table of ESA10 and IFRS. Public financial institutions for which further data was not commissioned were still considered.

	IFRS	ESA10
Purpose	Financial reporting for investors and stakeholders at level of corporate unit.	National accounting for government and macroeconomic statistics at level of country.
Basis	Accrual-based, economic substance over form.	Accrual-based and emphasises economic ownership, which is typically determined by legal/formal control and the party bearing the associated risks and rewards.
Standard-setting Body	International Accounting Standards Board (IASB)	Eurostat (via European Commission)
Time of recording	Based on contractual/legal terms and substance.	Based on economic ownership and timing of control transfer.
Regular revaluation of assets	Usually encouraged for financial assets per IFRS9.	Uses historic cost, with revaluation only for specific statistical reasons (e.g., market value adjustments for national accounts).
Use of Impairments	Required under IFRS 9/ IAS 36 based on estimated expected losses.	To ensure comparability across countries, ESA10 focuses on objective losses, as opposed to the estimations under IFRS. Losses are only recognised when triggered by observable events such as default. Loan partitioning may be used to separate guaranteed or risk-bearing components, but not for prospective loss estimation.
Use of provisions	Recognised if >50% chance of future outflow which can be reliably measured.	Similar to impairments, focus of ESA10 is on objective losses. Provisions are therefore not recognised until an actual liability or outflow has crystallised.

	IFRS	ESA10
Application to government	Used in all public bodies with audited financials at entity level, although adapted via the Government Financial Reporting Manual for public sector use. Consolidated via Whole of Government Accounts.	Used by Office for National Statistics to produce UK National Accounts. National accounts define key fiscal metrics such as public sector net borrowing, public sector net debt and public sector net financial liabilities.

Annex F:

Valuation Methodologies

An overview of valuation methodologies used by departments and public financial institutions to value investments within the government's financial transactions portfolio (excluding student loans) for this report.

Fair Value Investments in the Portfolio

£37bn (71%) of the investments within the portfolio are valued using fair value methodology. The largest single component is the Help to Buy scheme, accounting for £17bn.

Overview of valuation methodology

International Financial Reporting Standards defines fair value as “The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date”. Fair value therefore represents the price an asset could achieve in a transaction between a willing and knowledgeable buyer and seller, and reflects current market conditions.

The fair value of an investment can be estimated using a number of underlying methodologies. For assets where there is a reliable current market price, such as for listed shares or some financial instruments, this market price may be the best representation of fair value. For assets in less transparent markets, common methodologies include the income approach and market approach. Under the income approach, future expected cash flows intrinsic to the investment are discounted to present value using a discount rate that reflects the risks associated with the investment. Under the market approach, the value of the investment is estimated by comparing it to similar investments or transactions in the market.

Application of valuation methodology

For accounting purposes, investments may be recorded at fair value in several circumstances. Assets held for trading (for example, shares in publicly-traded companies) and equity investments are typically recorded at fair value. Investments in loans may also be recorded at fair value under certain circumstances.

Benefits of methodology

- Provides an up-to-date snapshot of what the asset could be sold for in the market at the measurement date.
- Takes into account real-time market dynamics and future expectations, including risk factors.

Useful for portfolio management, investment analysis, and strategic planning due to its relevance and timeliness.

Limitations of methodology

- Can be volatile (values can materially change year to year).
- Impacted by the reliability and certainty of assumptions which may be subjective.
- Complexity of the methodology means that it is not always practicable for unique or illiquid assets.

Cost-based (Historical Cost or Amortised Cost) Investments in the Portfolio

£13bn (25%) of the portfolio is valued using the cost-based methodology, with the largest assets valued under this methodology being the International Bank for Reconstruction and Development (£2.0bn), and International Finance Corporation (£1.4bn).

Overview of valuation methodology

Under cost-based valuation approaches, the value of an investment is recorded based on the amount paid to purchase the asset. Over time the value of the investment may be adjusted for amortisation (amortised cost methodology) or impairment.

Application of valuation methodology

The cost-based methodology is typically used to value assets that are held for their expected cash flows (such as loans held to maturity). This is common for government loans and receivables, especially when market-based or income-based valuation methods are not applicable.

Benefits of methodology

- Based on the original cost of acquisition or construction, making it straightforward to apply and verify.
- Less susceptible to market fluctuations, which can help maintain consistency in financial statements.
- Particularly useful when market prices are unavailable or unreliable, such as for specialised public sector assets or long-term loans.

Limitations of methodology

- The valuation is based on historical cost, so cost-based values may diverge from fair value over time and may not represent the asset's true economic worth.
- It does not account for changes in market conditions, asset performance, or external economic factors that could affect value.

Equity Method Investments in the Portfolio

£2bn (4%) of the portfolio is valued using the equity method, with the assets with the highest value incorporated within Department for Transport's accounts; National Air Traffic Service at £447m and Network Rail Insurance at £293m.

Overview of valuation methodology

The equity method is typically used to record the value of an equity investment in a business. The investor initially records the investment at cost following the purchase transaction. Subsequently, the value is adjusted to reflect the investor's share of the business's profits or losses, as well as dividends received and impairment losses.

Application of valuation methodology

This valuation methodology is typically applied when an investor has significant influence over another organisation, such as holding a 20–50% equity stake in a company or joint venture, where full control is not established but strategic influence can be exerted through shareholding. Equity method is commonly used to record investments in associates or joint ventures.

Benefits of methodology

- Recognises an investor's share of profits and losses, providing a more accurate representation of financial performance than cost method.
- Captures the extent of influence the investor has over the investee, offering a fuller picture of its strategic involvement.

Limitations of methodology

- Requires more detailed accounting and understanding of the investee's financials.
- Relies on regular and accurate financial information from the investee, necessitating ongoing monitoring and updates.
- Does not reflect the current market value of the investment, which may limit comparability or transparency in certain contexts.

Annex G: Data and Methodology – Experimental Returns Analysis

Data

In addition to the data reporting and methodologies described in **Annex C** and **Annex D**, an experimental exercise was undertaken to estimate the annual gross return on asset book. This experimental methodology was conducted for the following organisations: British Business Bank, British International Investments, Homes England, Multilateral Development Banks (in which the UK government has invested), National Wealth Fund, and UK Export Finance. This was done so that the majority of the non-student loan portfolio by value would be covered.

A separate data collection, similar but distinct to our management information data collection for 2024/25 financial year data, was undertaken by HM Treasury (HMT). UK Government Investments (UKGI) did not engage in any cross-validation of the data collected. The financial asset data was drawn from audited published annual accounts where possible. If this was not possible to obtain, then the organisations provided their relevant data that underpins the annual accounts. The aim was to keep all data consistent with accounting standards; figures used in the exercise are either directly audited (as they appear in annual report and accounts) or indirectly audited (as they form the basis of audited numbers). For British International Investments and the Multilateral Development Banks there are no dividend flows, and so the recorded asset values in HMT's and the Foreign, Commonwealth and Development Office's annual report and accounts adjusted for new investments have been used.

Figure A13: Data definitions for the annual gross return on asset book calculation. Public financial institutions for which further data was not commissioned were still considered.

Data Categories	Definitions
Opening book value	Value of book at start of year (opening balance, brought forward balance, carrying amount at beginning of period).
Value changes	Changes in value over the year (fair value adjustments, impairments, ECLs, bad debt charges/provision, write downs, exchange rate differences, FX revaluation, revaluation gains/losses).
New investments	New investments made (additions, acquisitions, new loans issued, equity subscribed, initial recognition of financial assets).
Investments sold	Investments sold (disposals, derecognition, redemptions, liquidations, derecognition of financial assets, capital transfers).

Data Categories	Definitions
Loan repayments	Loan repayments principle only (capital repayment, recovery of principal, loan balance reduction, reduction in carrying amount).
Interest and dividend income	Interest or dividend income on investments (accrued interest, dividend income, coupon income, yield, investment income).
Closing book value	Value of book at year end (closing balance, balance carried forward, year end balance, carrying amount at end of period).

Methodology

An adjusted return calculation metric was formulated to produce an aggregate annual gross return on asset book:

$$\frac{\text{interest and dividend income} + \text{value changes}}{(\text{opening book value} + (\text{opening book value} + \text{new investments} + \text{value changes} - \text{loan repayments} - \text{investments sold}))/2}$$

Note that the average loan book size would be calculated on a straight-line average basis. The definitions of the variables can be seen in **Figure A13**.

Quality Assurance

To provide external assurance of the data and methodology used, the Government Actuary's Department was asked to conduct a quality assurance review. This included reviewing the data, methodology, and calculations. The recommendations that they suggested as a result of their review were implemented. UKGI did not participate in this quality assurance process.

Limitations to Return Metric Interpretation

The non-standard return calculation metric presents a number of limitations relating to its interpretation. Therefore, a number of key limitations were identified. These are as follows:

- this is an experimental calculation and metric;
- the figure is considered to be a gross return metric. That is to say, it accounts for only changes in the value of investments, without factoring in any administrative or operational overheads, or any cost of financing the assets;
- this is a one-year snapshot including investments of different maturities. As such, the return metric should not be compared to the current gilt rate, given that many investments will have been made during previous decades when gilt yields were lower;
- the data underpinning the figure has been aggregated by organisations and therefore while HMT has attempted to control key variables, there will likely be differences between the make-up of each organisation's individual data set; and

- e. we have included this metric to provide an initial estimation of returns at the sub-portfolio level to improve fiscal transparency, but there are limitations to this metric. The gross return on asset book calculation will be refined and improved in future years.

Annex H:

Risk Modelling Approaches

Figure A14: An overview of different risk modelling approaches, including the merits and challenges of each approach. Public financial institutions for which further data was not commissioned were still considered.

Risk modelling approach	Definition	Merits	Challenges
Stress testing	Vary multiple assumptions at once in a way that mimics severe adverse events to determine impact on financial position.	- Identifies vulnerabilities under extreme scenarios - A common and easily understood risk management technique - Supports contingency planning	- Requires assumptions about unlikely events - Can oversimplify correlations - Does not assign likelihood to outcomes
Sensitivity analysis	Provides an idea of how sensitive model results are to individual assumptions by varying each input independently.	- Highlights key risk drivers - Simple to implement - Facilitates understanding of parameter impacts	- Ignores interactions between variables - Limited to small changes in inputs - Does not simulate real-world dynamics
Scenario analysis	Vary multiple assumption at once to simulate plausible future states.	- Simulates plausible real-world scenarios - Helps decision makers understand risks intuitively - A common and easily understood risk management technique	- Requires quality data, and careful design to avoid unrealistic or incoherent scenarios - May be hard to integrate with other risk quantification approaches
Stochastic modelling	Provides a probability distribution of outcomes to determine possible losses for any given likelihood.	- Quantifies risk with probability distributions - Enables risk-adjusted performance measurement	- Data intensive and complex to implement - Heavily reliant on modelling assumptions - Difficult to communicate results to stakeholders

Risk modelling approach	Definition	Merits	Challenges
Reverse stress testing	Identifies extreme but plausible scenarios that could lead to severe financial losses.	• Can be used to qualitatively validate the reasonableness of stochastic model outputs • Highlights potential vulnerabilities of stochastic models	• Highly dependent on subjective scenario selection • Defining realistic but severe outcomes can be complex • Less useful in suggesting improvements to stochastic models

