

Article

Foreign Direct Investment: a methods comparison of ONS and externally produced estimates

Summary of key differences between ONS estimates of inward foreign direct investment and externally produced estimates.

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1 . Main points

- Trends in inward foreign direct investment (FDI) sometimes vary between official estimates (produced by the ONS) and external estimates (produced by other organisations); potentially causing confusion for users of FDI statistics.
- For example, if official FDI statistics indicate higher foreign direct investment flows into the UK, this does not necessarily mean greater FDI activity at a project level (for example, a higher number of FDI projects or jobs created).
- Overall, estimates vary due to there being two distinct approaches to measuring FDI; official FDI estimates focus on the financial investment (referred to as a “top-down” measurement approach) whereas external estimates focus on FDI activity at a project level (referred to as a “bottom-up” measurement approach).
- Estimates of inward FDI can vary due to different definitions; official estimates produced by the ONS follow strict international guidelines, while “bottom-up” estimates have a broader definition of FDI and often include domestic financing in their FDI estimates.
- Estimates of inward FDI can vary due to different methodologies; for example, the ONS records FDI at the time the financial exchange has taken place, whereas “bottom-up” estimates include investments at the time of announcement.
- Estimates of inward FDI can vary due to the use of different data sources; for example, official estimates are produced using large-scale business surveys, supplemented with other sources including data from the Bank of England; “bottom-up” estimates rely mainly on news and media sources, investment promotion agencies, and industry-based databases.

2 . Introduction

Foreign direct investment (FDI) refers to cross-border investments made with the objective of establishing a lasting interest in the host economy and it can play an important role in a country's long-term economic growth. Important benefits of FDI include the creation of new jobs, new and more efficient management practices, and technological progress. While the UK is a leading source and destination for FDI, the recent economic climate has amplified interest into how FDI into the UK has performed; thus, raising demand for timely and granular FDI estimates.

Available to users are official FDI estimates produced by the ONS, estimates compiled by international organisations using ONS data, and other externally produced estimates (hereafter referred to as “bottom-up” estimates) produced by the Department for International Trade (DIT) and private organisations. The recent [UK Investment Policy](#) report by the International Trade Committee highlighted that the varying sources of FDI sometimes differ in trends, leading to an inconsistent picture of inward FDI. As a result, it highlighted the importance for users of FDI statistics to be aware of why differences between the various estimates of FDI exist, before deciding on which statistics to use and when.

Official FDI statistics produced by the ONS are considered “top-down” estimates, covering cross-border financial investment positions and corresponding financial and income flows. Through large-scale surveys and other supplementary data sources, these estimates follow strict international guidelines on how the investing country and host are identified, and what is and is not included within the scope of FDI (for example, only legally completed FDI transactions are in scope, while, domestically raised finance by foreign-owned UK companies are not included in headline FDI flows estimates). Furthermore, the estimates from this approach reflect expansions, disinvestments, mergers and acquisitions, reinvested (retained) earnings, corporate restructures and debt restructures (although, not all are separately identifiable).

In contrast, external estimates (not including databases compiled by international organisations using ONS data) follow a “bottom-up” approach, whereby the focus is on the underlying project-level activity resulting from such financial flows (for example, the number of new projects initiated, jobs created, or the resulting capital expenditure). These “bottom-up” estimates tend to have a broader definition of FDI than that of official statistics; such that they include newly announced investment projects (as opposed to just completed financial transactions) and new projects that foreign-owned enterprises undertake using domestically raised funds. This approach often allows for an industry-destination and country-origin breakdown of the investment project, but the broader definitions may consequently overstate headline estimates of FDI.

In summary, the varying sources of FDI sometimes differ in trends, leading to an inconsistent picture on foreign investment into the UK. Much of the differences stem from different definitions, methodologies and data sources used in the compilation of FDI estimates. This article provides a summary of such differences between a selected list of frequently used external FDI sources, listed in Table 1.

Table 1: List of frequently used FDI sources, produced externally to the ONS

FDI report or database	Source	Type of organisation
Inward investment results	Department for International Trade (DIT) UK Government department	
fDi Markets	Financial Times (FT)	Private company
The UK Attractiveness Survey	Ernst and Young (EY)	Private company
Global Locations Trends	IBM	Private company
International Direct Investment Statistics	Organisation for Economic Co-operation and Development (OECD)	International organisation
World Investment Report	United Nations Conference on Trade and Development (UNCTAD)	International organisation
Coordinated Direct Investment Survey	International Monetary Fund (IMF)	International organisation
Balance of Payments database Eurostat		European organisation

Source: Office for National Statistics

3 . Why FDI estimates from different sources vary

The latest foreign direct investment (FDI) statistics by the ONS (published in [Foreign direct investment involving UK companies: 2018](#)), indicated lower FDI flows into the UK in 2018 compared with 2017. The value of inward FDI flows was £49.1 billion in 2018, approximately one-third lower than that in 2017 (when it was £74.9 billion). While the ONS focuses on producing estimates on the financial value of FDI, “bottom-up” estimates focus on resulting FDI activity at a project level. As such, they mainly produce estimates on the number of FDI projects and the number of new jobs created by FDI.

As Figure 1 shows, the latest “bottom-up” estimates generally indicate a fall in both new FDI projects and jobs created in 2018, compared with 2017. On average, IBM, Department for International Trade (DIT) and Ernst and Young (EY) estimate 1,290 new FDI projects in 2018, a fall of approximately 15% compared with 2017. Though the Financial Times (FT) estimate a similar amount of new FDI projects in 2018 (1,278 new projects), compared with 2017, they suggest an almost 20% increase in new projects.

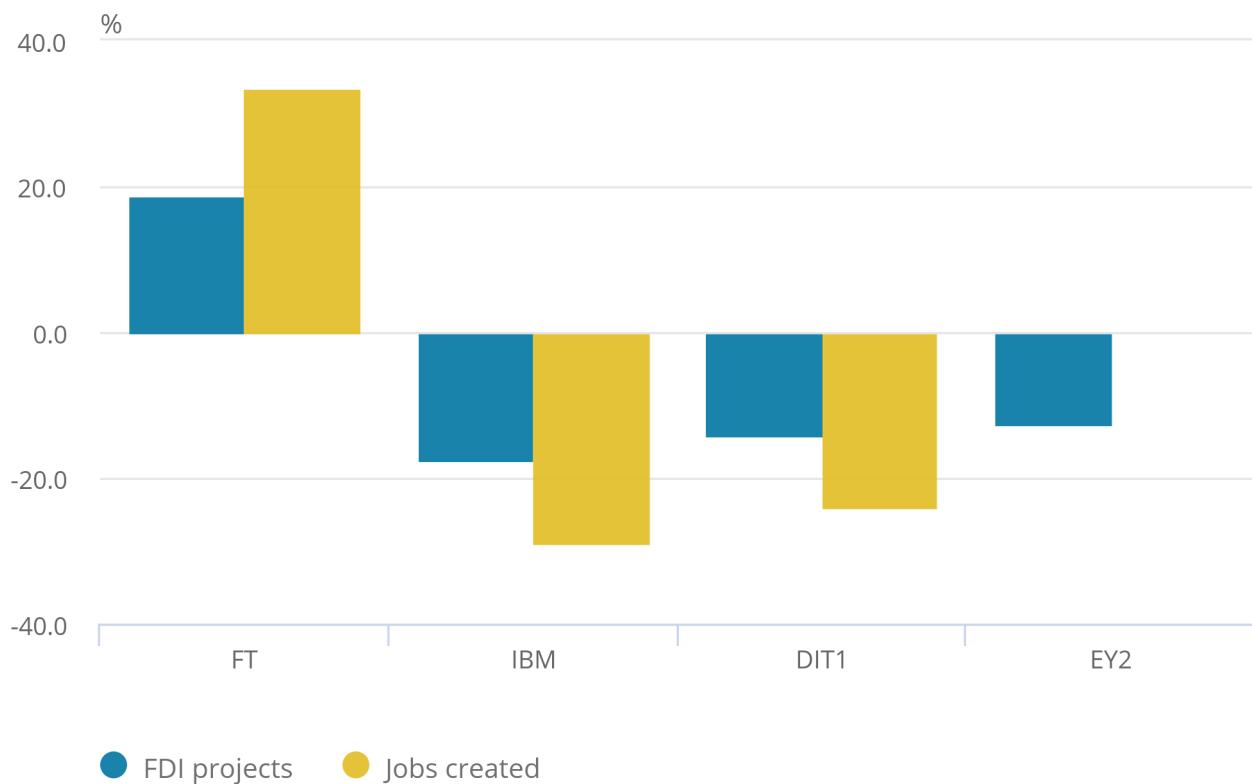
Similarly, the FT estimate a rise of more than 30% in new jobs created as a result of FDI in 2018, compared with 2017, while statistics produced by IBM and DIT estimate a fall of between 25-30%.

Figure 1: Most, but not all, “bottom-up” estimates indicated a slowdown in FDI related activity in 2018, compared with 2017

Year on year change in FDI into the UK according to “bottom-up” estimates in 2018, compared with 2017

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Year on year change in FDI into the UK according to “bottom-up” estimates in 2018, compared with 2017



Source: Financial Times, IBM, Department for International Trade, Ernst & Young

Notes:

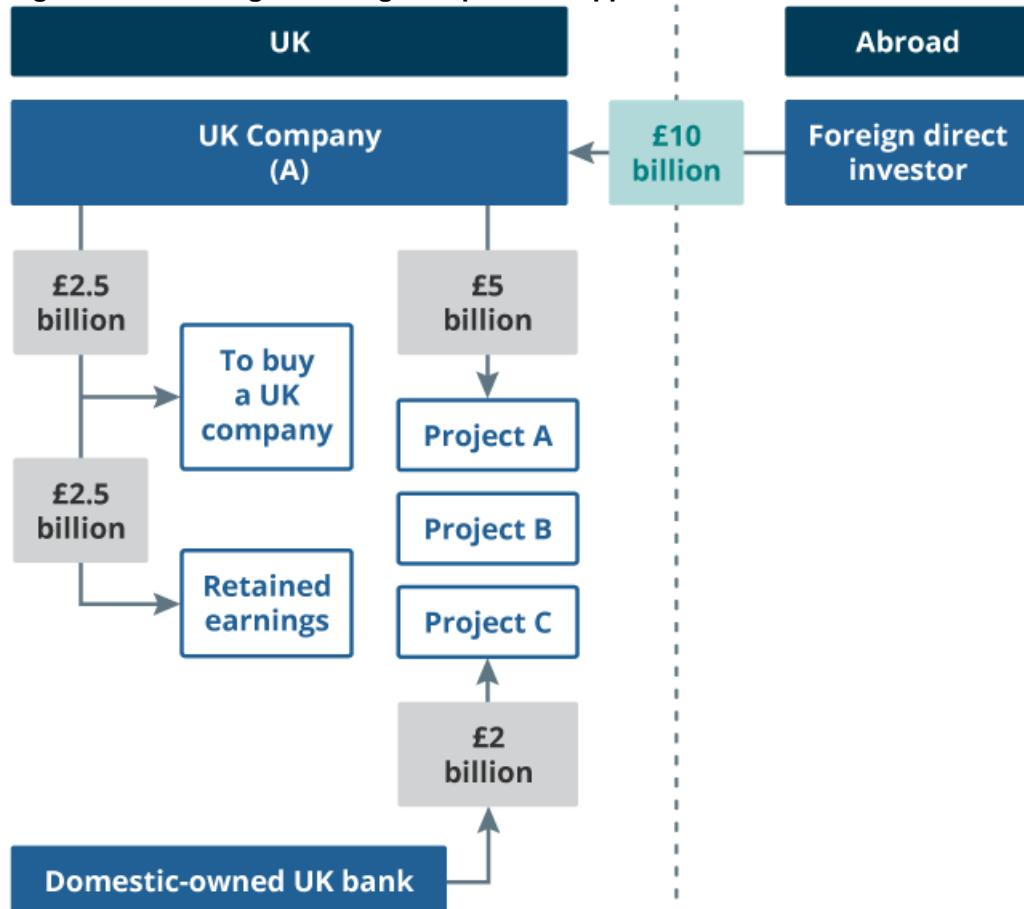
1. FDI statistics by the Department for International Trade cover the financial year (2018/19) while the other estimates cover the calendar year.
2. Ernst and Young do not produce an estimate on jobs created.

Though these estimates can complement official estimates produced by the ONS due to their timeliness and granularity, they can sometimes confuse users of FDI if conflicting trends arise, as they have here. International organisations also publish UK FDI estimates using ONS data, resulting in similar trends, though slight discrepancies may still exist (See Annex A for a summary of UK inward FDI estimates). It is therefore important to understand the various reasons to why FDI estimates may differ between sources. Some are definitional, others are methodological, and some reflect data sources used in the compilation of FDI estimates. Ultimately, the main difference between official and unofficial estimates of FDI is their fundamentally different approach to measuring FDI.

Different measurement approaches

The “top-down” approach used by the ONS captures the financial value of direct investment flows and stocks. This approach captures the overall financial transactions of an enterprise group including, implicitly, disinvestments, and allows for distinctions to be made by industry and by country-origin. This approach reflects international best-practice set out in the Balance of Payments and International Investment Positions Manual, sixth edition (BPM6) and the fourth edition of the OECD Benchmark Definition of FDI (BD4). See Figure 2 for an illustrative example.

Figure 2: Measuring FDI using a "top-down" approach



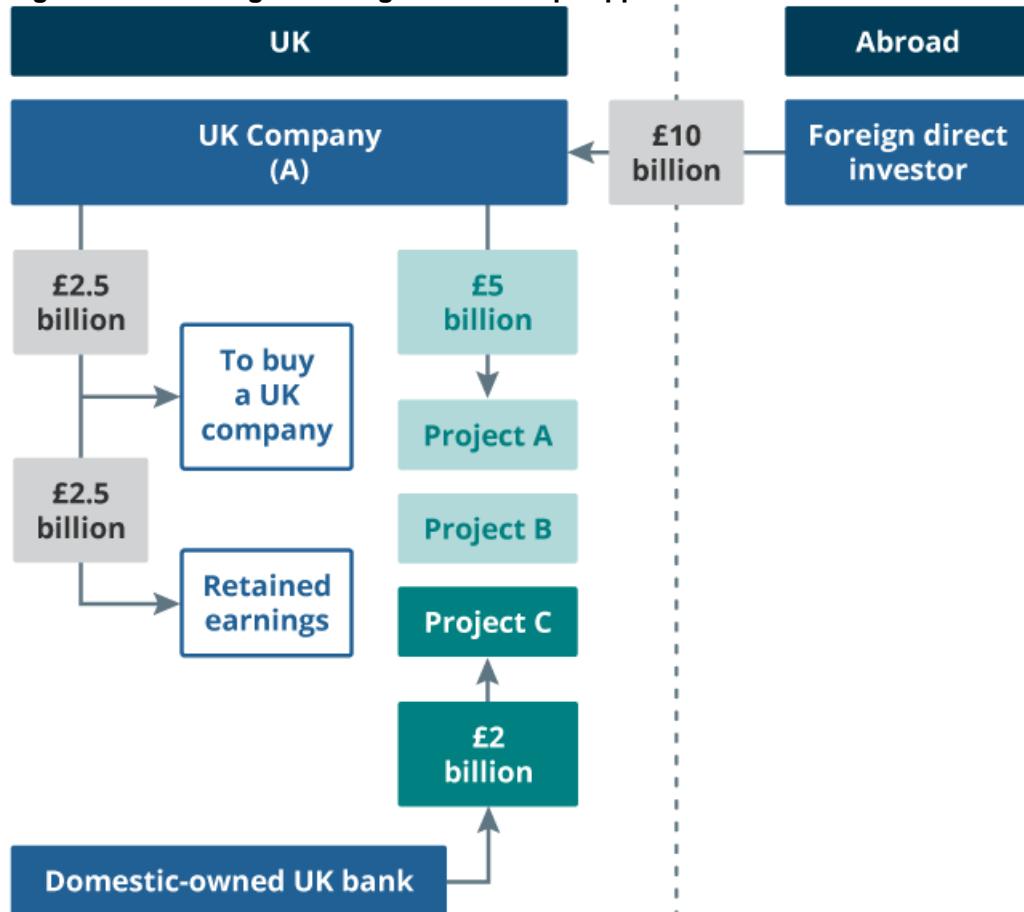
Source: Office for National Statistics

Notes:

1. In this example, a non-UK resident investor with a greater than 10% equity stake in UK-based company A invests a net total of £10 billion. Official estimates produced by the ONS would record this £10 billion inward flow (a net aggregate of investments via equity and debt instruments) at the time the financial transactions are completed. This data, collected via survey responses, would include information on the type of industry of Company A, and the country in which the foreign direct investor is resident. These official ONS estimates on inward FDI flows ignore the underlying detail of FDI project activity. For example, the number of projects and associated jobs created, and locally-sourced funds.

In contrast, “bottom-up” approaches (such as that used by the Department for International Trade and private companies) capture information of an enterprise group’s every new FDI project. This project-level information allows for information on the number of jobs created and where the investment project has landed. However, they exhibit limited information on financial flows, no information on stocks, and do not consider disinvestments due to the nature of the approach. See Figure 3 for an illustrative example.

Figure 3: Measuring FDI using a "bottom-up" approach



Source: Office for National Statistics

Notes:

1. In this example, a non-UK resident investor with a greater than 10% equity stake in UK-based company A invests a net total of £10 billion. In contrast to official estimates, 'bottom-up' estimates will present the number of projects financed by foreign direct investment (Project A and B) but also projects by Company A that are funded locally by domestically owned firms (Project C), and the number of UK jobs these projects create. Some estimates (for example, DIT estimates) would capture the total capital expenditure involved in projects undertaken by UK Company A (£7 billion).

Definitions

In line with international guidelines, official FDI estimates are narrowly defined by control relationships where the direct investor (parent company) controls at least 10% of the voting power (equity) of the direct investment enterprise. In contrast, "bottom-up" estimates have a broader definition of FDI, and they tend to track investments without information on the equity participation by investors, and this can potentially over or underestimate headline FDI.

Time of recording

Official FDI estimates produced by the ONS only include investment and mergers and acquisitions whereby the financial transaction has been completed. DIT estimates include FDI projects that they can demonstrate have become operational in the UK in a financial year. Other external sources of FDI such as that produced by the Financial Times (FT), Ernst and Young (EY) and IBM include announced but incomplete investment deals, as well as completed deals. Including announced investment deals reflects investor confidence at that given time but can overstate (or understate) headline FDI estimates as some deals may not be completed for a while yet or see completion at all. These estimates are revised in hindsight where such deals do fall through.

Measurement principles

FDI estimates produced by the ONS present FDI using either the directional measurement principle or the asset and liability measurement principle, as set out in international guidelines. Directional statistics present FDI from the perspective of the parent company and subtract any reverse investments from the affiliate to the parent company. Asset and liability-based statistics use the residency of the investment enterprise to sum for all UK and non-UK companies separately, irrespective of whether those are parents or affiliates. In either case, both principles reflect disinvestments made by the parent company (although, not separately identifiable).

"Bottom-up" estimates of FDI, such as the FT, captures capital investment in gross terms, while the FT, EY and IBM capture FDI projects and jobs created in gross terms too (that is, they do not account for jobs lost). In effect, these estimates do not reflect the impact disinvestments can have on FDI activity at the project-level and can therefore overstate headline FDI estimates.

Origin of investment

An immediate investor (for example, resident in Luxembourg) investing in the UK could be ultimately owned by a company in the USA, and thus distort the origin of investment. To ease these distortions, "bottom-up" estimates tend to measure the source of FDI on an ultimate controlling parent company basis. Whereas, ONS estimates allocate FDI to the country of the immediate parent company, however, [experimental estimates](#) on an ultimate controlling parent company basis are available.

Official FDI estimates capture the financial transactions between the foreign-owned immediate parent company and the UK-based company or subsidiary. However, it does not capture any further funds raised by that UK subsidiary elsewhere (for example, from the selling of corporate bonds itself or raising finances from domestic banks). In contrast, external estimates capture all investments undertaken by that foreign-owned UK-based subsidiary, regardless of the source of finance, including domestically raised capital (as Figure 2 highlights).

Sources

ONS estimates are produced using large scale surveys and supplemented with other sources including data from the Bank of England. As a result, these estimates reflect all current inward relationships. In contrast, "bottom-up" estimates by the DIT and private companies such as EY, IBM and the FT only capture new FDI activity. DIT estimates are compiled using information on projects they assist, and regularly check external databases compiled by EY, the FT and the ONS. Private companies collate their information using a mix of news and media sources, information from investment promotion agencies, and industry-based databases to compile their FDI estimates. Where necessary, the FT uses algorithms to fill in data gaps in jobs created and capital expenditure estimates.

International Organisations: multi-country databases of FDI statistics

International organisations such as the Organisation for Economic Co-operation and Development (OECD), United Nations Conference on Trade and Development (UNCTAD), International Monetary Fund (IMF) and Eurostat use ONS official data to compile UK FDI statistics for their consolidated multi-country databases for international comparability and analyses. Though they use ONS official data to compile their FDI estimates, differences may still exist. The reasons for these include the timing of when the latest estimates are delivered and then updated in their databases, as well as when any revisions to previous years are included in those updates. Conversion back to pound sterling may also be required, as international organisations may choose to present FDI statistics in a different currency (for example, the US Dollar or Euros) for international or regional comparability.

Summary

As a result of the two distinct approaches to measuring FDI, their definitional, methodological and data source differences result in the production of different FDI statistics. Table 2 provides a summary of the selected FDI sources.

Table 2: Summary profile of selected sources that estimate UK inward FDI

Source	ONS	Financial Times	Ernst & Young	IBM	DIT
Analysis					
Accessibility	Public	Public	Public	Public	Public
Data					
Accessibility	Public	Subscription	Not available	Subscription	Public
Themes covered					
Investment flows	Yes	Yes	No	No	No
Investment stocks	Yes	No	No	No	No
Number of projects	No	Yes	Yes	Yes	Yes
Number of jobs	No	Yes	Yes	Yes	Yes
Investor's perception	No	No	Yes	Yes	No
Sub-categories					
By industry	Yes	Yes	Yes	Yes	Yes
By sub-national	No	Yes	Yes ²	Yes	Yes
M&A	Yes	No	Yes ¹	No	Yes
Greenfield	No	No	Yes	No	Yes
Brownfield	No	No	No	No	Yes
Methodology					
Approach	Top-down	Bottom-up	Bottom-up	Bottom-up	Bottom-up
Definition	Narrow	Broad	Broad	Broad	Broad
Time of recording	At financial completion only	Includes at announcement	Includes at announcement	Includes at announcement	At completion
Measurement	Net	Gross	Gross	Gross	Gross
Investment origin	Ultimate ³ and immediate	Ultimate	Ultimate	Ultimate	Ultimate

Source: Office for National Statistics

Notes

1. Only if M&As result in new jobs or facilitates them being created. [Back to table](#)
2. Figures for UK not publicly available via analytical reports but are available via their database. [Back to table](#)
3. Currently experimental statistics. [Back to table](#)
4. M&A distinction for number of projects estimates, using information from DIT supported projects and ONS M&A data. [Back to table](#)
5. Gross refers to the impact (or value) of disinvestments not being reflected in the estimates. Net refers to the impact (or value) of disinvestments being included in the estimates (although, gross amounts of disinvestments are not separately available). [Back to table](#)
6. At time of deal completion, DIT record the number of new jobs the company states they expect to create over the first three years. [Back to table](#)

4 . ONS estimates of FDI

The ONS produce estimates on various foreign direct investment themes, all freely available to the public. These estimates include statistics accompanied by economic commentary to guide user understanding of the latest FDI trends and developments.

Foreign direct investment (FDI) statistics compiled by the ONS are fully compatible with international best practice, adhering to the fourth edition of the OECD Benchmark Definition of FDI (BD4). They are compatible with the underlying concepts and definitions of the International Monetary Fund's (IMF) Balance of Payments and International Investment Positions Manual, sixth edition (BPM6). For this reason, the statistics present information on the total value of FDI and are presented on an immediate partner country basis. The information includes the FDI position (stock of direct investments at a given time) along with the earnings (profits) and flows associated with that stock over a given period. Statistics are produced for both UK companies' direct investments in other countries (outward) and the investments in the UK controlled by foreign companies (inward). The ONS produce FDI estimates through various releases, reflecting the different ways of presenting FDI data.

Foreign direct investment involving UK companies ([Release List](#))

This annual publication provides estimates for FDI under the directional measurement principle, for the investment of UK companies abroad (outward) and foreign companies into the UK (inward). The publication and accompanying datasets provide figures on earnings, international investment positions (that is, stocks) and flows. These figures are analysed by component, industrial activity, and country at an immediate partner-country basis. This publication is badged as a [National Statistic](#).

Foreign direct investment involving UK companies (asset and liability) ([Release List](#))

This annual publication uses the asset and liability measurement principle, rather than directional. This looks at the investment of UK-resident companies abroad (assets and credits) and non-UK resident companies' investment into the UK (liabilities and debits). These are also presented by component, industrial activity, and country.

Balance of payments, UK ([Release List](#))

This quarterly publication provides a measure of cross-border transactions between the UK and the rest of the world. Foreign direct investment net earnings (credits less debits) is a component of primary income in the current account, while the net international investment position includes the net FDI position (assets less liabilities) and the financial account includes FDI flows. The quarterly FDI path in this release are benchmarked to the annual survey results. This information is also available in the [UK Economic Accounts](#) and more detail is provided in the annual [Pink Book](#) publication. Both publications are badged as a [National Statistic](#).

UK foreign direct investment, trends and analysis ([release list](#))

These articles are regularly published as part of ONS's continued research on foreign direct investment, to provide further insight into the statistics. Recent articles have analysed trends in implied rates of return; the distribution of FDI among the largest companies; FDI by country of ultimate controlling parent; and contributions to the UK economy of businesses engaged in FDI.

Other articles have looked at the [classification of special purpose entities](#) and provided an [international perspective on UK FDI](#).

Mergers and acquisitions involving UK companies ([release list](#))

Mergers and acquisitions data are included within FDI statistics, but also has its own National Statistic publication. This presents the number and value of mergers and acquisitions, as well as disinvestments. These are transactions that result in a change of ultimate control of the target company, which have a value of £1 million or more, and are distinguished in terms of inward, outward and domestic.

Table 3 summarises the ONS data sources, coverage and methodology of official FDI estimates.

Table 3: Sources and methodology in ONS estimates of FDI

	Foreign direct investment	Mergers and acquisitions
Data Sources	The Foreign Direct Investment survey consists of Annual and Quarterly versions, for both Inward and Outward. The Inward survey collects figures relating to profit and loss, equity ownership, and capital transactions between the UK business and its foreign parent companies. The Outward survey collects these figures between the UK and its foreign affiliate companies.	M&A transactions are identified using Bureau van Dijk's Zephyr database, with a Mergers and Acquisitions survey being sent to all transactions worth more than £100m.
Coverage	FDI data for banks, bank holding companies, property and public corporations are collected separately; the Bank of England provides information on monetary financial institutions, while web-scraping and other sources are also used.	M&A data only captures deals that are confirmed to be completed. The M&A surveys are sent for all transactions with a value above £100 million. Values below that threshold are taken from the Zephyr database or use imputation or estimation methods.
Methodology Notes	ONS maintains populations of Inward and Outward businesses who are involved in foreign direct investment. This is recognised as involvement in foreign investment of at least 10% of the ordinary shares or voting power. The FDI surveys are sent to a sample of these businesses, in accordance with a sample design – in which the largest businesses are fully enumerated, while only a proportion of smaller businesses are selected. Estimation methods are used to ensure that statistics represent the total population.	All M&A statistics are presented using the country of the ultimate controlling parent company. All published series are subject to statistical disclosure control methodology
	FDI and BoP statistics are provided on an immediate country basis. The ultimate controlling basis has been investigated within FDI trends and analysis articles.	
	Outlier detection and imputation methods are applied towards the sample data, to account for extreme values and non-response respectively. All published series are subject to statistical disclosure control methodology. The directional FDI publication includes a measure of standard error for the latest estimates.	

Source: Office for National Statistics

5 . External estimates of FDI

While official estimates capture the earnings, stocks and flows of financial investments, external estimates following a “bottom-up” approach provide complementary indicators that enable the assessment of FDI activity at the project level. For example, indicators on the number of FDI projects and their location, as well as the number of jobs being created as a result of inward FDI.

Estimates using this approach tend to include announced FDI deals in their figures as well as those completed. Furthermore, their estimates are measured in gross terms (that is, not allowing for changes in FDI activity resulting from disinvestments), and some include locally sourced capital investments in their estimates — all of which can overstate (or understate) their headline FDI estimates.

Other external estimates of FDI, such as those produced by international organisations, use ONS statistics to construct multi-country databases on FDI to facilitate international comparability. However, they may not match our latest estimates due to the timings of when we deliver data and when they are incorporated. Revisions to the back series are updated less frequently, further adding to potential mismatch when compared with our data.

The rest of this section provides a detailed summary of external estimates.

Inward investment results (Department for International Trade)

Analysis: [Department for International Trade inward investment results 2018 to 2019](#)

Frequency: Annual (financial year)

Access: Public

Database: Data tables available alongside analytical

Frequency: Annual (financial year)

Access: Public

The Department for International Trade (DIT) aims to promote UK trade and investment and facilitate foreign direct investment into the UK. As part of their mission, DIT produce an annual report estimating the different types of FDI into the UK: greenfield, brownfield and mergers and acquisitions (M&As). Their estimates include the number of projects into the UK by country of origin, UK location and by sector, number of new and safeguarded jobs.

DIT runs a specific investment programme dedicated to work with institutional investors to source and secure funding for large national and regional infrastructure projects. This is the monetary value referred to in the last Inward Investment Results (under capital expenditure). Typically, these investments do not classify as FDI.

Their estimates of FDI are compiled using information on projects assisted by the DIT network teams (which they call involved projects). Further information on projects which are outside of the DIT network (non-involved projects) are gathered by regular checks on external databases compiled by Ernst and Young (EY), Financial Times (fDi) Markets and the ONS. Unlike the other sources covered in this article, the period covered in their report is the financial year. The DIT also produces the [Trade and Investment Core Statistics Book](#), aimed at bringing together key estimates in trade and investment into a single product.

Table 4: Profile of Inward Investment Results (Department for International Trade)

Key themes

Covered	- Number of projects disaggregated by greenfield, brownfield and M&A FDI - Jobs created and Jobs safeguarded - Country of origin breakdown - English region and devolved administrations breakdown.
Not covered	- FDI stocks and flows (the gross financial investment values in the Inward Investment Results are typically not FDI).
Further notes	
Start of time series	2008/09 (Published by UK Trade and Investment until 2016)
Measurement principle	Not applicable
Measurement (Gross or net)	Gross (therefore, not taking into account the impact of disinvestments)
Origin of investment	Country of ultimate investor company
Time of recording	Successfully landed projects
Classification	Not applicable
Sources	Compiled using data from projects assisted by DIT, and checked against other FDI sources such as fDi Markets, European Investment Monitor and the ONS.
Revisions	None

Source: Inward Investment Results (Department for International Trade)

fDi Markets (Financial Times)

Analysis: [fDi Intelligence report](#)

Frequency: Annual

Access: Public

Database: [fDi Markets](#)

Frequency: Real-time

Access: Paid subscription

The Financial Times compile the subscription-based [fDi Markets](#) database consisting of real-time cross-border investments and summarise the key trends in their publicly-available annual [fDi intelligence report](#). Their analysis covers capital investment on new (greenfield) and expansion (brownfield) projects, new jobs created, and they provide a by sector breakdown (using the North American Industry Classification System 2012). Mergers and acquisitions are not captured in their analysis, nor are the stock values of FDI in a country.

They collate their data using publicly available news and media sources, data purchased from market research and publication companies, and verify much of their findings with investment promotion agencies (IPAs). Unlike official estimates, their estimates include investments at both the announcement and opening phases and include locally raised capital, both of which add to differences with official estimates. Where they have missing data, they use algorithms to fill in the gaps. Estimates stretch back to 2003 and are retrospectively revised as appropriate.

Table 5: Profile of fDi Markets (Financial Times)

Key themes

Covered	<ul style="list-style-type: none"> - Aggregated new (greenfield) and expansion (brownfield) projects - Number of jobs created - Sectoral breakdown - Capital investments
Not covered	<ul style="list-style-type: none"> - Mergers and Acquisitions, - FDI stocks
Further notes	
Start of time series	2003
Measurement principle	Not applicable
Measurement (Gross or net)	Gross (therefore, not taking into account the impact of disinvestments)
Origin of investment	Country of ultimate parent company
Time of recording	Includes announced FDI projects
Classification	Not applicable
Sources	Web scraping from news and media sources, data from IPAs, algorithms for data gaps.
Revisions	Estimates and models are run again at the end of the year, potentially causing revisions.

Source: fDi Markets (Financial Times)

UK Attractiveness Survey: (Ernst & Young)

Analysis: [UK Attractiveness Survey](#)

Frequency: Annual

Access: Public

Database: European Investment Monitor

Frequency: Real-time

Access: Not available

Ernst and Young (EY) produce an annual FDI report designed to capture greenfield FDI by number of projects, along with the number of jobs created directly through the investment and limited merger and acquisition (M&A) information. They capture information on M&As only if it results in the creation of new jobs or facilitates their creation. They source their data from the EY European Investment Monitor (EIM), which tracks new FDI projects across various countries by monitoring over 10,000 news sources. They are also trying to directly contact more than 70% of the companies involved to confirm the accuracy of their data.

EY also produces an annual survey designed to capture investors' sentiments on the attractiveness of investing. Questions in the survey include perceptions on the biggest threats to investing, as well as on the attraction of investing and where. The research for these surveys is conducted via telephone interviews, based on a representative panel of 506 companies around the globe.

Table 6: Profile of UK Attractiveness Survey (Ernst & Young)

Key themes

Covered	- New projects, - Jobs created, - Associated capital investment - Investment sentiment.
Not covered	- Disaggregated brownfield investments, - M&A (unless they result in new jobs) - Investments related to retail and leisure, hotels and real estates, utilities, extraction activities, and production replacement investments.
Further notes	
Start of time series	1997
Measurement principle	Not applicable
Measurement (Gross or net)	Gross (therefore, not taking into account the impact of disinvestments)
Origin of investment	Country of ultimate parent company
Time of recording	FDI at announcement
Classification	Not applicable
Sources	European Investment Monitor (of which mainly data from news sources and direct contact with companies involved)
Revisions	Revisions to the data are made annually.

Source: UK Attractiveness Survey (Ernst & Young)

IBM Global Location Trends

Analysis: [IBM Global Location Trends](#)

Frequency: Annual

Access: Public

Database: [Global Location Trends Analyzer](#)

Frequency: Annual figures

Access: Paid subscription

IBM Global Location Trends (2019) provides estimates on the number of new FDI projects in multiple countries and the number of jobs created as a result, in both new investment projects and expansions of existing operations. Using these country-level estimates, they also rank countries for international comparisons. They do not include capital investment or M&A activities as part of their FDI analysis, nor do they publish a dataset due to confidentiality. Though, they do provide a subscription-based [Global Location Trends Analyzer](#) tool that allows users to perform tailored analysis on statistics based on their data without needing direct access to the confidential raw data.

They collect FDI-related data from a variety of different sources, including, industry-specific news sources and databases, country-specific business news media, and receive data from Investment Promotion Agencies (IPAs). Their report is produced annually and, much like the FT and EY reports, their analysis covers the calendar year (January to December) and are updated retrospectively, where relevant. Their data stretches back to 2002.

Table 7: Profile of IBM Global Location Trends

Key themes

Covered - Number of projects (new and expansion projects)
 - Number of jobs created
 - Both of which, by sector and UK locations

Not covered - Capital investment
 - Mergers and Acquisitions
 - Financial stocks and flows

Further notes

Start of time 2002
 series

Measurement Not applicable
 principle

Measurement Gross (therefore, not taking into account the impact of disinvestments)
 (Gross or net)

Origin of Country of ultimate parent company
 investment

Time of Includes announced FDI projects
 recording

Classification Not applicable

Sources Industry-specific news sources and databases, country-specific business news media, and receive data from Investment Promotion Agencies.

Revisions Revisions are made when data on new projects that were previously missed are identified, and updates are retrospectively made on missing data for projects that were announced in the past.

Source: IBM Global Location Trends

OECD International Direct Investment Statistics

Analysis: [FDI in Figures](#)

Frequency: Biannual

Access: Public

Database: [OECD International Direct Investment Statistics](#)

Frequency: Quarterly and Annual

Access: Public

The Organisation for Economic Co-operation and Development (OECD) produces the [OECD International Direct Investment Statistics database](#) which includes datasets of main FDI aggregates and detailed datasets of FDI statistics by partner country and by industry. To facilitate the accessibility of the FDI datasets, the OECD also produces FDI indicators that are available on the [OECD Data Portal](#). To complement the statistical databases and the Data Portal, the OECD produces a biannual report. This provides key trends and developments in global foreign direct investment ([FDI in Figures](#)), including data tables of main aggregates of FDI flows, income and positions. Various editions of the report also include a section dedicated to latest trends of FDI flows in resident Special Purpose Entities (SPEs). Finally, the OECD produces estimates on [FDI restrictiveness](#) by OECD country; an index gauging the rules, mechanisms and wider restrictions in investing in a country.

Their main FDI aggregates are compiled using balance of payments (BOP) statistics published by Central Banks and Statistical Offices, and therefore adhere to international guidelines. They include annual and quarterly aggregate FDI flows, positions and income for 43 countries (mainly OECD member countries) and compile estimates of global FDI flows and positions using data from the IMF BOP database. FDI aggregates are presented on both the asset/liability principle and on a directional basis.

More detailed FDI statistics (by partner country and by industry) include FDI financial flows, income and positions for 36 OECD member countries presented on a directional basis, and by immediate host and immediate destination country. FDI statistics by industry are presented according to selected industry sectors and sub-sectors following the ISIC4 classification. Additionally, those datasets include new features that are recommended in the latest international guidelines. Those features are separately identifying capital being channelled through resident (SPEs) and presenting inward FDI positions according to the country of the ultimate investor as well as the immediate investor.

Aggregate FDI statistics are updated quarterly, four months after the end of the reference quarter, and can include revisions to earlier periods. Detailed FDI statistics by partner country and by industry are updated annually, in the second half of December of the year after the reference year and incorporate revisions to earlier periods. Minor updates are released in the last weeks of January, March and June to reflect new information.

Table 8: Profile of OECD International Direct Investment Statistics

Key themes

Covered	<ul style="list-style-type: none"> - Aggregate FDI flows, positions and income for 43 countries and global FDI flows and positions estimates. - Detailed FDI flows, positions and income for 36 OECD countries: - by industry; - by country source/destination - by major industry and major region - Resident Special Purpose Entities (SPEs) available separately.
Not covered	<ul style="list-style-type: none"> - Disaggregated FDI (Greenfield, Brownfield and mergers & acquisitions) - FDI projects - Jobs created
Further notes	
Start of time series	2005 (though, break in series may exist for some countries due to a change in international guidelines)
Measurement principle	<ul style="list-style-type: none"> - FDI aggregates: Directional basis and asset/liability basis - Detailed FDI: Directional basis
Measurement (Gross or net)	Net (that is, it captures disinvestment, although not separately identifiable).
Origin of investment	Country of immediate investor company (with country of ultimate investor available in addition to the immediate investor for 17 OECD countries)
Time of recording	At time of financial transaction
Classification	BD4 and BPM6 consistent
Sources	Compiled using country data reported directly to the OECD and IMF.
Revisions	<p>FDI aggregates: revisions to earlier periods are made every quarters</p> <p>Detailed FDI: revisions to earlier periods are made annually in December.</p>

Source: OECD International Direct Investment Statistics

World Investment Report (UNCTAD)

Analysis: [World Investment Report](#)

Frequency: Annual

Access: Public

Database: World Investment Report: [Annex Tables](#)

Frequency: Annual

Access: Public

United Nations Conference on Trade and Development (UNCTAD) produces the [World Investment Report](#), providing the value of FDI flows and stock for most economies. It compiles this database annually, by collecting published and unpublished data from central banks, statistical offices and national authorities. As part of its analysis, it uses also the value and number of announced greenfield investment projects and cross-border merger and acquisitions (M&As). In the UK's case, announced greenfield projects are based on the information provided by fDi Markets.

The UNCTAD FDI/MNE database also includes The [world's top 100 non-financial MNEs, ranked by foreign assets](#), of which UK companies are included.

Table 9: Profile of World Investment Report (UNCTAD)

Key themes

Covered - Value of FDI stocks and flows (by country source/destination)
- Mergers and acquisitions
- Announced greenfield investment

Not covered - UK industry breakdown
- Jobs created

Further notes

Start of time series Main aggregates (1990)
Greenfield investments (2003)

Measurement principle Directional

Measurement (Gross or net) Net (that is, it captures disinvestment, although not separately identifiable).

Origin of investment Directional

Time of recording At time of financial transaction

Classification BD4 and BPM6 consistent

Sources Compiled using country data obtained by collecting published and unpublished data from central banks, statistical offices and national authorities.

Revisions Any revisions to the data are made as part of their annual release in July of every year.

Source: United Nations Conference on Trade and Development (UNCTAD)

Coordinated Direct Investment Survey (IMF)

The International Monetary Fund (IMF) conducts an annual survey known as the [Coordinated Direct Investment Survey](#) (CDIS), designed to improve the quality and availability of direct investment position statistics. This survey breaks down FDI positions by equity and debt instruments, and by country of direct investor and direct investment enterprise.

This annual survey has been conducted on a voluntary basis since 2009, and participation involves the reporting economy (for example, the UK) passing on (at least) inward investment position by immediate counterpart economy within 9 nine months after the end of the reference period. Surveys are completed on a directional basis, fully compatible with BPM6. National FDI results are reported to the IMF using two data templates and one metadata questionnaire. Further information on the data that are collected in the survey and the reporting units can be found on the [IMF website](#).

Table 10: Summary of Coordinated Direct Investment Survey (IMF)

Key themes

Covered	Value of FDI stocks - By financial instrument (for example, equity and debt instruments) - By country source/destination
Not covered	- Disaggregated FDI (Greenfield, Brownfield and M&A) - FDI projects - Jobs created
Further notes	
Start of time series	2009
Measurement principle	Directional
Measurement (Gross or net)	Net (that is, it captures disinvestment, although not separately identifiable).
Origin of investment	Country of immediate investor and immediate investment enterprise
Time of recording	At time of financial transaction
Classification	BD4 and BPM6 consistent
Sources	Compiled using country data reported directly to the IMF, within nine months after the reference year.
Revisions	Any data revisions are made as part of their annual release in December of every year.

Source: International Monetary Fund

Balance of Payments (Eurostat)

Database: [Balance of Payments](#)

Frequency: Annual and Quarterly

Access: Public

Eurostat collect official FDI statistics directly from European national compilers, such as the ONS in the UK, to produce estimates in both a directional and asset or liability basis that are fully consistent with international guidelines. Eurostat's values for the UK can sometimes be inconsistent with ONS figures due to different vintages of data being displayed. This is due to timings of deliveries, the time taken to process new estimates, and the time in which revisions are fed through their database.

Table 11: Profile of Balance of Payments (Eurostat)

Key themes

Covered	<p>Annual database: Value of FDI flows, stock and earnings of EU member countries (including EU aggregates produced by Eurostat) plus other selected European nations.</p> <ul style="list-style-type: none"> - By financial instrument (for example, equity and debt instruments) - By country source/destination - By industry - By type of entity (with/without SPEs) - By functional category (with/without fellow enterprises) <p>Quarterly database: Value of FDI flows, stock and earnings of EU member countries plus other selected European nations.</p> <ul style="list-style-type: none"> - By financial instrument
Not covered	<ul style="list-style-type: none"> - Disaggregated FDI (Greenfield, Brownfield and M&A) - FDI projects - Jobs created - FDI by ultimate investor company
Further notes	
Start of time series	<p>Annual database: 2013</p> <p>Quarterly database: EU aggregates from Quarter 1 2008</p>
Measurement principle	<p>Annual database: Directional</p> <p>Quarterly database: Asset/Liability</p>
Measurement (Gross or net)	Net (referring to disinvestments being included in the estimates, although not separately available)
Origin of investment	Country of Immediate investor
Time of recording	At time of financial transaction
Classification	BD4 and BPM6 consistent
Sources	<p>Annual database: Compiled using country data reported directly to Eurostat. Data is published annually (usually in December, 11-12 months after the end of the new reference year and for the activity breakdown 23-24 months after the end of the new reference year).</p> <p>Quarterly database: Compiled using country data reported directly to Eurostat. Quarterly data are requested from data compilers at t+82/85 days after end of reference quarter and published online at around t+105 days.</p>
Revisions	<p>Annual database: Any data revisions are made as part of their annual updates in December of every year; revising data at T+21 and T+33 months.</p> <p>Quarterly database: Revisions are done every quarters with longer revisions published in April and October. Length of revised quarters differ between countries.</p>

Source: Eurostat

6 . Annex A: Inward FDI estimates

Table 12: Overview of headline inward FDI estimates from various sources, 2017 to 2018

Inward FDI estimate	Source	2017	2018	% change
Projects	FT	1,075	1,278	18.9
	IBM	1,250	1,033	-17.4
	EY	1,205	1,054	-12.5
	DIT2	2,072	1,782	-14.0
Jobs	FT	53,310	71,098	33.4
	DIT2	75,968	57,625	-24.1
	IBM	-	-	-29.0
Stocks (bn) ¹	ONS (£)	1,392	1,521	9.3
	UNCTAD (\$)	1,806	1,890	4.7
	OECD (\$)	1,806	1,930	6.9
	EUROSTAT (Euro)	1,939	2,143	10.5
	IMF (\$)	1,608	1,864	15.9
Flows (bn) ¹	ONS (£)	75	49	-34.7
	UNCTAD (\$)	101	64	-36.6
	OECD (\$)	101	65	-35.6
	EUROSTAT (Euro)	107	69	-35.5
	FT (\$)	25	35	40.0

Source: Department for International Trade, Financial Times, Ernst & Young, IBM, Organisation for Economic Co-operation and Development, United Nations Conference on Trade and Development, International Monetary Fund, Eurostat

Notes

1. Flows and stocks estimates are on a directional basis and rounding to the nearest billion. [Back to table](#)
2. Estimates from the Department for International Trade are based on the financial year, with the 2018 estimate referring to the 2018/2019 financial year. [Back to table](#)