

Article

International perspective on UK foreign direct investment: 2020

Compares trends in implied rates of return on foreign direct investment for the UK by industrial grouping with those for other countries.

Contact: Andrew Jowett fdi@ons.gov.uk +44 (0)1633 455357 Release date: 3 August 2020 Next release: To be announced

Table of contents

- 1. Main points
- 2. Overview
- 3. Outward FDI
- 4. Inward FDI
- 5. <u>Conclusion</u>
- 6. Acknowledgements

7. Details of Standard Industrial Classification 2007: SIC 2007 industries for each foreign direct investment industrial grouping

1. Main points

- Australia and the United States were the main countries to experience similar trends to the UK in implied rates of return on outward and inward foreign direct investment (FDI) between 2011 and 2018.
- Relatively few countries had similar trends to the UK for implied rates of return on outward FDI by industrial grouping; those in mining and quarrying for Australia and the United States were similar to the UK, indicating similar effects on overall rates too.
- For inward FDI, Australian implied rates of return by industry had the closest resemblance to those of the UK between 2011 and 2017 with mining and quarrying, manufacturing, and financial and insurance industries.
- This analysis uses Organisation for Economic Co-operation and Development (OECD) directional statistics to calculate implied rates of return; these rates are more accurate using asset and liability statistics but comparable industry-level estimates by country were not available for this measure and consequently these results are a guide to trends in implied rates of return.

2. Overview

Foreign direct investment (FDI) refers to cross-border investments made by residents and businesses from one country into another, with the aim of establishing a lasting interest in the country receiving investment ¹. Outward FDI captures the investments made by UK-based companies abroad whereas inward FDI covers investments in the UK made by foreign companies.

Statistics for other countries used in this analysis are sourced from the Organisation for Economic Co-operation and Development (OECD). The Office for National Statistics (ONS) and other national statistics compilers provide FDI statistics to international organisations, enabling comparisons using common definitions and currency. UK FDI statistics are also published routinely in the FDI statistical bulletin and balance of payments.

We calculate implied rates of return using the FDI earnings and positions from the same year. For example, the implied rates of return on outward FDI in 2017 would be the value of outward earnings in 2017 divided by the value of the outward FDI position in 2017. This shows the value of FDI earnings generated on the stock of FDI. There are other methods to calculate implied rates of return. We use this method as it more clearly highlights the extent to which a change in the implied rates of return is from changes in either the FDI earnings, position or both. This is also consistent with our previous analysis and can be informative about the relative contributions of industries to trends in FDI earnings.

This analysis uses the directional measurement principle for comparability with other OECD countries. Directional statistics subtract the reverse investments from affiliates back to their parent companies. These reverse investments are typically larger for FDI positions than for earnings. This implies that any country with high reverse investments will have a lower FDI position relative to earnings, leading to a higher implied rate of return.

Such reverse investments are added in asset and liability calculations and so do not affect implied rates of return in the same way, making them more accurate for this analysis. Using directional FDI statistics for this purpose can still be informative to assess the trends in rates of return rather than comparing the rate values themselves. More details on the FDI measurement principles can be found in <u>Foreign direct investment measurement</u> <u>principles explained</u>.

Our Foreign direct investment involving UK companies, trends and analysis (alternative scenarios and the current account): April 2020 article found that implied rates of return on mining and quarrying assets (outward FDI) had made the biggest contribution to the overall downward trend in UK FDI return rates since 2011. The sizeable increase in FDI credits in 2017 and 2018 for these industries, along with manufacturing, then contributed greatly to the higher rates in those years.

For inward FDI, the implied rates of return on financial and insurance liabilities made the biggest contributions to the overall trends in UK implied rates of return.

The aim of this article is to compare trends in overall and industry-level FDI implied rates of return for the UK with those from other countries to see if any other countries have had a similar experience to the UK since 2011.

While we do have UK FDI estimates by industry for 2018, many of these were not available by industry for other countries. Likewise, statistics for some countries did not go back to 2011, so for these we consider trends in total implied rates of return from 2014. Most of our analysis will be based on 2011 to 2017 for the OECD countries for which industry-level statistics were available. Section 7 includes details of which industries are included within each industrial grouping.

Notes for: Overview

1. A minimum of 10% of the voting power is the basic criterion used to distinguish FDI relationships from portfolio investment.

3. Outward FDI

The implied rate of return on the UK's outward foreign direct investment (FDI) position followed a downward trend between 2011 and 2016. This was from the value of outward FDI earnings decreasing over that period whereas the value of the outward position remained stable.

FDI earnings went from £100.0 billion in 2011 to £51.3 billion in 2016. By contrast, the outward FDI position remained between £1,073 billion and £1,091 billion between 2011 and 2015 before increasing to £1,274.6 billion in 2016.

The UK implied rate of return on outward FDI increased considerably in 2017 compared with 2016. This was because of a large rise in the value of FDI earnings, from £51.3 billion to £88.1 billion (by 71.7%). This was relatively larger than the increase in positions (7.4%) over the same period. Our previous analysis found that this increase in earnings was partly from some companies reporting much higher earnings in 2017 compared with 2016, but also from the increase in the oil price supporting earnings in mining and quarrying industries.

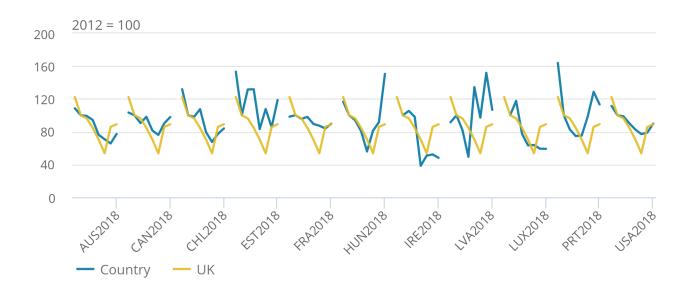
The implied rates of return for countries with lower values for FDI positions can have much bigger annual changes in implied rates of return compared with countries with larger FDI positions. This is because it takes a much smaller increase in the value of FDI earnings to change the implied rate of return by 1 percentage point since it is relative to the FDI position. The overall implied rates of return presented in Figure 1 have been indexed to 2012 to include Luxembourg and the Republic of Ireland; 2011 statistics were not available for both countries. The index movements are relative to the implied rate in the reference year. This also shifts the focus towards comparing trends rather than rate values, which are much harder to interpret using directional FDI statistics.

Figure 1: Trends in outward implied rates of return between 2011 and 2018 in Australia and the United States were most similar to the UK

Implied rate of return on inward FDI by country compared with the UK, index

Figure 1: Trends in outward implied rates of return between 2011 and 2018 in Australia and the United States were most similar to the UK

Implied rate of return on inward FDI by country compared with the UK, index



Source: Organisation for Economic Co-operation and Development, and Office for National Statistics

Notes:

- 1. Office for National Statistics directional statistics were used for UK values.
- 2. Sufficient information was available for Slovenia between 2011 and 2018. However, the index values were very high relative to the UK and other countries, making them harder to interpret. The trend in the overall implied rate of return for Slovenia was not similar to that of the UK.
- 3. Implied rates for return for the Irish Republic and Luxembourg in 2011 could not be calculated from available information.
- 4. AUS Australia, CAN Canada, CHL Chile, EST Estonia, FRA France, HUN Hungary, IRE Ireland, LVA Latvia, LUX Luxembourg, PRT Portugal, USA United States.

Most Organisation for Economic Co-operation and Development (OECD) countries for which statistics were available for 2011 to 2018 experienced a downward trend in their outward implied rates of return on FDI. The country most similar to the UK in terms of trend and change in implied rates of return relative to 2012 was the United States. There were also similarities with Australia up to 2016, before the Australian implied rate of return fell further in 2017 but then increased in 2018. Of the 11 countries included in Figure 1, the implied rate of return increased in both 2017 and 2018 in four of them – Canada, Chile, Hungary and the United States – as happened in the UK.

The underlying trends in outward FDI earnings and positions for the UK were mainly different to those in other countries with similar trends in implied rates of return. For example, the outward FDI positions in Canada and the United States followed upward trends between 2011 and 2018 compared with the flatter trend for the UK. Meanwhile, trends in outward earnings were largely stable for Australia, Chile and Hungary whereas the UK saw falling values between 2011 and 2016 before all increasing between 2016 and 2018.

The UK, Italy and Sweden had similar v-shaped trends in outward implied rates of return between 2014 and 2018

The results comparing trends in implied rates of return between 2014 and 2018 show a more mixed picture. Trends are much harder to discern over the shorter time period, yet this analysis suggests the experiences of Italy and Sweden could be the most similar to the UK (Figures 2a and 2b).

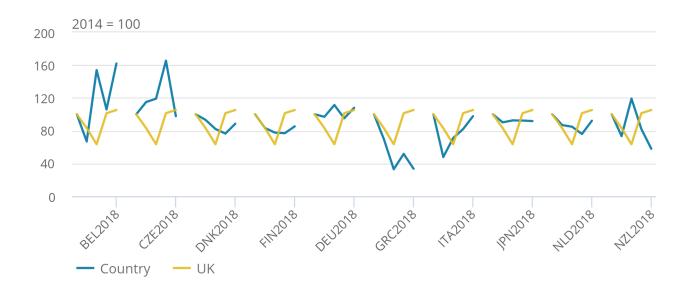
All three countries had v-shaped trends in implied rates of return over this period, in that the rates decreased year on year to 2015 (Italy) and 2016 (Sweden and UK) before increasing year on year to 2018. The implied rates of return in 2018 were also similar to their respective 2014 rates in all three countries.

Figure 2a: UK trends in outward FDI implied rates of return between 2014 and 2018 were most similar to Poland and Italy

Implied rate of return on outward FDI by country compared with the UK, index

Figure 2a: UK trends in outward FDI implied rates of return between 2014 and 2018 were most similar to Poland and Italy

Implied rate of return on outward FDI by country compared with the UK, index



Source: Organisation for Economic Co-operation and Development, and Office for National Statistics

Notes:

- 1. Office for National Statistics directional statistics were used for UK values.
- 2. Each country included in this Figure had an incomplete time series for years between 2011 and 2013, so we used 2014 to 2018 instead.
- 3. Sufficient information was available for Iceland, Republic of South Korea and Turkey between 2014 and 2018. However, the index values were very high relative to the UK and other countries, making them harder to interpret. The trend in the overall implied rate of return for all three countries was not similar to that of the UK.
- 4. BEL Belgium, CZE Czech Republic, DNK Denmark, FIN Finland, DEU Germany, GRC Greece, ITA Italy, JPN Japan, NLD Netherlands, NZL New Zealand

Figure 2b: UK trends in outward FDI implied rates of return between 2014 and 2018 were most similar to Poland and Italy

Implied rate of return on outward FDI by country compared with the UK, index

Figure 2b: UK trends in outward FDI implied rates of return between 2014 and 2018 were most similar to Poland and Italy

Implied rate of return on outward FDI by country compared with the UK, index



Source: Organisation for Economic Co-operation and Development, and Office for National Statistics

Notes:

- 1. Office for National Statistics directional statistics were used for UK values.
- 2. Each country included in this Figure had an incomplete time series for years between 2011 and 2013, so we used 2014 to 2018 instead.
- 3. Sufficient information was available for Iceland, Republic of South Korea and Turkey between 2014 and 2018. However, the index values were very high relative to the UK and other countries, making them harder to interpret. The trend in the overall implied rate of return for all three countries was not similar to that of the UK.
- 4. NOR Norway, POL Poland, ESP Spain, SWE Sweden, CHE Switzerland

Not many OECD countries experienced similar trends to the UK in implied rates of return on outward FDI by industrial grouping

FDI statistics can be spilt into seven broad industrial groupings. Details of the industries within each grouping can be found in <u>Section 7</u>.

This article uses implied rates of return for other OECD countries for each industrial grouping except for "Other". That grouping comprises many smaller sub-industries, which were suppressed for a lot of countries. It also includes some quite different industries, such as agriculture, construction and health, which can display markedly different trends in FDI earnings and positions from each other. The results of comparing the UK trends in outward FDI by industrial grouping with available countries between 2011 and 2017 is summarised in Table 1.

Table 1: Comparing trends in outward implied rates of return by industry for other OECD countries with the UK 2011 to 2017

Industrial group	Similar trend to UK	Different trend to UK
Mining and quarrying	Australia, US	Hungary, Luxembourg
Manufacturing		Australia, Estonia, Latvia, Republic of Ireland, Hungary, Luxembourg, United States
Wholesale, transport and accommodation	Hungary	Australia, Estonia, Latvia, Luxembourg, Slovenia, United States
Information and communication		Estonia, Hungary, Luxembourg, Slovenia, United States
Financial and insurance	US	Australia, Estonia, Latvia, Hungary, Republic of Ireland, Luxembourg, Slovenia
Professional and support	Estonia	Hungary, Latvia, Republic of Ireland, Luxembourg, Slovenia, United States

Source: Organisation for Economic Co-operation and Development, and Office for National Statistics

Notes

- 1. Office for National Statistics directional statistics were used for UK values. Back to table
- 2. Few countries have sufficient industry information to include 2018. Back to table
- 3. Details of the industries included within each industrial grouping can be found in Section 7. Back to table
- 4. FDI statistics by industry were not available for all OECD countries, notably Austria, Canada and France. Back to table
- 5. This table includes the countries for which information is present in all years, or missing for just one year in most industrial groupings. <u>Back to table</u>

Very few of the other OECD countries had similar trends for industrial groupings to the UK. Australia and the United States had comparable trends with the UK on implied rates of return in mining and quarrying industries. Financial and insurance industries was the other grouping for which the United States trends were close to the UK. Hungary and Estonia were the only other countries with similar trends in another industrial grouping, for wholesale, transport and accommodation, and professional and support services respectively.

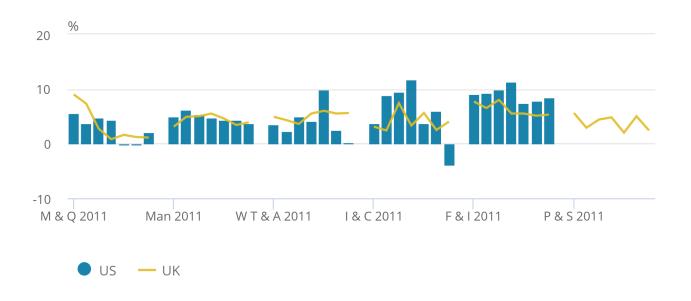
Trends in United States and UK outward implied rates of return were similar in mining and quarrying, and financial and insurance industries. Return rates in mining and quarrying industries for both countries fell considerably between 2011 and 2016 and have remained much lower since then (Figure 3). Likewise, returns on financial and insurance in both the United States and UK have followed downward trends with generally smaller year-on-year changes compared with other industrial groupings.

Figure 3: Trends in United States and UK outward implied rates of return were similar in mining and quarrying, and financial and insurance industries

US implied rates of return on outward FDI by industry compared with the UK

Figure 3: Trends in United States and UK outward implied rates of return were similar in mining and quarrying, and financial and insurance industries

US implied rates of return on outward FDI by industry compared with the UK



Source: Organisation for Economic Co-operation and Development, and Office for National Statistics

Notes:

- 1. Office for National Statistics directional statistics were used for UK values.
- 2. M & Q Mining and quarrying, Man Manufacturing, W T & A Wholesale, transport and accommodation, I & C Information and communication, F & I Financial and insurance, P & S Professional and support

Outward implied rates of return for the United States by industrial grouping were generally downwards between 2011 and 2017 whereas those for the UK were more mixed. For example, the implied rate of return for the United States was lower in 2017 than the respective values in 2011 for all industrial groupings, whereas this applied to three out of six for the UK.

The UK usually saw bigger year-on-year changes in implied rates of return than the United States, which could partly reflect the higher value of the United States outward positions relative to the UK. This indicates that while implied rates of return from mining and quarrying would have contributed to the downward trend in the overall United States return rate, there were contributions from lower rates in the other industry groupings as well. For the UK, implied rates of return from mining and quarrying made a bigger contribution to the UK's trend in implied rates of return than those industries did for the United States.

Very few OECD countries had similar trends to the UK in outward FDI implied rates of return by industrial groupings between 2014 and 2017

Only three countries had similar implied rates of return to the UK across all industrial groupings. We found similar trends between the UK and other OECD countries if the implied rates of return had a similar shape and moved in the same direction. There were some countries that came close to this but did not meet both conditions to have similar trends in Table 2. The outward trends in mining and quarrying for Belgium; wholesale, transport and accommodation for Japan, and professional and support for Sweden were the only examples where trends were similar to the UK.

Table 2: Comparing UK trends in outward implied rates of return by industry with those for other OECD countries 2014 to 2017

Industrial group	Similar trend to UK	Different trend to UK
Mining and quarrying	Belgium	Czech Republic, Denmark, Estonia, Italy, Germany, Greece, Japan, Netherlands, Poland, Spain, Sweden
Manufacturing		Belgium, Czech Republic, Denmark, Finland, Germany, Greece, Iceland, Italy, Turkey
Wholesale, transport and accommodation	Japan	Belgium, Denmark, Finland, Germany, Greece, Iceland, Italy, Republic of South Korea, Netherlands, Norway, Poland, Spain, Sweden, Switzerland, Turkey
Information and communication		Australia, Belgium, Czech Republic, Denmark, Finland, Germany, Iceland, Republic of Ireland, Italy, Japan, Republic of South Korea, Latvia, Netherlands, Norway, Poland, Spain, Sweden, Switzerland, Turkey, US
Financial & insurance		Australia, Belgium, Denmark, Finland, Germany, Greece, Iceland, Italy, Japan, Netherlands, Norway, Poland, Spain, Sweden, Switzerland, Turkey, US
Professional & support	Sweden	Australia, Belgium, Denmark, Finland, Germany, Greece, Iceland, Italy, Japan, Netherlands, Norway, Poland, Spain, Switzerland, Turkey, US

Source: Organisation for Economic Co-operation and Development, and Office for National Statistics

Notes

- 1. Office for National Statistics directional statistics were used for UK values. Back to table
- 2. Few countries have sufficient industry information to include 2018. Back to table
- 3. Details of the industries included within each industrial grouping can be found in the Section 7. <u>Back to</u> <u>table</u>

4 . Inward FDI

The implied rate of return on the UK's inward foreign direct investment (FDI) position also followed a downward trend between 2011 and 2017. This was from the value of inward FDI earnings increasing at a slower rate than that of the FDI position.

FDI earnings went from £44.4 billion in 2011 to £57.7 billion in 2017, or 30.0% higher. Over the same period, the inward FDI position increased from £792.7 billion to £1,392.5 billion, or 75.7% higher. The implied rate then increased in 2018 as a result of higher growth in inward earnings (25.9%) compared with inward positions (9.1%).

Most Organisation for Economic Co-operation and Development (OECD) countries for which statistics were available for 2011 to 2018 experienced a downward trend in their inward FDI implied rates of return. Figure 5 takes the same approach as Figure 1, indexing implied rates of return to 2012, to make it easier to compare the trends of each country with the UK.

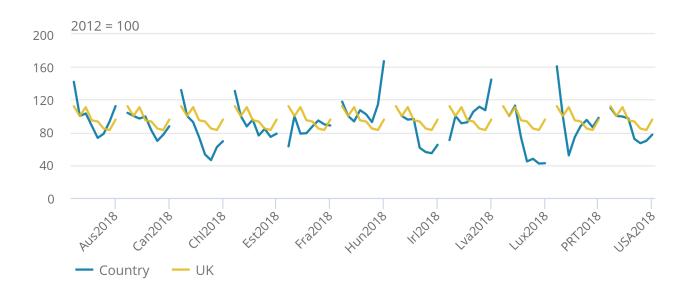
The country most similar to the UK in terms of trend and change in implied rates of return relative to 2012 was Canada. There were also similarities with Australia over this period, though the movements in the Australian returned rates were bigger relative to 2012. The United States was also similar up to 2014, before their implied rate of return fell considerably in 2015.

Figure 4: Falling inward implied rates of return between 2011 and 2016 were also observed in Australia, Canada, Chile, the Irish Republic and the United States

Implied rate of return on inward FDI by country compared with the UK, index

Figure 4: Falling inward implied rates of return between 2011 and 2016 were also observed in Australia, Canada, Chile, the Irish Republic and the United States

Implied rate of return on inward FDI by country compared with the UK, index



Source: Organisation for Economic Co-operation and Development, and Office for National Statistics

Notes:

- 1. Office for National Statistics directional statistics were used for UK values.
- 2. Sufficient information was available for Slovenia between 2011 and 2018. However, the index values were very high relative to the UK and other countries, making them harder to interpret. The trend in the overall implied rate of return for Slovenia was not similar to that of the UK.
- 3. Implied rates for return for the Irish Republic and Luxembourg in 2011 could not be calculated from available information.
- 4. Aus Australia, Can Canada, Chl Chile, Est Estonia, Fra France, Hun Hungary, Ire Ireland, Lva Latvia, Lux Luxembourg, Prt Portugal

Looking at the comparative growth of earnings relative to FDI positions in Australia, Canada and the United States also shows similar trends to the UK. All three reported positive annual growth in FDI earnings in 2017 and 2018, which was higher than the growth in FDI positions over the same period. Yet, like the UK, the United States also saw the value of the inward FDI position increase in 2017 and 2018 from the previous years.

For the others, their values of inward FDI positions were lower in 2018 than in 2017, supporting the overall increase in the implied rate of return over that period. While the overall inward implied rate of return for Canada was similar to that of the UK, rates for industrial groupings could not be calculated from available information so we cannot include Canada in the analysis that follows.

The results comparing trends in implied rates of return since 2014 show a more mixed picture. The trend in the UK was u-shaped between 2014 and 2018, in that the rates decreased year on year in 2015 and 2016, was more stable in 2017 before increasing in 2018; the implied rate of return in 2018 was also similar to that in 2014.

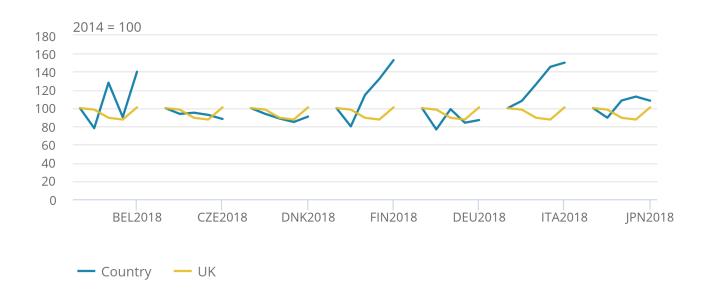
While some of the countries presented in Figure 5 experienced downward trends over the same period, those for Denmark and Sweden appear closest to the UK results relative to their respective 2014 implied rates of return. Both the Netherlands and Switzerland also saw their implied rates of return on inward FDI fall over the period, but to a greater extent than the UK relative to 2014. These countries also saw their implied rates of return increase in 2018 from 2017, with Switzerland also recording an increase in 2017 from 2016.

Figure 5a: UK trends in inward FDI implied rates of return between 2014 and 2018 were most similar to Denmark and Sweden

Implied rate of return on inward FDI by country compared with the UK, index

Figure 5a: UK trends in inward FDI implied rates of return between 2014 and 2018 were most similar to Denmark and Sweden

Implied rate of return on inward FDI by country compared with the UK, index



Source: Organisation for Economic Co-operation and Development, and Office for National Statistics

Notes:

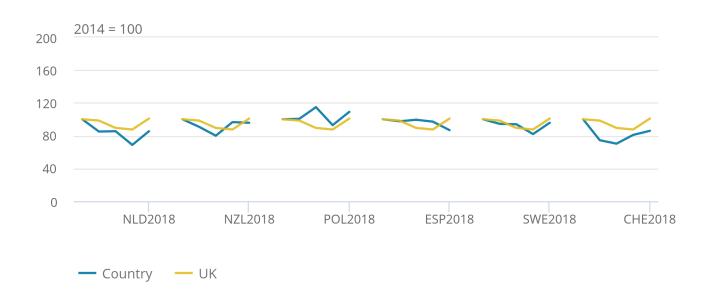
- 1. Office for National Statistics directional statistics were used for UK values.
- 2. Sufficient information was available for Greece, Iceland, Norway and Turkey between 2014 and 2018. However, the index values were very high relative to the UK and other countries, making them harder to interpret. The trends in the overall implied rate of return for each country was not similar to that of the UK.
- 3. BEL Belgium, CZE Czech Republic, DNK Denmark, FIN Finland, DEU Germany, ITA Italy, JPN Japan,

Figure 5b: UK trends in inward FDI implied rates of return between 2014 and 2018 were most similar to Denmark and Sweden

Implied rate of return on inward FDI by country compared with the UK, index

Figure 5b: UK trends in inward FDI implied rates of return between 2014 and 2018 were most similar to Denmark and Sweden

Implied rate of return on inward FDI by country compared with the UK, index



Source: Organisation for Economic Co-operation and Development, and Office for National Statistics

Notes:

- 1. Office for National Statistics directional statistics were used for UK values.
- 2. Sufficient information was available for Greece, Iceland, Norway and Turkey between 2014 and 2018. However, the index values were very high relative to the UK and other countries, making them harder to interpret. The trends in the overall implied rate of return for each country was not similar to that of the UK.
- 3. NLD Netherlands, NZL New Zealand, POL Poland, ESP Spain, CHE Switzerland

Australia experienced similar trends to the UK in implied rates of return on inward FDI for four industrial groupings

Taking the same approach for inward implied rates of return by industrial grouping as with outward gave the results in Table 3. We found that Australia had similar trends to the UK in four of the six industrial groupings. This was followed by the United States with two similarities.

Both countries had similar trends to the UK for inward implied rates of return in mining and quarrying, and financial and insurance industries. Australian trends in manufacturing, and wholesale, transport and accommodation were also close to the UK. None of the other OECD countries were similar to the UK in professional and support industries.

Table 3: Comparing trends in inward implied rates of return by industry for other OECD countries with the UK 2011 to 2017

Industrial group	Similar trend to UK	Different trend to UK
Mining and quarrying	Australia, Hungary, United States	Estonia, Latvia, Luxembourg, Slovenia
Manufacturing	Australia	Estonia, Hungary, Irish Republic, Latvia, Slovenia, United States
Wholesale, transport and accommodation	Australia	Estonia, Hungary, Latvia, Luxembourg, Slovenia, United States
Information and communication	Latvia	Australia, Estonia, Hungary, Slovenia, United States
Financial and insurance	Australia, United States	Estonia, Hungary, Latvia, Luxembourg, Slovenia
Professional and support		Australia, Estonia, Hungary, Irish Republic, Latvia, Luxembourg, Slovenia

Source: Organisation for Economic Co-operation and Development, and Office for National Statistics

Notes

- 1. Office for National Statistics directional statistics were used for UK values. Back to table
- 2. Few countries have sufficient industry information to include 2018. Back to table
- 3. Details of the industries included within each industrial grouping can be found in the Annex. Back to table
- 4. FDI statistics by industry were not available for all OECD countries, notably Austria, Canada and France. Back to table
- 5. This table includes the countries for which information is present in all years, or missing for just one year in most industrial groupings. <u>Back to table</u>

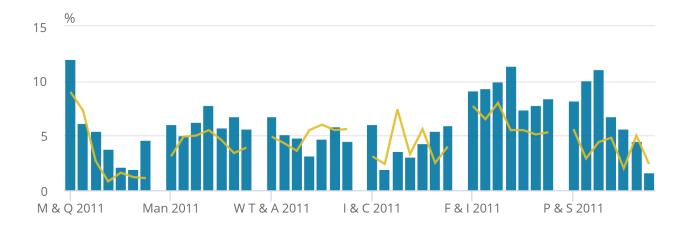
Perhaps the closest resemblance to trends in inward implied rates of return for Australia and the UK was in mining and quarrying industries. The implied rates of return for both countries fell considerably from 2011 to 2015 for Australia and to 2014 for the UK, and have remained much lower since then (Figure 6). Returns on mining and quarrying in Australia increased in 2017 from 2016, but were still much lower than the rate in 2011.

Figure 6: Australian inward implied rates of return for FDI in four industrial groupings were similar to trends in the UK

Australian implied rates of return on inward FDI by industry compared with the UK

Figure 6: Australian inward implied rates of return for FDI in four industrial groupings were similar to trends in the UK

Australian implied rates of return on inward FDI by industry compared with the UK



Source: Organisation for Economic Co-operation and Development, and Office for National Statistics

Notes:

Australia

— UK

- 1. Office for National Statistics directional statistics were used for the UK.
- 2. M & Q Mining and quarrying, Man Manufacturing, W T & A Wholesale, transport and accommodation, I & C Information and communication, F & I Financial and insurance, P & S Professional and support

The trends in manufacturing, wholesale, transport and accommodation, and financial and insurance industries for the UK and Australia are also quite similar. Both countries reported a peak in implied rates of return in 2014 among inward FDI companies in manufacturing. Among wholesale, transport and accommodation industries, both countries saw implied rates of return falling up to 2013 (UK) and 2014 (Australia) before increasing to 2017. Meanwhile for financial and insurance, there was a step-change in implied rates of return, leading to lower rates in the most recent years. For Australia, this change happened in 2015 compared with 2014 and for the UK in 2014 from 2013.

Our previous analysis also highlighted the role that implied rates of return in financial and insurance industries had on the overall implied rate of return for the UK. However, using directional statistics distorts the picture as explained in <u>Section 2</u>. These directional statistics made the implied rate of return from wholesale, transport and accommodation higher than that on financial and insurance industries in 2015, 2016 and 2017.

Financial and insurance industries in Australia had the highest implied rates of return in all years except 2011 and 2013 using directional statistics. This indicates that, like the UK, implied rates of return in financial and insurance industries may be the highest for Australia on an asset and liability basis and possibly had a similar impact on supporting the overall inward implied rate of return too.

The UK, Poland and Belgium had similar trends in inward FDI implied rates of return for some industrial groupings between 2014 and 2017

There are also some countries that had similar trends to the UK in implied rates of return by industrial grouping between 2014 and 2017. Over this period, there were three countries – Belgium, the Netherlands and Poland – that had similar trends in inward FDI implied rates of return to the UK in professional and support industries (Table 4). The UK, Belgian and Polish trends were also similar in information and communication, and financial and insurance.

Trends in Poland were similar to the UK in wholesale, transport and accommodation industries. No other countries had similar trends to the UK in return rates in mining and quarrying, or manufacturing industries. This indicates different industrial contributions to the overall inward implied rates of return compared with the UK, which were supported by financial and insurance return rates in the UK's case.

Table 4: Comparing trends in inward implied rates of return by industry for other OECD countries with the UK 2014 to 2017

Industrial group	Similar trend to UK	Different trend to UK
Mining and quarrying		Finland, Germany, Greece, Irish Republic, Italy, Japan, Republic of South Korea, Netherlands, Norway, Poland, Spain, Sweden, Turkey
Manufacturing		Belgium, Czech Republic, Denmark, Finland, Germany, Greece, Iceland, Italy, Japan, Republic of South Korea, Netherlands, Norway, Poland, Spain, Switzerland, Sweden, Turkey
Wholesale, transport and accommodation	Greece, Poland	Belgium, Finland, Germany, Iceland, Italy, Japan, Republic of South Korea, Netherlands, Norway, Spain, Sweden, Switzerland, Turkey
Information and communication	Belgium, Germany, Poland	Denmark, Greece, Iceland, Japan, Republic of South Korea, Netherlands, Switzerland, Turkey
Financial and insurance	Belgium, Poland	Finland, Greece, Iceland, Japan, Norway, Switzerland, Turkey
Professional and support	Belgium, Netherlands, Poland	Greece, Iceland, Italy, Republic of South Korea, Norway, Turkey

Source: Organisation for Economic Co-operation and Development, and Office for National Statistics

Notes

- 1. Office for National Statistics directional statistics were used for UK values. Back to table
- 2. Few countries have sufficient industry information to include 2018., Details of the industries included within each industrial grouping can be found in the Section 7., This table includes the countries for which information is present in all years between 2014 and 2017, or missing for just one year. Back to table

5. Conclusion

The UK experienced downward trends in the implied rates of return for both inward and outward foreign direct investment (FDI) between 2011 and 2018. The downward trend for outward FDI was more marked than that for inward, which partly reflects the impact of falling return rates in mining and quarrying industries.

Both Australia and the United States were among the countries that had similar trends to the UK in overall implied rates of return as well as in outward mining and quarrying FDI. Lower returns from mining and quarrying industries may have had a similar impact for Australia as they did in the UK, whereas for the United States, implied rates of return were falling across the other industrial groupings as well.

More stable inward implied rates of return among financial and insurance industries supported the overall inward FDI return rate for the UK. Once again, both Australia and the United States experienced similar trends to the UK in this grouping and overall between 2011 and 2018. This suggests that inward returns from these industries possibly made similar contributions to overall rates.

6. Acknowledgements

Authors: Andrew Jowett and Lucy Parker, Office for National Statistics.

The authors would like to acknowledge the contributions of Freddy Farias Arias, Nassir Hussain and Lee Mallett.

7 . Details of Standard Industrial Classification 2007: SIC 2007 industries for each foreign direct investment industrial grouping

Table 5: Details of Standard Industrial Classification (SIC 2007) industries for each FDI industrial grouping used

Industry grouping	Section(s) within SIC07			
Mining and quarrying	B - Mining and quarrying			
Manufacturing	C - Manufacturing			
Wholesale, transport and accommodation	G - Wholesale and retail trade; repair of motor vehicles and motorcycles			
	H - Transportation and storage			
	I - Accommodation and food service activities			
Information and communication	J - Information and communication			
Financial and insurance	K - Financial and insurance activities			
Professional and support	M - Professional, scientific and technical activities			
	N - Administrative and support service activities			
Other	A - Agriculture, forestry and fishing			
	D - Electricity, gas, steam and air conditioning supply			
	E - Water supply, sewerage, waste management and remediation activities			
	F - Construction			
	L - Real estate activities			
	O - Public administration and defence; compulsory social security			
	P - Education			
	Q - Human health and social work activities			
	R - Arts, entertainment and recreation			
	S - Other service activities			
	T - Activities of households as employers; undifferentiated goods- and services- producing activities of households for own use			
	U - Activities of extra-territorial organisations and bodies			

Source: Office for National Statistics