Impact of International Investment Agreements on Outward Direct Investment

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London Economics

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Executive summary

Aims of the study

This research seeks to investigate the impact of international investment agreements (IIAs) on UK outward direct investment (ODI).

ODI is cross-border investment from one country into another, with the aim of establishing a lasting interest in an enterprise where the investor's purpose is to play a significant role in the management of the enterprise. IIAs are a type of treaty between countries that address investments between those countries. IIAs can cover both investment chapters in free trade agreements (FTAs) or bilateral investment treaties (BITs). While BITs generally include investment protections and a related enforcement mechanism, investment chapters can also include market access provisions.

ODI plays an important role in the UK economy by helping UK businesses access overseas markets and creating export or investment opportunities for UK companies in the supply chain. The broad aim of the study was to understand the impact of IIAs on the UK.

There is little consensus in previous research about the effectiveness of IIAs in attracting ODI to the country involved in the agreement, however, little previous research has been undertaken on the impact on ODI from the UK.

Headline findings

The key findings from the study suggest that while there is a significant impact of IIAs on UK ODI, their importance is not perceived by interviewed businesses who are largely unaware of IIAs and their benefits.

- The impact of BITs on UK ODI is estimated to be on **average £1.88bn**, which indicates they play a key role in promoting UK ODI. This estimate uses data from 2000 to 2020, inclusive.
- This is the equivalent to a **14.4% increase** in UK ODI for the average country.
- The impact of BITs on UK ODI differs across countries. For example, it is larger in countries with a smaller GDP.
- BITs do not have an immediate impact, with significant increases in UK ODI from five years after the ratification of the IIA. The impact up to five years is not significantly different from zero, but rises to between £2.5bn and £3.6bn in the following twenty years.
- However, almost all of the 20 small and medium businesses interviewed were **not aware of IIAs or their benefits**.
- When making investment decisions, **businesses suggested other factors** (such as market potential, bureaucracy, regulatory environment, cultural fit, and language) **were more important**.
- Businesses acknowledged that IIAs can indicate a signatory host country was a hospitable environment for overseas investments. Consequently, **IIAs have the potential to increase their openness to invest** in less developed markets or countries they perceived to be riskier.
- Businesses believed they would be more able to derive benefits from IIAs if they **understood them better.**

■ There are some variations in the summary findings of the econometric analysis and the qualitative research. The reasons for this are likely to be primarily because the businesses observed were different in terms of investment location[1] and the sizes of businesses - the qualitative research focused on SMEs rather than large firms.

Contributions of the study

The study contributed to the trade policy research literature by undertaking **both a quantitative and qualitative approach** to understand the impact of IIAs on UK ODI.

The **quantitative approach** estimates the impact of IIAs (focusing on **Bilateral Investment Treaties**) on UK ODI by comparing UK ODI in countries that have ratified an IIA with the UK to UK ODI in countries that do not have a ratified IIA. A range of methods are used to separate the impact of IIAs from other factors that may influence investment decisions. The estimation of the impact of an IIA on UK ODI across time was a key contribution of the quantitative approach.

The **qualitative approach** involved 20 semi-structured interviews with businesses to investigate the factors behind the location of their overseas investment and the extent to which these decisions were influenced by IIAs. The sample consisted of businesses that had already invested overseas or were considering doing so, operating across a range of sectors, including services.

These two approaches complemented each other in several ways, providing alternative viewpoints of the impact of IIAs on UK ODI:

■ The quantitative approach focused on **the 'big picture' impact of IIAs on UK ODI through changes in total UK ODI** in a country, while the qualitative approach explored ODI decisions made by **individual businesses**.

■ The two approaches provide insights into both the **quantitative impact** of IIAs on UK ODI as well as the **perceived impact** of IIAs on businesses' decisions in ODI.

■ The qualitative approach allowed for the representation of **small and medium sized businesses**. Variation in total UK ODI across countries, which is used in the quantitative approach, is likely to be driven by the decisions of **larger businesses** that engage in significant ODI.

■ The quantitative approach **excludes some countries from the analysis** that may distort the overall findings (such as the United States and Luxembourg), whereas the qualitative approach **allowed for the discussion of IIAs across all countries**.

Limitations and recommendations for further research

There are some important caveats and limitations to consider when interpreting the findings of this study. Some of these are associated with relevant recommendations for further research.

An important limitation is the extent to which the estimated impact of IIAs on UK ODI have a causal interpretation: **that it is the IIA that causes the on average £1.88bn increase in UK ODI and not some other related reason**. While a range of methods have been used to test the reliability of this finding as well as the consideration of many other factors that influence UK ODI, it is possible that another factor that has not been considered may influence both the existence of an IIA between the

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[1] A large section of participants in the qualitative research invested overseas in Europe and the Americas while data points in the econometric analysis excluded companies that have invested in these countries.

UK and another country and greater UK ODI in that country. The existence of such a factor would suggest that the presented estimate of £1.88bn may overstate the true impact of IIAs on UK ODI.

Further research would explore in more detail **how IIAs impact UK ODI**. Contributions to this policy question are limited in this study. For example, this study does not evaluate the impact of **individual provisions** on UK ODI.

Further study related to the qualitative approach taken in this study would investigate **what type of businesses are aware of and understand IIAs**. Given the lack of awareness of IIAs among the businesses interviewed, it was not possible to undertake this analysis using the qualitative data collected from the interviews completed in this study.

Recommendations for future research include investigating:

- the impact of individual or groups of provisions in IIAs,
- the impact of IIAs on specific sectors and types of businesses,
- potential spillover effects of an IIA with a neighbouring country,
- the diversion of ODI from one country to another due to an IIA,
- the impact of IIAs on the ultimate destination of UK ODI, avoiding the distortions of pass-through investment, and
- why the impact of IIAs on ODI is delayed.

1   Introduction

IIAs seek to provide a welcoming business environment and benefit the UK and partner countries by defining the treatment exporters and investors can expect to receive from host states and providing legal certainty to underpin them.

This research study seeks to understand the impact of IIAs on UK outward direct investment (ODI, also outward foreign direct investment (FDI)[2] or overseas direct investment). It is important to note that the IIAs included in the analysis (in particular the quantitative analysis) focus on Bilateral Investment Treaties (BITs) rather than the same provisions included in Free Trade Agreements (FTAs) which may also impact investment.

ODI plays an important role in the UK economy, as it helps UK businesses secure or expand overseas markets, creates export or investment opportunities for UK companies in the supply chain, and can lead to company expansion in the UK.

The remainder of this report is structured as follows:

- Section 2 provides an overview of the FDI location choice literature;
- Section 3 summarises existing empirical evidence on the impacts of IIAs on overseas investment;
- Section 4 provides a quantitative analysis of the impacts of IIAs on UK ODI;
- Section 5 contains the qualitative findings from a series of interviews carried out with businesses currently investing overseas; and
- Section 6 concludes.

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[2] FDI is a cross-border investment from a business or individual based into a site or business based in another country, where the investor aims to establish a lasting interest and have an effective voice in the management of the business (DIT, 2018).

2 Determinants of firms' investment location decisions

The FDI location choice literature identifies several factors that affect FDI location choices, which can be broadly categorised into policy framework, market-related factors, resource-related factors, efficiency-related factors, and business facilitation (UNCTAD, 1998).

2.1 Policy framework

International investment agreements are believed to have a positive impact on FDI between two countries because they help alleviate what is referred to in the literature as the obsolescing bargain problem (OECD, 2018). The concept of the obsolescing bargain problem suggests that once an investment is made and the assets of the investor in the host country increase, the power balance shifts away from the investor and towards the host country. This means that the investor no longer has the leverage to hold the host country government to the promises made prior to the investment. IIAs (and the accompanying enforcement) can provide prospective investors protection against this thereby leading to increased FDI flows.

Moreover, IIAs are hypothesised to signal that a country is likely to be a hospitable investment environment, due to the commitments that states are making to uphold international rules (OECD, 2018; Lee and Johnston, 2016; Singh, Shreeti and Urdhwareshe, 2020).

Neumayer and Spess (2005) indicate that developing countries which are part of free trade agreements might also receive more FDI. It is suggested that this may make it easier to re-export goods back to other developed countries.

Another aspect of the host country policy framework that may influence FDI includes the tax regime.

The effect of taxes on FDI is the focus of Hines (1996). As well as the corporate tax rate, specific taxes and subsidies may also influence FDI location choices. Tax credits exist for R&D investments, as R&D activity can generate external benefits for the host country. In addition, Shleifer and Vishny (1994) identify that firms may receive tax breaks or subsidies if their investments lead to job creation.

Host country institutions that may be relevant to FDI decision making include the judicial system, the regulatory system, property rights and local customs. Several studies such as Globerman and Shapiro (2002) and Gani (2007) suggest that countries with better institutions are likely to attract more FDI. In a literature review of the impact of institutional quality on FDI, Peres, Ameer and Xu (2018) discuss reasons why this may be. They hypothesise that strong institutions decrease uncertainty for investors, can be associated with reduced production costs and reduce the perceived and actual risk of profits being nationalised or otherwise expropriated.

2.2 Econometric approach

2.2.1 Baseline specification

The equation represents the baseline specification used to assess the impact of international investment agreements (IIAs) on UK outward direct investment (ODI). The dataset of UK IIAs **focuses on Bilateral Investment Treaties (BIT)**.

$$ODI_{it} = \beta_0 + \beta_1 IIA_{it} + X\boldsymbol{\beta} + \gamma_i + \gamma_t + \epsilon_{it} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(1)$$

ODI_{it} Is the amount of outward direct investment from the UK to host country i in year t. The unit of observation is the host country across years (for example, the UK as the source country and India as the host country in 2019).

ODI can be represented as either a stock or as a flow variable. **ODI stock is the cumulative value** of investments from the UK to the host country, at a given point in time. **ODI flow is the total value of investments** from the UK to the host country **within a year**. A stock measure is preferred in this study because stock measures are less volatile (Gounder et al., 2019). ODI_{it} is defined in billions of 2015 GBP, deflated using host country GDP deflators**.**

IIA_{it} is a variable indicating the existence of an IIA between the UK and host country i in year t. In the baseline specification, this explanatory variable of interest is a dummy variable that takes a value of one if there exists an IIA between the two countries in a given year. The **interpretation of the coefficient of interest, β_1, is the increase in the outward FDI stock that is associated with the existence of an IIA** between the two countries.

When specifying the IIA_{it} variable, some approaches in the literature use the date of signature (Singh et al., 2020), while others use the **date that the agreement enters into force** (Falvey & Foster-McGregor, 2015). The date that the agreement comes into force is used for this study, as that is when the provisions are relevant for firms' investment decisions (Falvey & Foster-McGregor, 2015).

The estimated impact of IIAs when regressing ODI_{it} on solely IIA_{it} may be influenced by omitted variable bias. This is due to the fact that the determinants of foreign direct investment between two countries, such as GDP or distance between the countries, are generally thought to be similar to the factors that influence the existence of an IIA between the two countries (Falvey & Foster-McGregor, 2015).

The baseline specification alleviates part of the omitted variable bias by explicitly controlling for known and observable factors affecting both ODI and IIAs, through control vector X. Control variables include variables commonly used in the gravity model literature that illustrate the 'closeness' of two countries (Kamila & Chinara, 2017), as well as other determinants of ODI.

In the baseline specification underlying this report, the GDP of the host country is included as the variable that is commonly used in gravity models (such as Uttama, 2021) in the trade literature, which captures the market size. All other things equal, a larger economy may have more opportunities for UK investors as well as pre-existing relationships.

Natural resource rents (as a percentage of GDP) are included, as some studies suggest that abundant natural resources may increase investment (Chen et al., 2020).

Inflation and GDP growth are included as important macroeconomic indicators. Countries with high economic growth and consistently low inflation are seen as more attractive to investors.

Trade (imports added to exports as a percentage of GDP) and WTO membership are included to measure a country's economic openness.

The World Governance indices and Heritage Foundation overall score (Index of Economic Freedom) are used as these control for a comprehensive range of determinants of FDI that are discussed in Section 2.

The individual indices that make up the World Governance indices are the control of corruption, government effectiveness, political stability, rule of law, regulatory quality, voice and accountability.

These serve as a proxy for the protection that investors enjoy in the host country, such as from corruption and political instability. Further details are provided in Table 1 below.

Table 1   World Governance Indices

Index	Description
Control of corruption	Perceptions of the extent to which public power is not used for private gains and the extent of regulatory and policy capture by private interests.
Government effectiveness	Quality of public services, civil service, and policy formation and implementation, as well as the government's independence from political pressure and commitment to policies.
Political stability	Perceptions of the likelihood of political stability and the absence of violence.
Rule of law	Confidence in contract enforcement, property rights, and effectiveness of policy and courts.
Regulatory quality	Perceptions of the ability of the government to formulate and implement policies and regulations that permit and promote private sector development.
Voice and accountability	Perceptions of the extent to which a country's citizens can participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.

Source: Kaufman et al. (2010) The World Governance Indicators: Methodology

The Heritage Foundation overall score is included to control for economic freedoms that investors have in the host country. This includes indices concerning business, labour market, trade, investment, and financial freedoms, as well as the level of government intervention. Countries where the score is higher are likely to receive more investment due to fewer restrictions in the host country, which are explained in further detail in Table 2.

Table 2   Factors included in the Heritage Foundation overall score

Topic	Factor	Description
Rule of law	Property rights	Extent to which a country's legal framework allows individuals to acquire, hold, and utilize private property and the extent to which property rights are clearly legislated and effectively enforced. This considers the risk of expropriation; respect for intellectual property rights; and quality of contract and law enforcement.
	Judicial effectiveness	Independence and effectiveness of the judicial system, as well as perceived quality of the judicial system
	Government integrity	Perceptions of control over corruption, risk of bribery, control of corruption which considers regulatory capture.
Government size	Tax burden	Marginal tax rates on individual and corporate incomes, and the total tax revenues as a percentage of GDP. Higher taxes contribute to a lower score.
	Government spending	Total government spending as a percentage of GDP. Higher taxes contribute to a lower score.
	Fiscal health	Average deficit across the past three years and debt as a percentage of GDP. A higher deficit contributes to a lower score.

Topic	Factor	Description
Regulatory efficiency	Business freedom	Access to electricity, business environment risk, regulatory quality, and women's economic inclusion.
	Labour freedom	Minimum wage, collective bargaining regulations, annual leave regulations, notice period and severance pay and other regulations regarding redundancy dismissal, labour productivity, labour force participation rate, restrictions on overtime. More restrictive policies contribute to a lower score.
	Monetary freedoms	Average inflation across the past three years, government control of prices through direct controls and subsidies.
Open markets	Trade freedom	Trade-weighted average tariff rate and non-tariff barriers, such as quantity or regulatory restrictions.
	Investment freedom	Restrictions and regulations concerning investments (foreign exchange controls, bureaucracy involved in investing as an international investor, capital controls). More restrictions contribute to a lower score.
	Financial freedom	Intensity of government regulation of the financial services, state ownership or control of financial firms, and financial sector's openness to foreign competition. More restrictions contribute to a lower score.

Source: Heritage Foundation (2022) Index of Economic Freedom, Methodology

Some determinants of ODI that do not vary across time, such as whether English is an official language in the host country or the bilateral distance between the UK and the host country, are not included. While there is evidence in the trade literature that these **time invariant characteristics** are important determinants of UK ODI, the use of country fixed effects controls for time-invariant heterogeneity between (host) countries. Further, time fixed effects are included to control for global changes across time. Standard errors are clustered at the country level.

2.2.2 Variation of IIA impacts by country characteristics

The included controls are not only important determinants of ODI but may also influence the impact of IIAs on ODI. For example, investors may be more likely to take advantage of the benefits of an IIA if the host country is a politically stable environment. As a result, the interaction between the existence of an IIA and the control variables is also estimated:

$$ODI_{it} = \beta_0 + \beta_1 IIA_{it} + X\boldsymbol{\beta} + IIA_{it} \times X\boldsymbol{\beta}' + \gamma_i + \gamma_t + \epsilon_{it}\text{...}(2)$$

$\boldsymbol{\beta}'$ estimates the influence of controls X on the impact of IIAs on UK ODI. $\beta'_{GDP} < 0$ implies a greater GDP leads to an IIA having a smaller impact on ODI.

2.2.3 Impact of IIAs across time

Most of the literature compares ODI while an IIA exists between two countries to ODI when an IIA does not exist between the two countries. However, **this estimated average impact of IIAs ignores the potential difference in the short- and long-term impact of IIAs on ODI**. The impact of IIAs on ODI may not be homogeneous across time, as firms may not immediately take advantage of IIA provisions. These potential effects warrant the estimation of the impact of IIAs across time in the following amendment of the baseline specification:

$$ODI_{it} = \beta_0 + \beta_1 IIA_{it} \times YEARS0to4_{it} + \beta_2 IIA_{it} \times YEARS5to9_{it} + \beta_3 IIA_{it} \times YEARS10to14_{it} + \beta_4 IIA_{it} \times YEARS15to19_{it} + \beta_4 IIA_{it} \times YEARS20to24_{it} + \beta_4 IIA_{it} \times YEARS25to29_{it} + \beta_4 IIA_{it} \times YEARS30_{it} + X\boldsymbol{\beta} + \gamma_i + \gamma_t + \epsilon_{it} \dots\dots\dots\dots(4)$$

$YEARS0to4_{it}$ is a binary variable that take a value of one if an IIA entered into force from four years before year t to year t, $YEARS5to9_{it}$ indicates whether an IIA entered into force five to nine years before year t, and so on. $YEARS30_{it}$ is a binary variable that indicates whether an IIA entered into force thirty or more years before year t. The coefficients indicate the impact of ODI of IIAs that entered into force zero to four years before (β_1), five to nine years before (β_2), and so on.

2.2.4   Further robustness tests

Propensity score matching

Propensity score matching is used to further alleviate potential endogeneity, such as through selection bias or omitted variable bias, and serves as a further robustness check of the baseline estimates. This method matches each observation where an IIA is in force with an observation where an IIA is not in force. Propensity score matching pairs observations that have a similar estimated probability (or propensity score) of having an IIA in force.

This estimated probability, or propensity score, is estimated using a logit model that includes other determinants of FDI which are included as controls in the baseline specification:

$$P(IIA_{it} = 1|X) = \frac{\exp(\mu_0 + X\boldsymbol{\mu} + \eta_{it})}{1 + \exp(\mu_0 + X\boldsymbol{\mu} + \eta_{it})} \dots\dots\dots\dots(4)$$

$P(IIA_{it} = 1|X)$ is the probability that country i has an IIA with the UK in year t, while X is the same battery of controls included in the baseline specification. The upper and lower bounds of the right-hand side are zero and one, respectively, which makes the logistic function more suitable than a linear probability model. Once equation (4) has been estimated, propensity scores (estimated probabilities) are assigned to every observation.

A matching algorithm is used to match observations where an IIA is in force with an observation where an IIA is not in force. This is undertaken with nearest neighbour matching: an observation with an IIA is matched with the closest observation (by propensity score) without an IIA. This method removes some of the selection bias problem, where countries are more likely to have an IIA with the UK for reasons that are similar to the reasons why they have more ODI from the UK. The matching algorithm removes some of the selection bias by pairing countries that are similarly likely to have an IIA with the UK.

The differences in UK ODI between observations with an IIA and their matched observations without an IIA can be tested to estimate the impact of IIAs on UK ODI.

Arellano-Bond estimation

As part of sensitivity analysis, the lagged value of ODI can be included as a regressor (Singh et al., 2020). This may be appropriate if current levels of ODI are heavily influenced by previous levels of FDI. However, the inclusion of lagged ODI introduces an endogeneity problem. For example, unobserved and time invariant country-pair heterogeneity is correlated to both ODI and its lagged value. Therefore, a GMM Arellano-Bond estimator is used to estimate the impact of IIAs on ODI. First differences are taken and further lags of ODI are used as instruments for the lagged difference in ODI.

2.2.5　　Limitations of the research methods and causal inference

While the analysis seeks to limit the potential endogeneity concerns, undertakes a range of robustness checks, and adds to the literature by investigating the impact of IIAs across time (rather than a post-IIA average effect), there are limitations.

By using country fixed effects, it is **impossible to estimate the impact of time invariant characteristics individually** (such as distance between countries) and compare their importance to that of time varying characteristics and the impact of IIAs.

The extent to which these estimates can be interpreted as causal estimates is dependent on methods used to alleviate potential endogeneity problems. The impact of other factors that are linked to the existence of IIAs and the value of ODI between two countries may be misattributed to IIAs if not properly accounted for, such as the two countries sharing a common border.

Fixed effects are used to control for time-invariant factors. While sharing a common border or language are factors for which data is readily available, there may be other cultural, political, and socioeconomic factors that are unobservable. Those that do not change across the sample timeline (from 2000 to 2020) are controlled for with country fixed effects.

However, the use of country fixed effects **does not control for time varying heterogeneity**. While many relevant factors and determinants of ODI have been included as controls, there may exist unobserved differences between countries that vary across time and influence both the IIA status of a country and UK ODI stock.

Fixed effects may also **exacerbate estimation bias associated with measurement error** if the measurement errors are relatively uncorrelated across time and there is correlation in the treatment variable across time (which is likely to be the case as IIA status changes infrequently). Attenuation bias from measurement error leads to the underestimation of the absolute impact of the impact of IIAs on ODI, so positive impacts are estimated as less positive and negative impacts are estimated as less negative. Under certain conditions, the resulting bias in fixed effects estimators may be greater than the bias of the OLS estimates.

2.3　　Market-related factors

Market-related determinants of FDI include the size of the host market (in terms of population) as well as the income of individuals within the market and growth prospects.

Domestic demand in a host country is likely to be important for FDI location choice, but the location choice literature broadly relies on a wider measure of demand. This is referred to as 'market potential'. Market potential considers domestic demand as well as the demand in neighbouring countries. A second element of market potential is the degree of competition in the host and neighbouring countries. The higher the intensity of competition the lower the market potential. A third element of market potential is the trade costs arising from the geographic distance between the demand and competitors, as discussed by Head and Mayer (2002).

Furthermore, the possibility of agglomeration economies affects FDI location choices. Agglomeration economies are the benefits that come about when firms locate in close proximity to one another in the same cities or industrial clusters. In the case of R&D investments, high levels of pre-existing R&D spend and the presence of other firms undertaking similar activities could generate agglomeration economies that make investments more viable.

Uttama (2021) indicates that the similarity of home and host countries in terms of the market size may be relevant to FDI location decisions. The author argues that countries with similar factor endowments will invest abroad for horizontal FDI (producing similar goods and services in the home and host countries), whereas countries with different factor endowments may invest for vertical FDI (producing different goods and services in the home and host countries). Additionally, it is suggested that firms invest in countries with similar market sizes to penetrate foreign markets and that firms in larger countries will be more likely to invest abroad for access to markets and resources.

2.4   Resource-related factors

Resource-related determinants of FDI include the level of natural resources available as well as the composition of the labour force and the quality of the capital stock.

Studies such as Chen, Zhai and Zhang (2020) and Neumayer and Spess (2005) have argued that countries with abundant natural resources are attractive to prospective investors. Physical capital may also be a factor in FDI location decision-making. Shah (2014) indicates that multinationals prefer countries with well-established infrastructure to help optimise their production processes in host countries. More recently, Caon (2021) uses World Economic Forum data to show a very strong relationship between the quality of infrastructure and the number of FDI projects.

The skill composition of the labour force is also identified as being important in the literature. For example, Noorbakhsh, Paloni and Youssef (1999) find that human capital can play an important role in attracting FDI.

2.5   Efficiency-related factors

The efficiency-related determinants of FDI are closely related to the resource-related determinants discussed previously. All else being equal, countries in which production costs are relatively low are more likely to attract FDI as this will lead to a higher degree of international competitiveness. However, what is likely to be most important to firms is the productivity of resources relative to their cost.

Another dimension of this are transportation and investment costs. Armstrong and Nottage (2016) highlight that this may be related to the distance between the home and host countries. Additionally, firms are likely to locate manufacturing investments near large markets to minimise the cost of transporting products to those markets.

2.6   Business facilitation

The business-facilitation related factors that influence FDI include the level of corruption as well as quality of life features and cultural factors.

The influence of corruption is generally considered through the lens of two different hypotheses. One is that corruption may 'grease the wheels' and the other is that corruption may 'sand the wheels'. The 'grease the wheels' hypothesis suggests that corruption can help to bypass onerous bureaucracy and speed up business processes. The 'sand the wheels' hypothesis argues that corrupt officials may create artificial hurdles for businesses so that they can extract bribes. Zander (2021) analyses FDI flows in the OECD and his results support the notion that the influence of corruption on FDI is uncertain.

The quality of life available to employees in host countries may also influence the FDI location decision. Gottlieb (1995) regards amenities as an important factor in firm location decisions, and Chen (2018) points out that CEOs highlight quality of life as an important locational motive.

Cultural aspects have also been found to be important in determining FDI flows. For example, a study by Siegel, Licht and Schwartz (2013) found that there is more likely to be FDI between countries with a common language and that have colonial ties.

3   Existing empirical evidence on the effect of IIAs on FDI

While there is now a vast amount of empirical evidence available on impacts of IIAs (this review focuses on BITs), there is no consensus in the literature as to whether IIAs have an impact on FDI.

A meta-analysis of 74 studies conducted by Brada, Drabek and Iwasiki (2020) suggests that IIAs have a negligibly small or zero effect on FDI. However, the authors acknowledge that there may be an effect that is not captured due to the limitations of current research methods.

Similarly, Bellak (2015) and Copenhagen Economics (2012) conclude on the basis of their own respective meta-analyses of existing research that there is no genuine empirical effect of IIAs on FDI.

In contrast, a World Bank (2015) report on investment policy highlights several studies that have found a positive effect of IIAs on FDI. Moreover, an evidence review carried out by the United Nations (2009) concludes that IIAs can influence the decision of where to invest.

The table below presents a summary of the estimates provided in existing empirical investigations of the impact of IIAs on FDI. The remainder of this section discusses those studies in more detail.

Table 3   Summary of coefficients

Paper	Major Coefficient	Geographic Coverage	Dependent variable	Independent variable of interest	Interpretation
Impact of IIAs on FDI value (flows)					
Aisbett (2007)	0.204	Low-/middle-income countries (from OECD)	FDI value (log of FDI flows)	Ratified IIA (dummy)	There is no causal impact of IIAs on FDI flows
Armstrong and Nottage (2016)	0.33***	Global (from OECD)	FDI value (log of FDI flows)	Signed IIA (dummy)	The presence of an IIA is associated with an increase in bilateral FDI flows of 39%
Cao et al (2014)	1.446***	Vietnam	FDI value (log of FDI flows)	IIA index	An increase in the IIA index of one percentage point results in an increase of FDI of 3.3%
Falvey and Foster-McGregor (2015)	1.415***	Global (from OECD)	FDI value (log of FDI flows)	Ratified IIA (dummy)	The presence of an IIA is associated with a quadrupling of bilateral FDI flows
Frenkel and Walker (2018)	0.190**	Global	FDI value (FDI flows, transformed using hyperbolic sine transformation)	Ratified IIA (dummy)	The presence of an IIA is associated with an increase in bilateral FDI flows of 21%

Paper	Major Coefficient	Geographic Coverage	Dependent variable	Independent variable of interest	Interpretation
Hallward-Driemeier (2003)	-11.36	Developing countries (from OECD)	FDI value (level of FDI flows)	Ratified IIA (dummy)	There is no causal impact of IIAs on FDI flows
Jung and Kim (2020)	3.846***	Global (from South Korea)	FDI value (log of FDI flows)	Signed IIA (dummy)	The presence of an IIA is associated with a 46.8-fold increase in bilateral FDI flows
Kamila and Chinara (2017)	2.810*	India	FDI value (log of FDI flows)	Ratified IIA (dummy)	The presence of an IIA is associated with a 47-fold increase in bilateral FDI flows
Lee and Johnston (2016)	0.103***	Non-OECD	FDI value (log of FDI flows)	Number of IIAs signed with powerful countries	Signing an IIA with a powerful country is associated with an increase in overall FDI flows of 10.8%
Lesher and Miroudot (2006)	0.011	Global	FDI value (level of FDI flows)	Signed IIA (dummy)	There is no causal impact of IIAs on FDI flows
Myburgh and Paniagua (2016)	0.984*	Global	FDI value (log of FDI flows)	Signed Convention on Recognition and Enforcement of Foreign Arbitral Awards (dummy)	Signing the convention on recognition and enforcement of foreign arbitral awards is associated with a 2.7-fold increase in bilateral FDI flows
Neumayer and Spess (2005)	0.015***	Developing countries (from OECD)	FDI value (log of FDI flows)	Number of IIAs signed with OECD (weighted)	Signing an IIA with an OECD country is associated with an increase in overall FDI flows of 1.5%
Park and Jung (2020)	0.883*	Developing countries (from South Korea)	FDI value (log of FDI flows)	Signed IIA (dummy)	The presence of an IIA is associated with a 2.4-fold increase in bilateral FDI flows

Paper	Major Coefficient	Geographic Coverage	Dependent variable	Independent variable of interest	Interpretation
Peinhardt and Allee (2012)	Bangladesh: 28.18*; Honduras: 82.79*; Turkey: 155.08; Trinidad & Tobago: 254.11*[3]	From US	FDI value (level of flows)	Signed IIA (dummy)	The presence of an IIA is associated with an annual increase in FDI flows of $28 million for Bangladesh, $83 million for Honduras, $155 million for Turkey, and $254 million for Trinidad & Tobago
Phanord-Cadet (2017)	244.654	Global	FDI value (level of flows)	Number of IIAs signed	There is no causal impact of IIAs on FDI flows
Singh et al (2020)	0.271	India	FDI value (level of flows)	Signed IIA (dummy)	There is no causal impact of IIAs on FDI flows
Tobin and Rose-Ackerman (2003)	-0.32	Developing countries	FDI value (5-year average level of flows)	Number of IIAs signed (logged)	There is no causal impact of IIAs on FDI flows
Uttama (2021)	0.15*	ASEAN countries RCEP-6 countries	FDI value (log of FDI flows)	Cumulative number of IIA provisions	An increase in the number of IIA provisions between two countries is associated with an increase in FDI flows of 0.15%
Yackee (2008)	0.002	Global	FDI value (log of FDI flows)	Signed IIA with strong country (dummy)	There is no causal impact of IIAs on FDI flows
Zhao and Lee (2019)	0.146*	From China	FDI value (log of FDI flows)	Signed IIA (dummy)	The presence of an IIA is associated with an increase in bilateral FDI flows of 16%
Impact of IIAs on FDI value (stocks)					
Bengoa et al (2020)	0.086*	Latin America	FDI value (log of FDI stocks)	Ratified IIA (dummy)	The presence of an IIA is associated with an increase in bilateral FDI stocks of 9%
Buge (2014)	0.986***	OECD	FDI value (log of FDI stocks)	Preferential Trade Agreement (dummy)	The presence of a PTA is associated with an increase in bilateral FDI stocks of 170%

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[3] Only significant coefficients are reported.

Paper	Major Coefficient	Geographic Coverage	Dependent variable	Independent variable of interest	Interpretation
Colen et al (2014)	0.0207***	Central and Eastern Europe, Former Soviet Union	FDI value (log of FDI stocks)	Number of IIAs ratified	The presence of an IIA is associated with an increase in bilateral FDI stocks of 9%
Gounder et al (2019)	-0.157	OECD to Africa, Caribbean and Pacific	FDI value (log of FDI stocks)	Ratified PTA (dummy)	There is no causal impact of IIAs on FDI stocks
Lejour and Salfi (2015)	0.302***	Global	FDI value (log of FDI stocks)	Ratified IIA (dummy)	The presence of an IIA is associated with an increase in bilateral FDI stocks of 35%
Shah (2018)	0.79***	MENA countries	FDI value (log of FDI stocks)	Number of ratified IIAs	Signing an IIA is associated with an increase in bilateral FDI stocks of 120%
Impact of IIAs on FDI shares					
Berger et al (2013)	0.106***	Developing countries	FDI (share in total FDI, logged)	Ratified IIA (dummy)	The presence of an IIA is associated with an increase in the share of FDI to that country relative to all other countries of 11%
Busse et al (2008)	0.221***	Developing countries	FDI value (share in total FDI, logged)	Ratified IIA (dummy)	The presence of an IIA is associated with an increase in share of FDI to that country relative to all other developing countries of 25%
Danzman (2010)	0.016***	Developing countries	FDI value (share in GDP)	Weighted (by the percentage of world FDI exports of the IIA partners) number of IIAs	Signing an IIA increases the share of FDI in GDP by 1.6%
Haftel (2010)	0.002**	Developing countries (from US)	FDI value (flow, share in GDP)	Ratified IIA (dummy)	A ratified BIT increases FDI's share in GDP by 0.17%
Mina (2008)	0.019	GCC	FDI value (stock, share in GDP)	Number of ratified IIAs	There is no causal impact of IIAs on FDI share in GDP
Buthe and Milner (2008)	0.0411***	Non-OECD countries with a population over 1 million	FDI value (flow, share in GDP)	Number of ratified IIAs	A ratified BIT increases FDI's share in GDP by 4%

Paper	Major Coefficient	Geographic Coverage	Dependent variable	Independent variable of interest	Interpretation
Impact of IIAs on number of FDI projects					
Desbordes (2016)	0.117*	Global	Number of FDI projects	Ratified IIA (dummy)	The presence of an IIA is associated with an increase in the number of FDI projects of 12%
Gomez-Mera and Varela (2017)	1.612*	Brazil, Korea, South Africa and India	Number of FDI projects	Ratified IIA (dummy)	An IIA between two countries increases the difference in the logs of expected counts of investments by 1.6
Impact of IIAs on probability of investing					
Li et al (2021)	0.062**	Global (from China)	FDI dummy	Signed IIA (dummy)	The odds of a firm investing in a country increase by 6% if that country has signed an IIA

3.1.1   Impact of IIAs on FDI

Several studies find that IIAs have a positive impact on FDI.

Neumayer and Spess (2005) perform a country-level analysis of the effect of BITs on FDI flows to developing countries, obtaining robust results indicating that a higher number of BITs increases the FDI flows to that country. Buthe and Milner (2008) also found that countries with more BITs experience greater FDI inflows in their study of FDI inflows to 122 developing countries.

Falvey and Foster-McGregor (2018) concur with this and find that forming a BIT with a developed country significantly increases FDI inflows to developing countries. They also claim that the increases in FDI flows arising from BITs are primarily due to the development of new FDI flows and the revitalisation of existing relationships that are deteriorating.

Uttama (2021) uses panel data collected on RCEP countries from 2009 to 2018 to explore the relationship between IIAs and FDI. The author finds that there is a positive and statistically significant relationship between inward FDI and investment provisions in IIAs.

Singh, Shreeti and Urdhwareshe (2020) study the impact of several BITs signed by India in the 1990s. The authors found that whilst the individual signing of BITs did not influence the inflow of foreign investment, the effect of cumulative bilateral investment treaties signed was statistically significant.

In contrast, the study of Kamila and Chinara (2017) on the effect of BITs on the inflow of foreign investment to India comes to the opposite conclusion. Their analysis of data from 209 source countries covering 2010 to 2015 finds a positive, statistically significant and robust effect on FDI inflows for countries that have signed a BIT with India, however not for the overall number of BITs in force in India at any given time.

Jung and Kim (2020) explore the relationship between BITs signed by South Korea and outward FDI. The authors find that BITs – whether signed or entered in force – between South Korea and a developing nation have a positive and statistically significant impact on FDI flows to those nations.

In contrast, they find that for developed countries this does not hold. This is consistent with the results of Park and Jung (2020), who found that investment treaties with South Korea are associated with increased South Korean FDI.

Busse et al (2008) also found that BITs can promote FDI flows to developing countries and claim that they may even act as a substitute for weak institutions. Their study covered the period 1978 to 2004, and the authors attribute the differences in their findings to some other previous work in the field to the fact that their dataset covered a wider range of host and source countries.

However, other studies find that no causal link between BITs and ODI can be established.

Hallward-Driemeier (2003) study bilateral FDI flows from 20 OECD countries to 31 developing countries and concluded that whilst the share of FDI flows into developing countries covered by BITs increased from 5% to almost one half from 1980 to 2000, there was no causal link. Instead, it is suggested that BITs act as a complement to institutional quality rather than a substitute. Tobin and Rose-Ackerman (2003) obtained similar results using data covering the latter part of the 20th century. The authors concluded that the relationship between having a BIT with the US and US FDI is very weak.

Aisbett (2007) finds through her exploration of FDI outflows from OECD countries that whilst there is a strong correlation between BITs and investment flows the relationship is not causal. Yackee (2008) also finds that BITs are not a key driver of FDI in his analysis of FDI outflows from the top 18 capital exporting nations.

Peinhardt and Allee (2012) does not find that IIAs signed with the US have an impact on FDI. They study the impact of existing agreements (trade and investment framework agreements, BITs and preferential trade agreements) signed with the US and their results indicate that these agreements do not increase outward investment from the US. The authors conclude that the expectations of US treaty partners of increased FDI are likely to be unrealistic.

3.1.2 Impact of specific IIA provisions on FDI

Investment clauses

Buthe and Milner (2008) examine the link between specific institutional features of trade agreements and FDI flows. The authors analyse data from 122 developing countries from 1971 to 2007 and find that the institutional features of these agreements can have a significant effect on the impact of the agreements. They find that the ratification of a preferential trade agreement is linked at an increase in FDI of 0.274% of GDP. Additionally, it is found that moving from a Preferential Trade Arrangement (PTA) without a strict investment clause to one with a strict investment clause[4] increases FDI by approximately 0.316% of GDP and the addition of a dispute settlement mechanism is associated with an increase in FDI of 0.252% of GDP.

Berger, Busse, Nunnenkamp and Roy (2010) explore the effects of guarantees of market access for investors by means of National Treatment (NT) and Most Favoured Nation (MFN) treatment as well as Investor-State Dispute Settlement (ISDS) mechanisms on FDI. They find that the existence and

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[4] The authors consider a clause to be strict if it includes provisions such as NT, MFN or sanctions for violations, as opposed to a basic investment clause which simply requires some clause concerning FDI.

coverage of NT provisions has a highly significant effect on bilateral FDI, whereas ISDS mechanisms play a far smaller role in their study of FDI from 28 source to 83 host countries.

Nguyen, Cao and Lu (2014) explore how the strength of provisions in BITs influenced Vietnam's inward investment flows. They found that three specific kinds of provisions were associated with a statistically significant and positive effect on FDI. These were having a broad definition of investment in the BIT, granting right of establishment to foreign investors and NT.

Arbitration and disputes

Frenkel and Walter (2018) explore how the strength of provisions related to international dispute settlement in BITs influence the role of BITs in attracting FDI. The principal finding of the study was that stronger international dispute provisions are associated with increased FDI activity, and it was also noted that the estimated effect of BITs on FDI activity was higher when restricting the host countries of study to developing countries.

Desbordes (2016) explores how specific provisions influence the impact of IIAs using data covering most pairs of developed and developing countries from 2003 to 2010. Their results indicate that BITs specifically granting access to an investor-state dispute mechanism have a positive impact on FDI. Separately, they find that Regional Trade Investment Agreements (RTIAs) that protect foreign investors from discrimination also have a positive impact on FDI.

Danzman (2010) finds that strong arbitration provisions have the largest effect on infrastructure investment, and that investment treaties without these provisions are not associated with an increase in investment. The author also indicates that this positive effect is stronger when there are greater political constraints on the host country, and it is suggested that this is because high domestic political constraints will increase the confidence of investors that host countries will comply with BIT provisions.

Myburgh and Paniagua (2016) explore the impact of the adoption of the Convention on Recognition and Enforcement of Foreign Arbitral Awards (the New York Convention)[5] on greenfield FDI using data collected from almost 200 countries. The authors found that adoption of the convention was associated with a statistically significant increase in greenfield FDI.

Phanord-Cadet (2017) uses a panel of 107 countries from 1993 to 2015 to explore the effect of being a respondent party in ISDS cases on FDI inflows. The author finds that there is a positive and statistically significant relationship and interprets this as an assessment of validity of the international arbitration system and that ISDS helps to find a balance between investors rights and the regulatory frameworks of host countries.

Armstrong and Nottage (2016) explore how the strength of ISDS provisions effects the influence of BITs on FDI. They find that the effect of strong ISDS provisions on FDI is less than that of weaker ISDS provisions and suggest that this may be because investors may not be interested in the details of exact provisions included within BITs.

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[5] For details, see: https://newyorkconvention1958.org/index.php?lvl=cmspage&pageid=10&menu=729&opac_view=-1.

BITs in comparison to other kinds of agreements

Büge (2014) also finds that that the effects of BITs and Preferential Trade Agreements (PTAs) can be different and vary across countries. Firstly, he finds that there is a positive correlation between PTAs and bilateral FDI flows. Secondly, he finds that BITs between developing and developed countries increase FDI flows from the developed country to the developing country, but also that BITs have no effect on the level of bilateral FDI between developed nations.

Lesher and Miroudot (2006) obtain slightly different results, identifying that, by themselves, BITs do not affect investment flows. However, they also find that investment provisions in PTAs are associated with an increase in FDI flows of up to 45 percent using data from more than 100 countries.

Berger, Busse, Nunnenkamp and Roy (2010) find that the impact of investment provisions on bilateral FDI depend on whether the provisions are contained in Regional Trade Agreements (RTAs) or BITs – the former are found to leave FDI unaffected.

Bengoa, Sanchez-Robles and Shachmurove (2020) compare the effects of RTAs and BITs on FDI within Latin America using a panel of 11 countries over the period 1995 to 2018. The authors find that membership of a well-established RTA is more effective than signing BITs as a means of fostering intra-regional FDI. The effect of BITs was found to be heterogeneous across countries – they were found to have a positive effect in attracting FDI in the case of middle-income countries but not in the case of middle to low-income countries unless the ratified BITs included a high degree of investment protection.

Gomez-Mera and Varela (2017) focus on how IIAs influence the investment decisions of firms in emerging economies. Their analysis, based on surveys of firms in Brazil, India, South African and the Republic of Korea, finds that the existence of BITs and PTAs with a given host country significantly increase the likelihood of firms investing abroad in that host country. Additionally, the authors find that the positive effects of PTAs (and not BITs) fades with distance and suggest as a result that emerging markets firms value PTAs for their cost reducing effects.

3.1.3   Studies exploring whether there are heterogeneous effects on FDI of signed and ratified agreements

Haftel (2010) analyses data on US investment into more than 100 developing countries to explore the link between BITs and US outward FDI. The author finds that the presence of an IIA is associated with an increase in FDI from 0.07% of host country GDP to 0.24% of host country GDP. The authors also find that there is no effect for agreements that are just signed rather than ratified.

The idea that the sway of a ratified BIT is more than that of a signed BIT is supported by Shah (2018) which analyses FDI in MENA states. It was found that there is a positive effect of investment treaties on FDI from OECD countries.

3.1.4   Breakdown of impacts by firm characteristics

Colen, Persyn and Guariso (2014) explore how the effects of BITs vary across sectors using data collected from 13 countries in Central and Eastern Europe and the Former Soviet Union from 1994 to 2009. It was found that one additional BIT was associated with an increase in the FDI stock of between 1 and 2 percent. Also, the results indicate that BITs are most effective at attracting investment in utilities and real estate, somewhat effective at increasing FDI in banking, agriculture,

and mining and not effective at attracting investment in manufacturing and services. The authors also suggest that higher capital requirements partially explain the increased responsiveness of FDI to BITs in sectors with more investment irreversibility.

Li, Zhao and Shen (2021) consider the conditions under which BITs might be most effective using China as a case study. They determine that the cultural difference between China and the host country is negatively associated with FDI entry but that BITs may act as a substitute for the host country's institutional environment by reducing the investment uncertainty arising from cultural difference. Additionally, they find that state-owned enterprises are less responsive to BITs in host countries than are privately owned enterprises. This contrasts with the findings of Zhao and Lee (2019), who also study the effects of BITs on Chinese outward FDI from 2005 to 2016. The authors find that BITs induced increased outward FDI for state-owned enterprises but not for private enterprises.

3.1.5 Breakdown of impacts by geography

Lejour and Salfi (2015) also find a significant effect of BITs on FDI, through the analysis of a dataset covering 217 countries from 1985 to 2011. The authors find that a ratified BIT between a pair of countries is associated with an increase in bilateral FDI stocks by 35% but that high income countries with a high level of existing governance do not profit in the same way. They also find variation by region – ratified BITs led to increased FDI stocks primarily in East Asia, Middle and Eastern Europe.

Gounder, Falvey and Rajaguru (2019) use panel data from 2000 to 2017 on FDI stocks from 34 OECD nations and 45 ACP countries to explore the role of international agreements in attracting FDI. The authors found that there was no evidence that a BIT encouraged FDI. Additionally, the results indicated that there is no significant effect of PTAs on FDI in the Caribbean, but that in Africa a BIT in combination with a PTA can generate a positive effect on FDI.

Lee and Johnston (2016) find that BITs signed with powerful countries (defined by the authors as the top six largest economies) lead to an increase in FDI inflows (from these countries and from other countries) whereas BITs signed with other countries have little influence on FDI flows.

Mina (2008) explores the effects of the number of BITs contracted on FDI inflows to GCC countries between 1980 and 2002. It is found that BITs with high income non-OECD countries and low-income countries have a positive impact on the FDI stock, however no such effect was found for other groups of countries.

3.1.6 Limitations of existing empirical analyses

The OECD identify that there is a lack of firm-level analysis of the effects of IIAs on FDI, acknowledging that there is some potential in approaches that use firm-level data. Bellak (2015) highlights that there is a lack of studies exploring the impact of specific aspects of IIAs.

The OECD also raise questions about the general level of reliability in the analysis of the determinants of FDI. These include both shortcomings in the data as well as potential issues with the modelling approaches used. This sentiment is echoed by Bellak (2015), Jacobs (2017), Kerner (2009) and Kerner (2018).

Some of the issues with the analysis of the effect of IIAs on FDI raised in the literature include shortcomings in reflecting the activity of corporations in host countries and that FDI does not measure the aggregate resources devoted to host countries as it ignores possible borrowing from

host country sources. Additionally, some of what may be recorded as FDI is really a form of portfolio investment, and there is possible failure to account for investor protection and other host country characteristics arising from international agreements other than BITs and other host country policies. Furthermore, it is possible that the practice of 'treaty shopping' by multinational corporations (investments made from countries other than that whose BIT will be invoked should any conflict arise) may lead to spurious correlations.

4 Quantitative analysis of the impact of IIAs on UK outward direct investment

4.1 Data sources and descriptive statistics

4.1.1 Data sources

The following table outlines the data sources for the variables used in the econometric analysis. The sample timeline is between 2000 and 2020, following the timeline of available data on bilateral ODI.

Table 4 Data sources for econometric analysis

Variable	Source
ODI (flows and stocks)	UNCTAD
IIA (date)	UNCTAD
GDP and GDP growth	World Bank
Worldwide governance indicators	WGI
Economic freedoms indices	Heritage Foundation
Trade openness	World Bank
Natural resource rents (% GDP)	World Bank
Inflation	World Bank
WTO membership	WTO

Data concerning ODI flows, and stocks is sourced UNCTAD, but of the 4515 potential observations (215 countries across 21 years from 2000 to 2020), 35.1% do not have data on UK ODI stock and more concerningly 71.0% do not have data on UK ODI flows. This may be partly driven by values of ODI or the number of distinct UK firms investing in the host country being small enough, such that reporting may be disclosive. Nonetheless, the missing data is largely restricted to countries where there is relatively little UK ODI. For example, the ONS reported that total UK ODI stock in 2015 (across all countries) was £1,084bn (ONS, 2016), and total UK ODI stock in the data in 2015 is £956bn. The ODI data provided by UNCTAD is imperfect but constitutes around 90% of all UK ODI stock and is likely to be consistent as it is based on UK reporting of the ODI of UK firms. One limitation of the study relates to concerns about the quality of FDI data worldwide (Damgaard and Elkjaer 2017, Mugge and Linsi 2020). **ODI data used in the descriptive statistics section and in the econometric analysis is deflated to 2015 prices using host country GDP deflator.**

Economic data concerning GDP, GDP growth, inflation, trade openness and natural resource rents are provided by the World Bank. While there are associated potential measurement errors with these indicators, these are likely the most reliable data available. Data on the existence, timing, and contents of IIAs between the UK and other countries is provided by UNCTAD, in a process that mapped the contents of the IIAs onto a fixed set of provisions.

4.1.2   Descriptive statistics

This section describes the data used in this study. While more recent descriptive data may be available, the purpose of this section is to describe the data used in the econometric analysis.

The IIA data from UNCTAD includes 99 BITs that included the UK and were in force for at least one year of the sample between 2000 and 2020, inclusive. As of 2020, 95 agreements were in force.[6] Figure 1 provides an overview of when those agreements were reached.

The majority of the 99 relevant BITs came into force in the 1990s, with 28 coming into force before 1990. Compared to the 1990s, there have been relatively fewer BITs including the UK that have come into force in the 2000s (15).

**Figure 1   IIAs by year of entry into force**
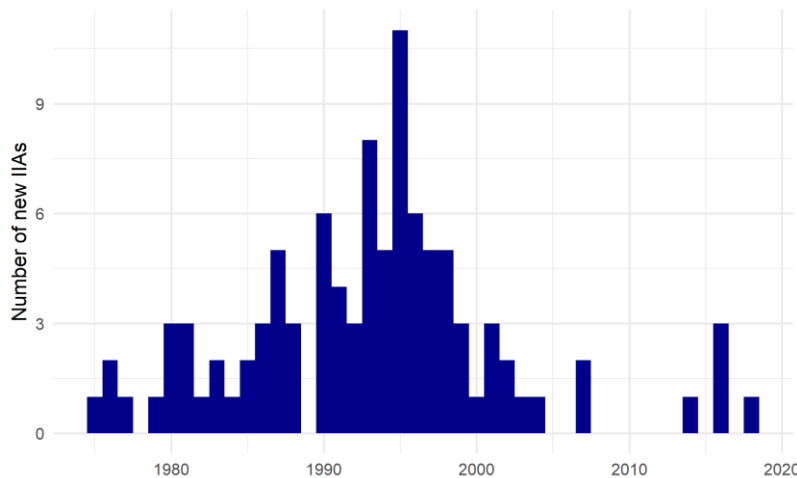
Source: UNCTAD

Figure 2 presents the geographical distribution of countries with whom the UK had a BIT in force for at least one year between 2000 and 2020.

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[6] There are four terminations of BITs in the sample where a replacement agreement has not entered into force: those with Bolivia, Ecuador, Poland, and South Africa.

Figure 2   IIA status across country
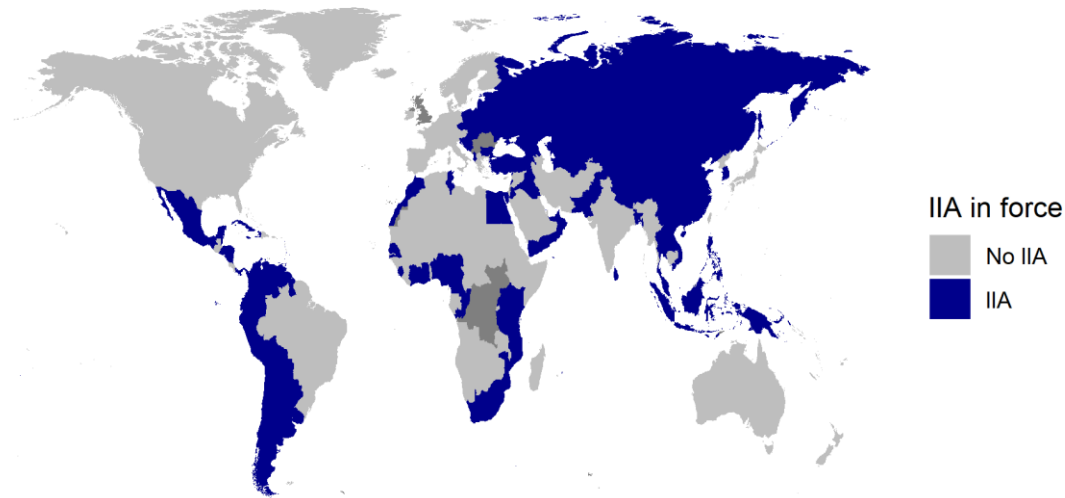
Source: UNCTAD

Figure 3 illustrates the geographical distribution of UK ODI stock across countries in 2020 with missing and/or unreported data in several countries, especially in Africa. **UK ODI stock data has been deflated to 2015 prices using host country GDP deflators.**

The United States has by far the largest UK ODI stock of all countries, with £410.6bn of UK ODI stock in the United States (in 2015 prices). Significant UK ODI stock is also found in European countries such as the Netherlands (£142.7bn), Luxembourg (£105.8bn), France (£87.1bn), and Spain (£71.5bn). Relative to the size of their economies, there is relatively little UK ODI stock in Asian economies such as India (£12.6bn), China (£12.2bn), Japan (£4.7bn), and South Korea (£3.8bn).

**Figure 3   UK ODI stock by country (2020 values)**
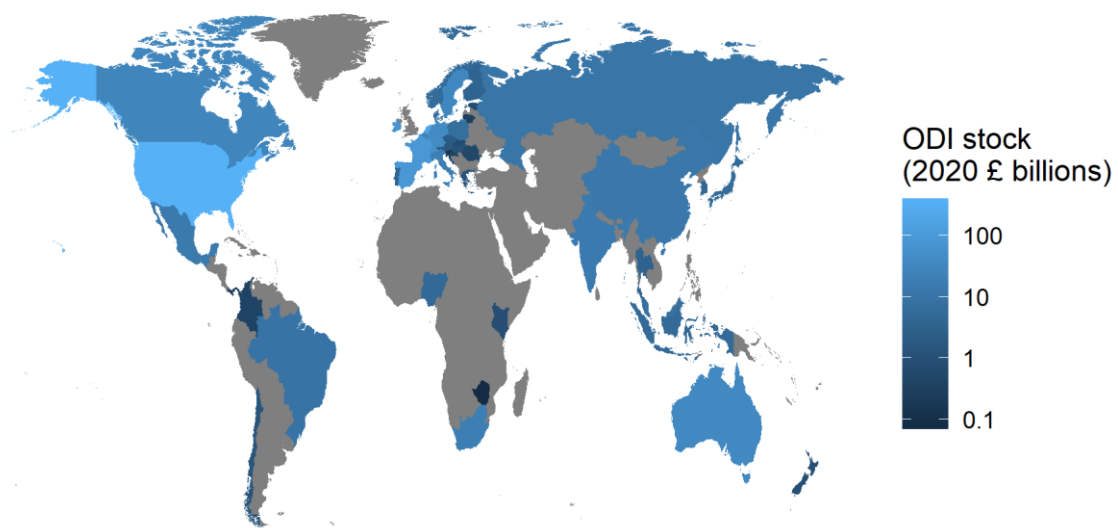
Source: UNCTAD

The distribution of FDI is heavily skewed towards a handful of countries. For example, in 2019 the top five locations for UK ODI stock (the United States, the Netherlands, Luxembourg, France, and

Spain) made up over half (54.3%) of global UK ODI stock. The share of total UK ODI stock held by the top ten countries is over three quarters (75.9%) on average across the sample.

Figure 4   UK ODI stock by IIA status
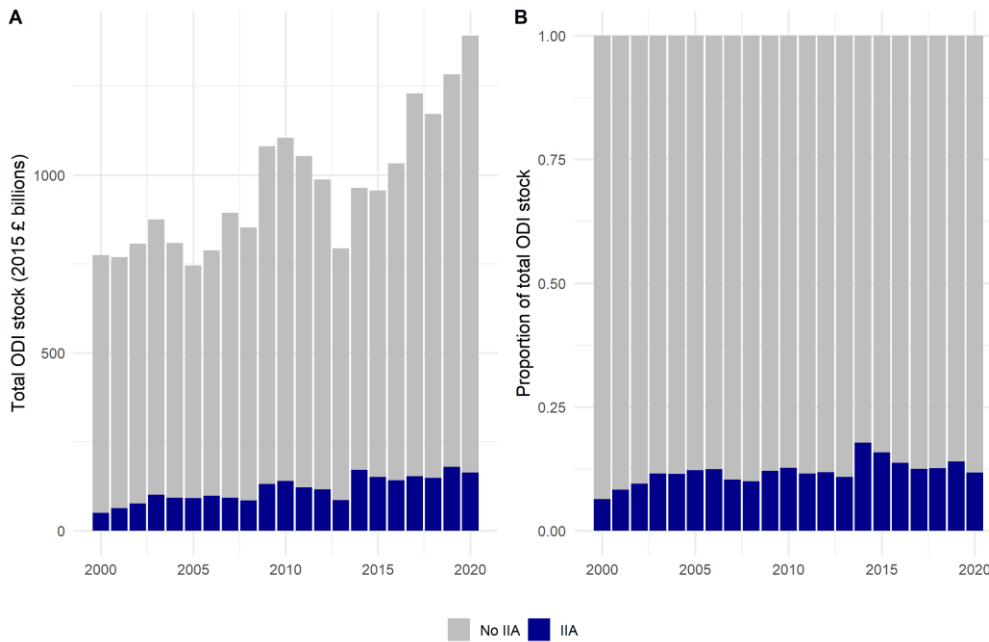
Sources: UNCTAD and OECD

Besides a fall in the mid-2010s, UK ODI stock has consistently grown within the sample timeline between 2000 and 2020, growing by an average annual rate of 3.0%. Figure 4 illustrates trends in ODI across time and distribution between countries with which the UK has an IIA in force and countries with which the UK does not. Panel A shows trends in the absolute value of UK ODI stock and its distribution between IIA and non-IIA countries, while Panel B shows the proportion of UK ODI stock between the two groups.

At the start of the sample IIA countries make up 6.4% of total UK ODI stock (£49.7bn in 2015 prices). While it almost doubles to 12.7% by 2010, this growth stalls in the 2010s largely because of significant growth in UK ODI stock in non-IIA countries. UK ODI stock in IIA countries constitutes only a little over a tenth (11.7%) of total ODI stock by the end of the sample.

While countries with IIAs including the UK do not make up a large proportion of the UK's ODI stock, their importance has grown in the last twenty years. In particular, FDI has increased more in countries with IIAs compared to countries without IIAs, part of which is driven by 15 IIAs entering into force between 2000 and 2020. Total UK ODI stock in IIA countries grew by 229% between 2000 and 2020, an average annual growth rate of 6.1%. This is more than double that of total UK ODI stock in non-IIA countries (2.7% a year).

4.2 Econometric results

4.2.1 Baseline specification

The impact of IIAs on UK ODI is estimated using the baseline specification outlined in Section 2.2.1, which estimates the impact of an IIA with a country on the total amount of UK ODI stock in that same country, controlling for other determinants of UK ODI.

Some countries with disproportionately large UK ODI stocks (the Netherlands, Luxembourg, Monaco, and the British Virgin Islands) are removed from the econometric analysis as a significant proportion of FDI into those countries may also reflect pass-through investments where the final destination of the investment is elsewhere.

The United States is an outlier in terms of UK ODI stock and is removed from the baseline analysis due to long-standing economic, social, and political connections with the UK, where the impact of the introduction of an IIA between the two countries would not be representative of the impact of the introduction of an IIA between the UK and other countries. The inclusion of such an outlier could also make the estimate of the impact of IIAs less precise.

Although there is free movement of capital within the EU (relevant to the UK for most of the sample timeline), it is not clear how this agreement compared to other IIAs, or whether it was comparable to other IIAs. As a result, these countries are also removed from the econometric analysis.

The baseline results are reported in Table 5. Column 1 reports the estimated impact of IIAs on UK ODI stock with a fixed effects specification (including year fixed effects). Column 2 reports the same coefficient estimate when controls (other determinants of UK ODI) are included and follows the baseline specification outlined in the methodology (full results including estimates of all controls can be found in Table 16 in the Annex[7]).

Table 5   Impact of IIAs on UK ODI

	No controls	Baseline specification
IIA	2.54 **	1.88 *
	(1.14)	(1.13)
Controls included	No	Yes
Country fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
R-squared	0.08	0.12
No. obs.	1442	1442

Note: Control variables concerning the host country include real GDP, natural resource rents (% GDP), inflation, GDP growth, trade (% GDP), WTO membership, Heritage Foundation overall score, World Governance Indices for control of corruption, government effectiveness, political stability, rule of law, regulatory quality, and voice and accountability. Standard errors are reported in parentheses and are clustered at the country level. Significance levels: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Sources: LE calculations, various data sources (see methodology)

Both specifications estimate a positive and significant impact of IIAs on UK ODI. The coefficient estimates of 2.54 (Column 1) and 1.88 (Column 2) imply that an IIA entering into force has an average

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[7] Table 16 in the Annex also includes baseline specification estimates where the United States is included. While the point estimate of the impact of IIAs (1.77) is similar to the baseline estimate reported in Table 5 (1.88), the standard errors are far larger, suggesting that the inclusion of the outlier makes the estimates noisier/less precise.

impact of a £2.54bn and £1.88bn increase in UK ODI stock, respectively. Results from the baseline specification (Column 2) are the preferred estimates, as they account for other determinants of UK ODI. The gap between the two estimates illustrates the importance of including the controls, implying that without those controls there would be an overestimate of the impact of IIAs on UK ODI stock.

The average UK ODI stock in countries without an IIA in force is £13.1bn, so the estimated impact of an IIA according to the baseline specification (£1.88bn) is the equivalent of around a 14.4% increase in UK ODI stock for countries without an IIA.

Further specifications that add outliers to the sample are presented in Table 16 in the Annex. The first specification includes the baseline sample and the United States, the next includes the baseline sample and where pass-through ODI is suspected to make up a significant proportion of total ODI (Netherlands, Luxembourg, British Virgin Islands, and Monaco), and the last includes the baseline sample with EU countries. The inclusion of these large outliers does not significantly change the point estimates (ranging between £1.77bn and £2.39bn), but the accompanying standard errors are far larger (between 1.93 and 1.98 compared to 1.13 and 1.14 in Table 5). This suggests that the inclusion of these outliers make the estimates noisier and less precise without significantly changing the estimated impact of IIAs on UK ODI stock.

4.2.2   Variation of IIA impacts by country characteristics

Included controls account for other host country characteristics that may also influence UK ODI stock. These characteristics may also influence the impact of IIAs on UK ODI stocks.

One important characteristic may be the size of the host country's economy (GDP). IIAs with larger economies may have a smaller impact as there often is already significant UK ODI, whereas IIAs may have a greater impact in smaller economies where an IIA may be the starting trigger for UK ODI.

This hypothesis is tested by including an interaction term between IIAs and real GDP in the baseline specification. Table 6 presents the results for this model.

Table 6   Impact of IIAs interacted with host country GDP on UK ODI stock

	Interaction with GDP
IIA	7.11 **
	(3.41)
IIA X Real GDP, Host country (2015 £ billions, log transformed)	-1.01 *
	(0.62)
Controls included	Yes
Country fixed effects	Yes
Year fixed effects	Yes
R-squared	0.07
No. obs.	1897

Note: Control variables concerning the host country include real GDP, natural resource rents (% GDP), inflation, GDP growth, trade (% GDP), WTO membership, Heritage Foundation overall score, World Governance Indices for control of corruption, government effectiveness, political stability, rule of law, regulatory quality, and voice and accountability. Standard errors are reported in parentheses and are clustered at the country level. Significance levels: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Sources: LE calculations, various data sources (see methodology)

The estimated coefficient of the interaction of -1.01 implies that a ten percent increase in GDP decreases the impact of IIAs by £0.101bn. The implied impact of IIAs on ODI for an average-sized economy in the sample (GDP of £217bn in 2015 prices) is £1.68bn, similar the baseline estimate.

The impacts of IIAs on UK ODI stock may be influenced by other host country characteristics. Figure 5 presents the results of interacting the existence of an IIA with all host country characteristics simultaneously (the controls included in the baseline specification). Results are also presented in Table 17 in the Annex.

Figure 5   IIA impact by host country characteristics
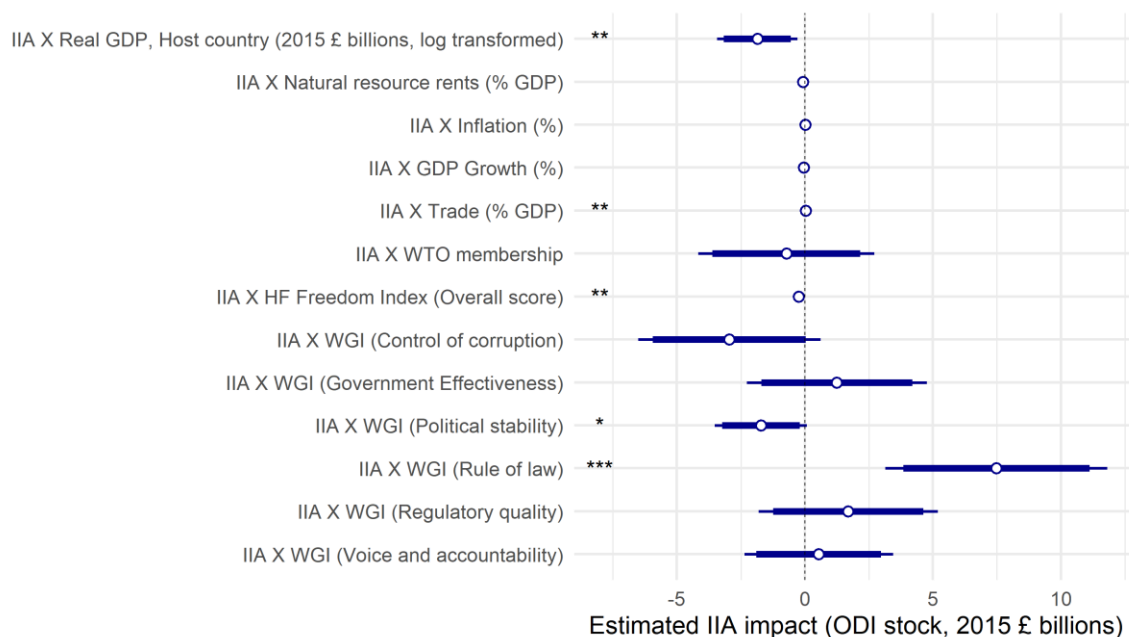
Note: This figure presents the point estimates across specifications and accompanying confidence intervals (90% and 95%). Statistical significance levels are also reported: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.
Sources: LE calculations, various data sources (see methodology)

As suggested in previous results, the impact of IIAs on UK ODI stock falls in response to GDP. A ten-percent increase in GDP is associated with a £0.19bn decrease in the impact of IIA on UK ODI stock.

IIAs also have a greater impact in countries where trade makes up a significant proportion of their economy. A ten-percentage point increase in the trade as a percentage of GDP is associated with an increase in IIA impact of £0.44bn.

Although estimates are generally noisy across the other ODI determinants, the rule of law has a positive and significant effect on the impact of IIAs on UK ODI stock. A country moving from the bottom quartile of countries (by WGI for the rule of law) to the median (an increase in the index of 0.62) increases the impact of IIAs on UK ODI stock by £4.62bn. However, there are some negative estimates of other indicators of other factors such as political stability.

These contrasting findings may reflect two effects. A positive interaction may exist between governance indices and IIAs as higher governance indices may make it easier for investors to take advantage of the benefits of an IIA. For example, the enforcement of the IIA provisions may be more effective in countries with higher governance indices. However, a negative interaction may also exist

between governance indices and IIAs as this may reduce the marginal effect of IIAs of UK ODI stock. If a country already has favourable conditions for UK investors, then the additional impact of IIAs may be lower.

There are statistically insignificant interactions found between IIAs and other factors: natural resource rents (as a percentage of GDP); inflation; GDP growth; WTO membership; World Governance Indices for control of corruption, government effectiveness, regulatory quality, and voice and accountability.

4.2.3   Impact of IIAs across time

The estimated impact of IIAs in previous specifications has compared observations (host country-year pairs) where an IIA has been in force to observations where an IIA has not been in force. However, previous specifications have not accounted for potentially different impacts of IIAs on UK ODI stock across time since the IIA entered into force.

Figure 6 and Table 7 present the impact of IIAs across five-year time periods since an IIA entered into force. Impacts over time are derived by adding interactions between the IIA variable and binary variables indicating whether the IIA entered into force a certain range of years ago.

The estimates presented in Figure 6 and Table 7 suggest that the impact of IIAs on UK ODI stock does not occur immediately, as the estimate of the IIA impact within the first four years is insignificantly different to zero.

After five years there is a positive impact on UK ODI stock of around £3.27bn, which is significantly different to zero at the one percent significance level. The estimated impact varies between £2.27bn and £3.57bn across the next three five-year periods. Beyond twenty-five years, the estimated impact of IIAs remains positive, but these estimates are smaller and less statistically significant.

These results suggest that IIAs may take some time to affect UK ODI stock after it has come into force. This may be because the decisions of investors to undertake ODI may be the result of longer-term planning, which leads to a delayed response to the introduction of an IIA. While the estimates of longer-term impacts of IIAs are smaller and noisier, these results suggest that the impact of IIAs are persistent for at least twenty to thirty years after the IIAs enter into force.

Figure 6 **Impact of IIAs on ODI across time periods since IIA entered into force**
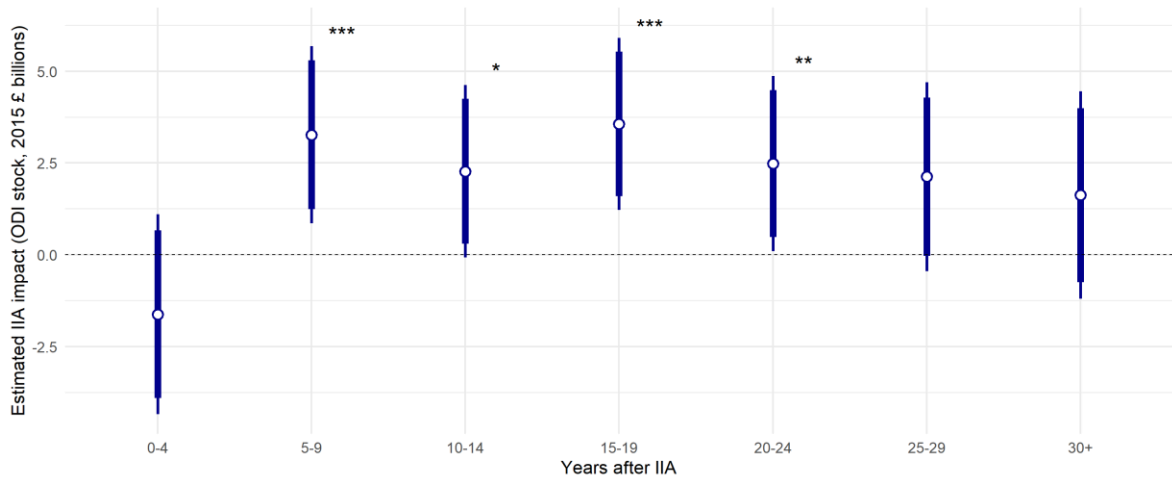
Note: This figure presents the point estimates across specifications and accompanying confidence intervals (90% and 95%). Statistical significance levels are also reported: *** p < 0.01; ** p < 0.05; * p < 0.1.
Sources: LE calculations, various data sources (see methodology)

Table 7   IIA impact by time since IIA

	IIA impact by time period after IIA
IIA X 0-4 years after IIA	-1.62
	(1.39)
IIA X 5-9 years after IIA	3.27 ***
	(1.23)
IIA X 10-14 years after IIA	2.27 *
	(1.20)
IIA X 15-19 years after IIA	3.57 ***
	(1.20)
IIA X 20-24 years after IIA	2.49 **
	(1.22)
IIA X 25-30 years after IIA	2.13
	(1.31)
IIA X 30+ years after IIA	1.63
	(1.44)
Controls included	Yes
Country fixed effects	Yes
Year fixed effects	Yes
R-squared	0.14
No. observations	1442

Note: Control variables concerning the host country include real GDP, natural resource rents (% GDP), inflation, GDP growth, trade (% GDP), WTO membership, Heritage Foundation overall score, World Governance Indices for control of corruption, government effectiveness, political stability, rule of law, regulatory quality, and voice and accountability. Standard errors are reported in parentheses and are clustered at the country level. Significance levels: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Sources: LE calculations, various data sources (see methodology)

4.2.4   Propensity score matching

Propensity score estimation

Propensity score estimation is undertaken using the specification in equation (4) and the results are presented in Table 8. The first column presents the point estimates and standard errors for the coefficients for each explanatory variable. The interpretation of the coefficients of the logistic model are not the same as for linear models used in previous specifications. Nonetheless the results presented in Table 8 give an indication of which factors have a significant impact on the likelihood of a country having an IIA with the UK.

Table 8   Logistic regression results for propensity score estimation

	IIA in force
Real GDP, Host country (2015 £ millions, log transformed)	0.34 ***
	(0.07)
Natural resource rents (% GDP)	-0.32 ***
	(0.06)
Inflation (%)	0.03
	(0.05)
GDP Growth (%)	0.00

	(0.05)
Trade (% GDP)	0.50 ***
	(0.07)
WTO membership	0.37
	(0.24)
HF Freedom Index (Overall score)	0.35 ***
	(0.13)
WGI (Control of corruption)	-1.62 ***
	(0.17)
WGI (Government Effectiveness)	1.24 ***
	(0.21)
WGI (Political stability)	-0.11
	(0.08)
WGI (Rule of law)	-0.33 *
	(0.20)
WGI (Regulatory quality)	-0.22
	(0.20)
WGI (Voice and accountability)	0.04
	(0.08)
No. observations	2128

Note: Odds ratios are calculated by applying the exponential function to the point estimate of the coefficient. Standard errors are reported in parentheses and are clustered at the country level. Significance levels: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Sources: LE calculations, various data sources (see methodology)

The coefficients in Table 8 suggest that GDP, Trade (as a percentage of GDP), the Heritage Foundation freedom index, and WGI on government effectiveness, have a positive and significant impact on the likelihood of a country having an IIA with the UK. The UK may prioritise creating IIAs with countries with a larger economy as there are more opportunities for UK investors. Trade as a percentage of GDP may be correlated with a country seeking more international agreements, as the country may be more dependent on these agreements than a country with less trade. The UK may seek IIAs with countries where investors have fewer restrictions (HF Freedom Index) as investors may be able to take greater advantage of an IIA than in countries where there are more restrictions. The UK may also seek IIAs with countries with greater government effectiveness as it may suggest that the provisions of a potential IIA may be more effectively enforced.

There are negative estimated coefficients for natural resource rents, control of corruption, and rule of law. Higher natural resource rents are associated with greater ODI, so there may be less need for an IIA to encourage UK investors to invest in that country. Greater control of corruption and effective rule of law may also reduce the necessity for an IIA as a means of assuring UK investors. Other factors (GDP growth, inflation, WTO membership, and other World Governance Indicators) appear to have a statistically insignificant impact on the likelihood of a country having an IIA with the UK.

Figure 7   Distribution of IIA probabilities, by actual IIA status
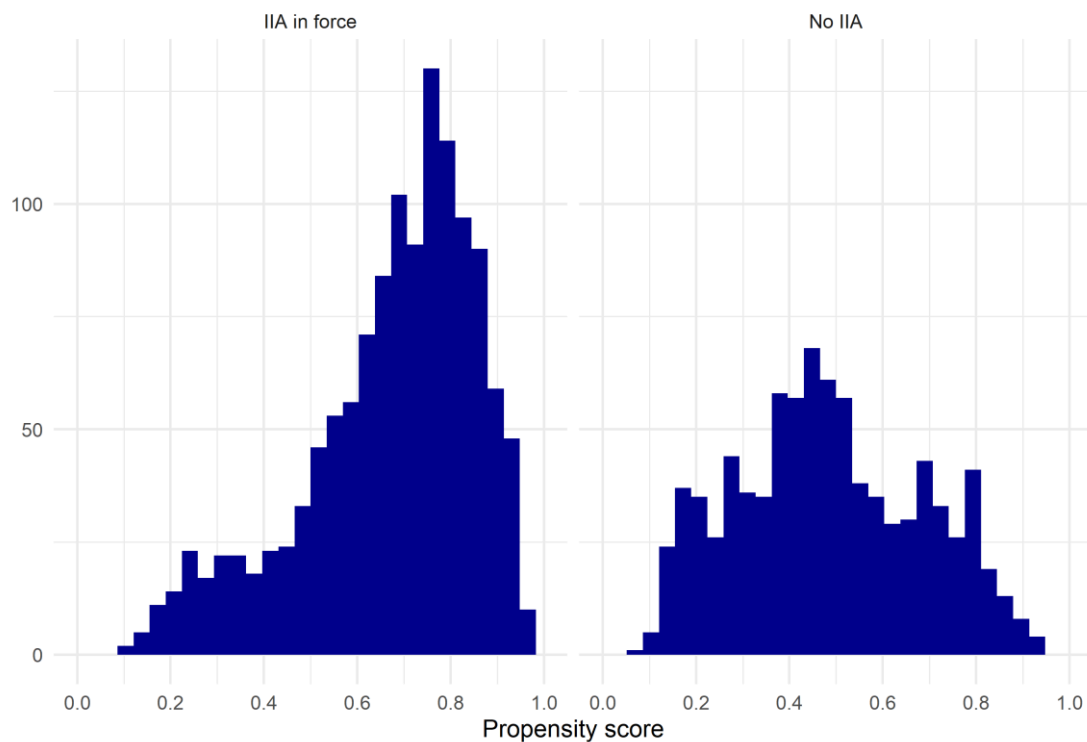
Sources: LE calculations, various data sources (see methodology)

Figure 7 illustrates the distribution of observations across propensity scores and suggests that there is common support across the propensity scores. The left-hand graph shows the distribution of observations with an IIA in force across propensity scores while the right-hand side shows the distribution of observations without an IIA. While the distribution of observations with an IIA is shifted towards the upper bound, there is considerable overlap between the two distributions. This suggests that each observation with an IIA is likely to have a close neighbour to match with from the set of observations without an IIA.

Matching algorithms

Each observation with an IIA in force is matched to an observation without an IIA with the nearest propensity score. Replacement of observations from the group without an IIA is used, so one observation without an IIA can be used as a comparison for multiple observations with an IIA[8]. Further, restrictions can be imposed on how far away the nearest non-IIA observation is permitted to be before the IIA observation is discarded. If the nearest non-IIA observation is far away from an IIA observation, the comparison between the two observations may suffer from a greater selection bias. The difference in UK ODI stock between the two observations may be driven by the difference in factors that determine the probability of an IIA with the UK existing rather than solely the existence of an IIA.

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[8] If replacement of observations were not permitted, then the matching order (which observations are matched earlier or later) may influence the final set of matchings. For example, suppose observations A and B have IIAs and have probabilities of 0.7 and 0.8, respectively, and that observation C does not have an IIA and has a probability of 0.73. Suppose also that C is the closest observation without an IIA for both A and B. If B were chosen to be matched first, then B and C would be matched, and A would be paired with some other observation, and vice versa if A were chosen to be matched first. Replacement allows for both A and B to be matched with C.

As a result, a calliper of 0.2 standard deviations of the pool of propensity scores in the sample is implemented, so IIA observations whose nearest non-IIA observation (by propensity score) is further than 0.2 standard deviations are discarded. While the consensus in the applied econometrics literature is a calliper of 0.2 standard deviations (for example, Wange et al. 2013), other callipers (0.2, 0.1, 0.01, 0.001) are used as a robustness check.

Figure 8 illustrates the balance in control variables across observations with IIAs and those without IIAs. For example, the first panel shows the distribution of log transformed real GDP across propensity scores. Observations where there actually is an IIA in force are denoted in dark blue and those where there is not are denoted in grey. The 95 percent confidence intervals for the IIA observations and the non-IIA observations overlap for most of the distribution across the control variables.

For a given estimated probability of having an IIA, there appears to be no significant differences in control variables between observations where an IIA is actually in force and observations where an IIA is actually not in force. This suggests that there is a balance in variables between IIA observations and non-IIA observations, and that observations that have similar propensity scores are unlikely to have systematic differences in the chosen control variables.

**Figure 8   Distribution of propensity scores across control variables, by actual IIA status**
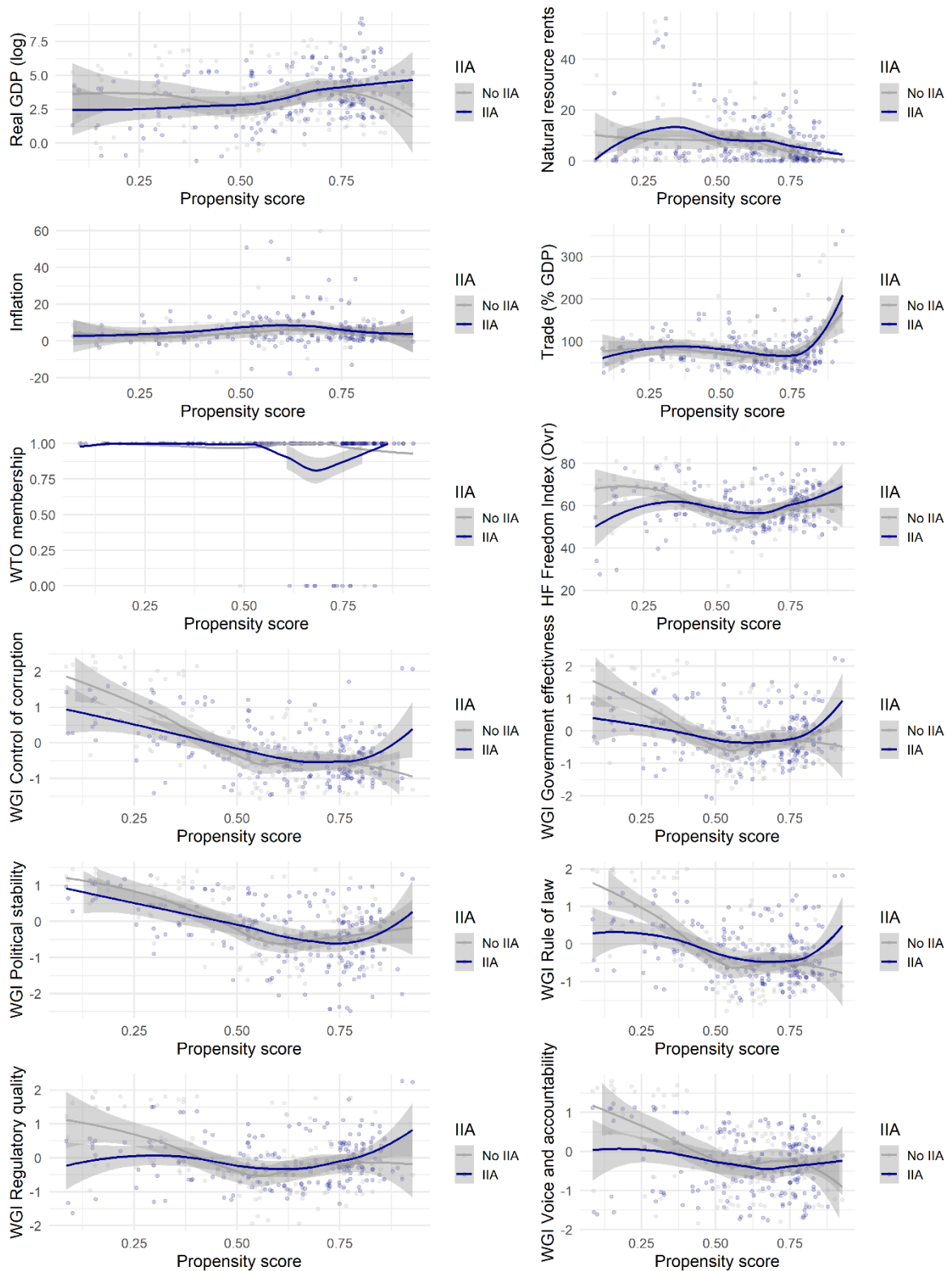
Sources: LE calculations, various data sources (see methodology)

Results

Figure 9 and Table 9 presents the results of the propensity score matching method. They report the estimated impact of IIA on UK ODI stock across four specifications. The four specifications differ by the 'strictness' of the matching algorithm: how close do a pair of matched observations (one with an IIA and its nearest non-IIA neighbour by propensity score) need to be to be included in analysis. The maximum allowed distance, or calliper, is set at 0.2 (least strict), 0.1, 0.01, and 0.001 (most strict) multiplied by the standard deviation of the propensity score across the four specifications.

Figure 9   Distribution of IIA probabilities, by actual IIA status
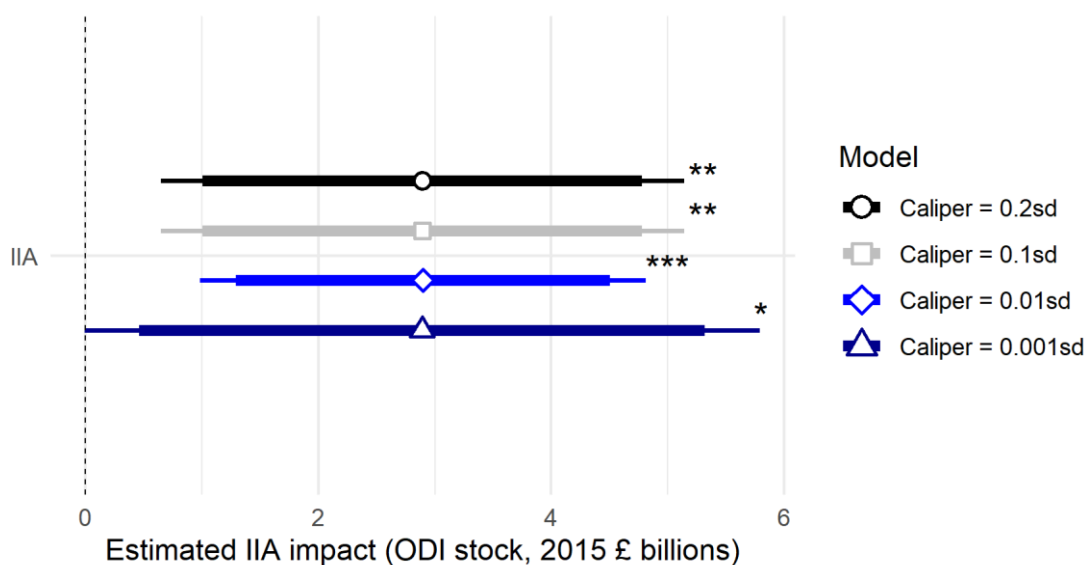
Note: This figure presents the point estimates across specifications and accompanying confidence intervals (90% and 95%). Statistical significance levels are also reported: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.
Sources: LE calculations, various data sources (see methodology)

Figure 9 and Table 9 suggest that the **estimated impact of an IIA on UK ODI stock is around £2.9bn**, and this result is robust across the different callipers. As shown in the first two columns of Table 9, restricting the calliper from 0.2 and 0.1 multiplied by the standard deviation does not remove any observations. Further tightening of the calliper to 0.01 and then 0.001 multiplied by the standard deviation reduces the sample by 105 and by 773 compared to the first two columns, respectively. However, the point estimates are almost identical, and statistically significant to the ten percent level even when over half of the sample is removed in the fourth column.

Table 9   Regression results of propensity scoring matching

	Calliper = 0.2sd	Calliper = 0.1sd	Calliper = 0.01sd	Calliper = 0.001sd
IIA	2.89 **	2.89 **	2.90 ***	2.89 *
	(1.15)	(1.15)	(0.98)	(1.47)
Controls included	No	No	No	No
Country fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
R-squared	0.76	0.76	0.77	0.88
No. observations	1122	1122	1017	349

Note: Control variables are not included explicitly in any of the specifications, as they are already controlled for in the matching process. Country and year fixed effects are still included to control for unobservable time invariant heterogeneity. Standard errors are reported in parentheses and are clustered at the country level. Significance levels: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Sources: LE calculations, various data sources (see methodology)

4.2.5 Impact of IIAs on UK ODI flows

While the previous analysis has focused on the impact of IIAs on UK ODI stocks, it is possible to undertake the same analysis for UK ODI flows: the total value of investments from the UK to the host country within a year. The outcome variable in the baseline specification is altered to UK ODI flows in billions of 2015 GBP, deflated using host country GDP deflators.

Table 10   Impact of IIAs on UK ODI flows

	No controls	Baseline specification
IIA	0.42	0.13
	(0.54)	(0.56)
Controls included	No	Yes
Country fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
R-squared	0.08	0.09
No. observations	701	701

Note: Control variables concerning the host country include real GDP, natural resource rents (% GDP), inflation, GDP growth, trade (% GDP), WTO membership, Heritage Foundation overall score, World Governance Indices for control of corruption, government effectiveness, political stability, rule of law, regulatory quality, and voice and accountability. Standard errors are reported in parentheses and are clustered at the country level. Significance levels: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Sources: LE calculations, various data sources (see methodology)

Table 10 reports the estimates of the impact of IIAs on UK ODI flows, where the sample size (701) is less than half of sample size for UK ODI stocks (1442). Column 1 reports the estimated impact of IIAs on UK ODI flows with a fixed effects specification (including year fixed effects). Column 2 reports the same coefficient estimate when controls (other determinants of UK ODI) are included and follows the baseline specification outlined in the methodology (full results including estimates of all controls can be found in Table 18 in the Annex).

Both specifications in Table 10 suggest that IIAs do not have a significant impact on UK ODI flows, which is **consistent with ODI flows generally being more volatile than ODI stocks**. Neither of the estimates (excluding and including controls) are statistically significant at the ten-percent level.

These results are also consistent with the estimated impact of UK ODI stock across time, where UK ODI flows contribute to increases in UK ODI stock. The estimates presented in Figure 6 suggest that an IIA entering into force is associated with a level increase in UK ODI stock between five and nine years later, without any evidence of further increases afterwards or before. As a result, no impact on ODI flows would be expected in most years after an IIA enters into force if increases in ODI stocks are confined to a relatively small period after the IIA enters into force.

4.2.6 Arellano-Bond estimates

An alternative approach to fixed effects and propensity score matching is the inclusion of the lagged dependent variable (UK ODI stock). The current level of UK ODI stock may be heavily determined by its past level, the previous year's UK ODI stock (which fixed effects may not fully control for). This is likely as UK ODI stock in one year is the sum of UK ODI flows in that year and UK ODI stock in the previous year. However, as discussed in the methodology section (2.2.4), there may be further endogeneity problems. As a result, a GMM Arellano-Bond estimator is used to estimate the impact of IIAs on UK ODI stock.

Table 11 reports the Arellano-Bond estimates. The coefficient estimate of the previous year's UK ODI stock is statistically significant at the one-percent level, confirming that UK ODI stock is largely determined by its level from the year before. The short-term impact of IIAs is estimated to be small and statistically insignificant. The autocorrelation tests suggest that the chosen specification of including the first lag is warranted but not one including a second. Further, the Sargan test of overidentifying restrictions is undertaken to test whether the instruments included are valid, the null hypothesis. There is insufficient evidence to reject the null hypothesis, so there is insufficient evidence to suggest that the instruments (further lagged values of the dependent variables) are themselves endogenous.

Table 11   Arellano-Bond estimates

	UK ODI stock
UK ODI stock (previous year)	0.93***
	(0.04)
IIA	0.08
	(0.11)
Sargan test statistic	33.1
Arellano-Bond autocorrelation test (degree 1, p-value)	0.003
Arellano-Bond autocorrelation test (degree 2, p-value)	0.287
No. observations	2114

Note: Standard errors are reported in parentheses and are clustered at the country level. Significance levels: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Sources: LE calculations, various data sources (see methodology)

The insignificant impact of IIAs on UK ODI stock in Table 11 is consistent with the estimated insignificant shot-term impact on UK ODI stock. The inclusion of the previous year's UK ODI stock means that the IIA coefficient reported in Table 11 can be interpreted as the short-term impact of IIA on UK ODI stock. **While not statistically significant, the implied long-term impact of IIAs on UK ODI stock is £1.1bn**[9] which is closer to the estimated long-term impact presented in Table 7.

4.2.7   Recommendations for further research

The econometric analysis suggests that there is a positive and significant effect of IIAs on UK ODI stock that is realised in the long run, so further research could uncover the mechanisms through which IIAs have this positive impact. Further research could also investigate the heterogeneous impact of IIAs within a host country. There are several approaches that could be taken, estimating:

- the **impact of individual or groups of provisions in IIAs**. This report does not include analysis of individual provisions in IIAs and its impact on UK ODI.

- the impact of IIAs on **specific sectors and types of businesses**. There may be sectors that take greater advantage of the existence of an IIA than others, differences between which could be estimated with firm-level or sector-level analysis. There may also be businesses, including intermediaries that are influenced by IIAs.

- **potential spillover effects**. The impact of an IIA may not solely be realised in the countries directly involved in the IIA but also in neighbouring countries or countries with which the

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[9] The impact of IIAs in the first year is estimated to be 0.08, while the impact of IIAs in the second year is 0.93 (the impact of the previous year's ODI on the current year's ODI) multiplied by 0.08, and so on. An infinite geometric sum ($\frac{0.08}{1-0.93}$ = 1.1) calculates the estimated long-term impact of an IIA.

directly involved countries have an IIA. To what extent do other IIAs influence UK ODI decisions?

■ **diversion effects.** As discussed by Falvey and Foster-McGregor (2015), IIAs may increase UK ODI stock in the host country with which the IIA has been agreed, but this may be the result of diverting ODI that would have gone to another country. It would be helpful to understand how much IIAs increase total UK ODI and how much they redistribute the destination of ODI.

■ the impact of IIAs on UK ODI similar when using data that considers the **ultimate destination of UK ODI**, avoiding the distortions from pass-through investment.

■ **reasons for the lag in the impact on UK ODI**. While this study suggests that the benefits may not be realised until five years after the ratification of the IIA, further research would explore why this is the case.

5   Qualitative findings

This chapter of the report presents the findings from the qualitative research conducted by Ipsos. This element of the research is designed to examine the way that businesses make overseas investment decisions and the extent to which investment treaties are significant in their decision-making. It is intended to supplement the insights gathered from the Rapid Evidence Assessment (REA) and econometric analysis and provide case-study examples that illuminate key findings to deepen DIT's understanding of the impact of IIAs on ODI.

5.1   Methodology

Ipsos conducted research with 20 UK businesses that had invested overseas or were actively considering investing. Fieldwork took place between 8th June and 23rd July 2022.

A total of 20 semi-structured depth interviews were conducted with businesses using MS Teams or the telephone, each lasting around 60 minutes on average. The interview followed a topic guide covering the key research questions and was developed collaboratively by Ipsos and DIT following the completion of the REA and econometric analysis report by London Economics. The semi-structured nature of the interviews meant that questions were typically open, allowing participants to talk in detail about their experiences, with interviewers guiding and prompting where necessary to thoroughly explore the key topic areas.

Participants were recruited from a sample of businesses provided by DIT as well as other public databases. Those taking part were senior decision makers with responsibility for overseas investment decisions and investment planning. A screening questionnaire captured firmographic data such as investment status, business size, sector, head office location, and the countries invested in. This was designed to ensure interviews were achieved with a range of businesses.

5.1.1   Sample profile

A breakdown of the businesses that took part in the qualitative research is shown below. Most businesses had already invested overseas. Only two out of the 20 businesses had not completed an overseas investment but were actively considering investing. Interviews reflected a mix of businesses in terms of size and sector, with the sample focused on small and medium sized businesses (SMEs). Large corporations were not identified by DIT as businesses of interest in this study.

Table 12   Number of interviews by business size

Business size	Total interviews
Micro (0-9 employees)	2
Small (10-49 employees)	2
Medium (50-249 employees)	11
Large (250+ employees)	5

Table 13   Number of interviews by business activity

Business activity	Total interviews
Goods	10
Services	10

Table 14   Number of interviews by sector

Sector	Total interviews
Agriculture (including processing and agri-food)	1
Electronics, Software and Computer Services	2
Advance Manufacturing	5
Energy	1
Construction	2
Other	9

Table 15   Number of interviews by broad investment regions

Sector	Total interviews
Western Europe	9
Eastern Europe	2
North America	7
Middle East	3
Asia (focus on East Asia, India, and Southeast Asia)	8
Oceania, mainly Australia	3
South America	2
Africa, mainly South Africa	3

5.1.2   In-depth interview topics

The 60-minute depth interviews explored businesses' approach to overseas investments, their decision-making process and influencing factors, understanding of IIAs, and the extent to which IIAs play a part in decision-making. Below are the main topics discussed in the interviews:

- **Background:** overview of the business, sector, length of time operating, and interviewee role.

- **Current overseas investment context:** whether the business currently invests overseas or is considering doing so, how long have they been operating overseas, their plans for on-going investment, how investment decisions are made and what research informs the process. The challenges and risks faced when investing overseas and how are these removed or minimised.

- **Awareness and role of IIAs:** Awareness levels of IIAs, the role that IIAs currently play in decision making and risk mitigation, and impact IIAs have and could have on future investments.

- **Supporting UK ODI:** how could IIAs effectively support UK ODI, suggestions for how DIT and other organisations could support and promote outward investment.

5.1.3 Interpretation of qualitative findings

Qualitative approaches are used to explore the nuance and diversity of views, the factors which shape or underlie them, as well as the ideas and situations in which views can change. The results are intended to be illustrative of the range of views and to offer insight into overarching themes. As such, qualitative findings are not statistically representative. Instead, they aim to provide more refinement and context to the findings generated through the econometric analysis. As in most qualitative research, there may be respondent bias; some businesses may be more inclined to take part in the research than others. The Ipsos team has sought to mitigate that risk through the screening of participants to ensure that a wide range of business sectors and sizes were included. Additionally, to address researcher bias, Ipsos ensured the inclusion of several moderators, and contrasting of notes and interpretations during analysis sessions and analysis grids. Verbatim comments and short case studies have been included to illustrate and highlight key points and common themes. Where verbatim quotes are used, they have been anonymised and attributed by business sector, size, and investment status.

Although summary findings of the econometric analysis and the qualitative research differ, London Economics and Ipsos posit that they are not inherently contradictory. The businesses observed are different, with a large section of participants in the qualitative research having invested overseas in Europe and the Americas while data points in the econometric analysis excluded companies that have invested in the United States and European Union. Sizes of businesses considered in the data analysis also differ, with the qualitative research concentrating on the views and experiences of SMEs rather than large firms. The impact of IIAs and what they represent for the decision-making process of various businesses included in the different strands will vary which should explain why some findings do not clearly align. The qualitative findings aim to address one of the limitations of existing empirical analyses by providing some firm-level insight and analysis (see section 3.1.6 Limitations of existing empirical analyses).

5.2 Key findings

- Market-related factors were the primary drivers of overseas investments, specifically market demand and potential for growth.
- Secondary factors influenced the location of investment rather than whether to invest overseas. Businesses considered the supply chain, cost of labour and production, access to natural resources, the business eco-system, regulatory environment, and cultural fit. Similar factors were highlighted in the review of existing literature concerning FDI location.
- Businesses used internal and external sources of data in scoping the viability of the overseas investment. There was a lack of awareness of what advice DIT could provide investors and as a result DIT was not mentioned as the main source of information.
- IIAs did not feature in the fact-finding process and businesses reported having limited awareness of these agreements or any detailed understanding of the provisions. Consequently, IIAs were not cited as influential in decision-making.
- Businesses described a range of challenges when investing overseas - barriers to market entry, high set-up costs, operational challenges, security of property and services and unfavourable business environments. Businesses dealt with the challenges and adapted their business model or operation or chose not to make the investment. Whilst some of the challenges could be mitigated by IIAs, those connections were not made by businesses.
- There was some scepticism that IIAs could be enforceable between states, with some countries perceived to be less likely to comply with the agreement. Businesses expected that provisions such as ISDS would be too bureaucratic and costly to be of benefit. However, the existence of an intergovernmental agreement indicated a commitment to overseas

investors and signalled that the host country was welcoming and open. Thus, IIAs offered a degree of reassurance and insurance even if the business expected that the detailed protections may not be directly applicable to their company.

- Businesses were interested in the principles of IIAs and keen to learn about the potential benefits. There is a clear demand for more information.

5.3 Factors influencing decision-making

A range of factors influenced how businesses made decisions about investing overseas. These can be broadly categorised into primary and secondary drivers. The **primary driver was market opportunity** – perceived unmet market demand for a business' product or services, speculation on space in overseas markets to outcompete local supply, and opportunity for significant revenue and profit generation. This was consistent across business size and sector. Secondary factors were more likely to influence, or even dictate the location of the overseas investment, rather than determine whether the business chose to invest overseas. Businesses chose to ascribe different values to factors depending on their size, available resources, appetite for risk, expansion objectives and level of knowledge of the host countries.

5.3.1 Market-related factors: Business growth and market potential

Businesses were primarily driven to invest overseas because it presented **an opportunity for expansion and business growth**, enabling them to realise their short, medium, or longer-term business plans. They identified countries that had significant market demand or where there was potential for increasing demand in the future (see 2.3 Market Related Factors). They tried to identify market demand that they felt their business could adequately cater to while making significant profits so that additional costs of the investment was worthwhile.

The Finance Director of a medium-sized electronics manufacturing company summarised primary drivers as: 1) where the customers are, 2) where the customers go / will be, and 3) how the customers are evolving based on product innovation and evolution in the supply chain.

One business operating in the energy sector invested in France because of its commitment to nuclear energy, whilst Germany offered a different type of opportunity as they moved toward dismantling their nuclear energy plants. One business shifted from investing in the United States to China in the early 2000, following the mass migration of the electronic market.

"The UK market is limited and there is lots of competition, but the international market can be lucrative and rewarding in terms of brand value and brand reputation. British products are known for quality. We want to expand the business and the UK market is not big enough."
(Advanced manufacturing, Goods, Medium, Investing overseas)

Overseas markets that did not offer sufficient growth were not prioritised. One participant providing consultancy services to the construction industry felt that Europe was a mature market, with too many suppliers already operating in the region to justify the return on investment (RoI).

"Pursuit of growth and we won't see that growth in the European market because it is mature and saturated, it has to come from new markets."
(Construction, Goods & Services, Large, Investing overseas)

5.3.2 Resource-related factors: Route to market – reducing costs and bureaucracy of complex supply chains

Overseas investments were driven by a business' need to reduce the time and costs incurred getting products or services to the market, enabling them to be more competitive and increase profits (see also 2.4 Resource related factors).

Participants also discussed that where goods were not suited to being shipped, they would manufacture their product in the same country as their primary market.

"75% of the product is water, so effectively we're shipping water around the world. It would be better to export and import concentrate or produce locally."
(Manufacturing and Distribution, Goods, Medium, Investing overseas).

There was a perception and experience that some overseas markets had faster procurement process allowing projects to progress at pace from commission to completion, for example an infrastructure project was commissioned in six months compared to two years in the UK.

5.3.3 Resource-related factors: Labour market and access to relevant staff in country

Access to a skilled or cheaper labour force was **not a primary driver for most businesses**, however, assessment of the local labour market was factored into cost projections during decision-making.

5.3.4 Resource-related factors: Business eco-system and supply chain

The presence of an existing eco-system of competitors, customers or supply chain (agglomeration economies) **influenced the location of the investment** rather than whether to invest overseas. A business operating in advance manufacturing said that the supply chain, particularly around innovative technology, influenced their decision to invest in China.

"The risks are bigger, but the returns are much bigger. And you don't have the choice that's where the metals are, so you have to invest there." (Energy, Services, Small, Investing overseas)

A couple of businesses invested abroad to be closer to their industry's epicentre to establish local links and relationships. One business exporting gardening items aimed to expand into France given the large unmet demand for their products. However, due to perceived restrictive conditions in France, they expanded into surrounding countries such as Spain, Germany, and Benelux.

Easy access to natural resources had an influence on where to invest. One agri-business was influenced by the availability of specific natural resources in India, although market opportunity was still the primary factor in their investment decision.

5.3.5 Efficiency-related factors: Regulatory environment, including taxation policy

The regulatory environment, often the taxation policy was a factor. One consideration was to choose countries where **tax policies were in line with the UK** to reduce any barriers to entry to the market and opportunity for business growth.

"We have local partners with track records for similar projects and that understand the legislation already. We have connections with legal firms in Europe that understand all those issues. Going

outside Europe, for example America or Asia the legislation is different. That means you have to spend time on due diligence."
(Construction, Goods, Medium, Investing overseas)

Some businesses also reported being influenced by the **corporation tax rates and other tax rules** around labour, wages, repatriation of funds and import and export duties. Tariffs and import duties affected costs linked with supply chain and, consequently, the pricing of goods and services for some businesses. A business in electrical manufacturing considered the repatriation regulations when choosing where to locate the overseas investment.

5.3.6 Efficiency-related factors: Cultural fit and language

Cultural fit and language played a significant role in determining **where to locate an overseas investment**. Specifically, the social behaviour and norms around professional etiquette, work ethics, and collaboration styles. Businesses tended to demonstrate a preference for acquiring firms in countries with similar attitudes and ethos as themselves (see also 2.5 Efficiency related factors). A business operating in the Software as a Service Sector (SAAS) said the accessibility of the language influenced their decision about where they plan to make overseas investments with the language and currency in China presenting too many technical challenges to make this market a worthwhile investment (also see section 3.1.4 on Breakdown of impacts by firm characteristics). An advanced manufacturing business indicated they invested in Vietnam rather than China due to stronger English levels of technical staff in Vietnam which allowed them to liaise more easily with local partners, suppliers, and with the UK headquarters. Cultural fit and language were essential considerations for where to invest overseas because of the impact on productivity and efficiency levels of a business. Whilst these seem to have marginal direct effects, cultural and language issues can be perceived to be intractable hurdles leading to more administrative challenges and higher costs.

5.3.7 The influence of IIAs on decision-making

Awareness around IIAs was extremely limited in the qualitative strand of the study. Businesses were unable to confidently assert an awareness of IIAs. Although, a small number of participants, while unfamiliar with IIAs, were able to demonstrate some recollection of their features after prompting. **Businesses did not cite IIAs as a factor** in their overseas investment decisions.

Participant recruitment was focused upon interviewing staff involved and engaged with the overseas decision-making process. However, businesses mentioned using third parties or expert legal or accounting partners to inform their decisions and therefore it is possible that IIAs might have been considered through a third-party.

"Is it more about the taxes or treatment of businesses? What are they supposed to cover...I don't know much about them."
(Energy, Services, Small, Investing overseas)

Section summary

Qualitative findings echoed and confirmed those in the general literature on FDIs. Market-related factors (see 2.3 Market Related Factors) were most important - consideration of market demand, potential for innovation and growth, local supply availability and capacity.

Secondary drivers affected location of the investment. Resource and efficiency factors - supply chain, cost of labour and raw materials, partnership network and business eco-system, bureaucracy, regulatory environment, and cultural fit. These focused mainly around markets and regulatory efficiency.

Factors that could have been considered but did not emerge prominently included general aspects around government size (such as fiscal health, tax burden, and government spending) and rule of law (such as property rights, judicial effectiveness, government integrity and effectiveness) – see 2.6 Business facilitation. The latter was referenced when businesses considered the value of IIAs (see section 5.6 The future role of IIAs).

5.4   Research and fact-finding

Businesses used **internal and external data sources** to inform their decision-making.

5.4.1   Internal data sources

Along with online searches, they relied on the knowledge of their staff, suppliers, distributors, and existing local partners to gain a better understanding of the market in the host country to inform the business case. Local presence provided valuable insight on the day-to-day realities of operating in countries of interest and businesses visited the host country to establish these local connections. Those with more ambitious goals for overseas investments had dedicated staff for trade export and exploring expansion options in other countries.

5.4.2   External data sources

Participants referenced using external sources of data, such as market reports, online searches, consultation with other businesses in the same sector or industry, advice from legal and accounting experts, and government entities. As part of their due diligence, they used specific organisations and professional services such as lawyers, accountants, and consultants.

"The overview of the regulations … the narrowing down of where we think we might go, tends to be where we've used government bodies to help. For the main countries, the government have produced a simple guide here is the pros and cons of investing in x y and z countries and we'll use those as a steer. We'll use companies like one of the local law firms who have an international partnership of lawyers, they will be able to fire off a question to a Hong Kong lawyer if we need them."
(Electronics manufacturing, Goods, Medium, Investing overseas)

Networking events, conferences and trade shows were used to research market opportunities and access potential clients, suppliers and competitors.

"We have an annual membership with them that we pay for but with that we can ask them every kind of question under the sun about the country and they will point us in the right direction. [Membership organisation] … have agents in all different countries and they have a huge wealth of knowledge."
(Gardening goods, Large, Investing overseas)

Some businesses mentioned **government departments**, such as DIT, BEIS, Chamber of Commerce, Scottish Enterprise Council and staff in consulates and embassies in the host country. Usage of DIT varied, with some stating they did not know what DIT could offer.

"To be honest, it's something I've never even considered. I didn't know that sort of advice was there... I've worked in a number of different businesses, which have overseas operations, not once has that ever been a consideration, to speak to somebody like that."
(Retail, Goods, Medium, Investing overseas)

While other participants assumed that DIT would not have relevant sector specific information or that it was designed to support large companies.

"Don't use them because I don't think they have much information on our specific sectors. My assumption was that they are mainly used for trading of goods between countries."
(Construction materials, Goods, Medium, Investing overseas)

"[There's no cost barrier to engaging them] but I'm thinking, well... who are they? Can I get to them easily? I perceive them to only be interested in big businesses and we're quite a small business, 4 million turnover, are they not really interested in us because we're not a sufficient size?"
(Legal & Translations, Small, Investing overseas)

SMEs explained that having reliable external data sources to guide decision-making came at a significant cost that they perhaps could not always afford.

"I think there's also time and cost to [fact-finding and research], right? If you've got to do your own research, or if you need to spend that additional time to get familiar with all those that one can be, especially for a smaller business or medium sized business even that's a lot of time you can't afford."
(Retail, Goods, Medium, Investing overseas)

Section summary

In the scoping stage of their investment, companies acquired more granular information on the feasibility and viability of investments overseas to project scenarios for risk assessment and costing. Businesses did not become aware of IIAs or do any research on IIAs during this fact-finding stage. Decision-making was based on internal and external data to provide clarity on market potential and the realities of goods, services, and labour markets in the countries of interest. Businesses used existing experience, networks, and insight from partners in-country. These often guided the first impressions and business cases considered at board meetings or business development planning. DIT was not mentioned as the main government reference; mainly due to lack of awareness on the advice available through DIT.

5.5 Challenges, risks, and risk mitigation

Businesses reported a range of challenges and barriers, ranging from challenges in the establishment of any new corporation to more situational challenges related to an overseas investment. These fed into businesses' risk analysis and risk mitigation strategy and determined how they weighed the cost and value-added of investing abroad. Businesses assumed most of the challenges and risks were inevitable hurdles to overcome. Businesses were prompted to consider at what points IIAs could mitigate specific risks, but their lack of knowledge and understanding of provisions and application of these agreements meant this was not always possible.

5.5.1 Barriers to market entry

The first challenge was **accessing local markets**. Three main barriers emerged: restrictions, usually informal, on foreign-owned companies; preferences for local companies and familiar local structures; and ease of accessing the market, especially after the EU Exit.

Deep cultural and national differences (including language) could affect sales and ability of businesses to trade. Businesses noted that some markets tended to prefer their own countries goods, conversely other clients preferred to only deal with businesses from established countries.

> *"Certain countries in Europe don't like to deal with British companies… especially after Brexit, so we employ individuals in the countries."*
> (Retail, Goods, Medium, Investing overseas)

To overcome these barriers, one business reported "rebranding" to appear to be a local company, hiring local staff, connecting with local suppliers and partners to present the company as a "local" or French business. Although the challenges to access the market seemed significant, they identified this barrier as a natural and reasonably expected one.

5.5.2 Costs

As cost assessments are crucial for measuring risk and projecting anticipated profits, any major **high-cost risks inhibited investing overseas**. These were concrete costs for establishing a presence in another country: set-up costs, purchasing of materials, the establishment of a new office, factory, or facility. These concerns could be tied to those over eminent domain, but they represent heavy expenditures. Additionally, there could be costs related to processing the overseas investment: tariffs, import and export duties, hiring of specialist lawyers and accountants, insurance costs, etc. For companies that have easy access to resources, these could be absorbed into general operations costs. However, for smaller or less experienced businesses, that additional cost may be significant and too high to proceed with the investment. Finally, there were sunk costs in terms of time and research for an enterprise that may not have the projected results.

Despite completing all the necessary due diligence checks, costs could still hypothetically increase if the context was unstable (i.e. war), if there were unforeseen external factors (i.e. natural disaster, supplier or partner backs out last minute), uncontrollable factors (i.e. change in exchange rates, fuel and general energy costs, compromised supply chains), information used in projections that turned out incorrect, and changes in competitors or local market landscape.

Businesses ultimately indirectly alluded to these as the cost of risk, which was a determinant of their overseas investment strategy. Most businesses assumed and expected that they would have to incur the cost of a risk taking place. As such, if the business could cover the cost of the risks, then they

would be more inclined to invest abroad. Those that did not have the same risk appetite or capacity to cover potential costs would decide not to make the investment.

"If no credit insurance can be put in place, that's a real red flag."
(Retail, Goods, Medium, Investing overseas)

5.5.3 Operational

The **viability of operations was an important risk to consider**; one difficult to solve once the business had started investing overseas. In terms of strategy design and implementation of day-to-day activities, if the business felt there was little possibility that they could successfully operate overseas then they were deterred from doing so.

The practicalities of carrying out an operation abroad was also a serious risk to consider for many businesses. These related to labour and staffing but also to pricing, branding and marketing, stock management and retention.

5.5.4 Security of products and services

Challenges around protecting products, services, and innovation were also mentioned. Issues related to the theft of intellectual property (IP) and copywrite infringement, the loss of physical assets, data security breaches and cybercrime were cited as essential reasons for not wanting to invest in certain countries. Several businesses selling goods (retail women's clothing, electronics manufacturing, IT software) explained that their products could be copied and imitated by competitors in local markets. When asked what they did to address those issues, all explained that they simply needed to outcompete local businesses by producing a better product – this was seen as part of the process in certain countries. One business summarised this by saying: *"Our first approach to addressing it would be to have a better product."* (Electronics manufacturing, Goods, Medium, Investing overseas). They tended to feel it would not be worth pursuing legal action.

"We live and die by our own capabilities of being able to articulate the value of what we offer […] If we can't do that, then we've not done the right job."
(IT software, Goods & services, Large, Investing overseas)

When it came to the loss of assets, participants gave the example of items lost through theft or poor storage. This was not an issue solely affecting investments overseas; it was also a domestic issue. An IT software sector business explained that loss of assets in their case could be kidnap or theft of a laptop. These represented major security breaches which would undermine the reliability of their services and products. To avoid this risk, they had strict travel restrictions for their UK staff who were not allowed to travel to certain locations. They reinforced those with rigorous rules around data sharing and data protection. Businesses expected that provisions in IIAs to protect property and IP would possibly not apply to them and / or would be too complex and time consuming to enforce.

5.5.5 Business environment

General challenges linked with the business environment overseas were also mentioned, such as political instability and unpredictability, risks to business reputation, administrative and legal requirements or regulatory frameworks. As well as a lack of understanding of how the government or government entities could play a role in securing a more friendly business environment.

Although markets in China, Russia, and South Africa, seemed to be reasonably suited for some businesses' overseas investments, the **political and economic unpredictability** (perhaps partly linked to lack of knowledge) quickly deterred them from investing. This echoes the indices in the World Governance index and Heritage Foundation overall score highlighting the protection desired by businesses in the host country. These include control of corruption, government effectiveness, political stability, rule of law, regulatory quality, voice and accountability.

Several participants highlighted the **tangible and intangible regulatory issues** faced by international businesses. They shared their struggles with requirements pertaining to cyber and data regulations and challenges that come with moving private and personal information. But, they also shared that some countries may have an inherently riskier and more complex situation for data-related activities. Similarly, financial regulation was reported by participants as a challenge, also falling within the intangible barriers.

Tangible regulatory issues were regulations related to the EU Exit, organic, and chemical regulations. The separation of the UK from the single market has resulted in diverging standards which have been confusing and difficult to navigate for some businesses.

By investing abroad, businesses needed to address the **situational challenges that came with international trade**. Participants reported dealing with the issue of non-payment, as well as the challenge of expropriating funds, in addition to their pre-existing concerns of currency fluctuation and conversion. One participant noted that every day banking was their single largest challenge. The process of opening a bank account for the business and the subsequent legislation to prove their financial legitimacy was the largest undertaking.

Whilst IIAs may signal that a host country was potentially open and welcoming to investors, some of the day-to-day situational challenges were still unavoidable.

Section summary

The challenges and risks mentioned by businesses were intricately linked with factors affecting their decision-making. Risk assessment was an integral part of market scoping and assessment as this came into consideration during the weighing of costs of investment. Businesses cited a range of challenges - barriers to market entry, potentially high set-up costs, operational challenges, security of property and services and unfavourable business environments. In many instances businesses either chose to deal with these challenges and adapt or decided not to make the investment. Whilst some of the challenges that acted as deterrents to investing overseas could, in some cases, be mitigated by IIAs, those connections were not made by the businesses taking part in this study.

5.6 The role of IIAs in mitigating risk

5.6.1 Awareness

Awareness around IIAs was extremely limited and businesses reported that IIAs were not taken into account when investing overseas. However, despite the lack of awareness, once informed of the purpose and features of IIAs, participants were curious and interested to understand how they could apply to their business and investment objectives.

5.6.2   Current role of IIAs

Because businesses were largely unaware of IIAs and specific provisions, the conversation largely revolved around deliberative hypotheticals, as senior decision-makers were only able to speculate on the value of IIAs, however this produced insightful findings.

Efficacy against the state

Businesses recognised IIAs were principally sound in nature. However, they raised questions over their actual efficacy against states. They demonstrated **scepticism about the enforcement of the IIA** against states.

> *"You'd have to trust that it had teeth, if it's a country-to-country deal and it's one company that has fallen out of favour would the agreement still matter? Not 100% if that mediation service would have the teeth to make it work … if we were going into Angola to build a railway and we didn't get paid, would the British government protect us if it risked trade between the country and say the manufacturing industry? I'm not sure it would."*
> (Construction, Goods, Large, Investing overseas)

Most stated they would avoid any financial risks by not venturing into unstable or risky countries. This might partly reflect the size of businesses taking part in this study, as SMEs were less likely to have a business model that could absorb a loss of revenue.

Despite some scepticism, there was a consensus that the existence of an intergovernmental agreement to safeguard investments did provide a degree of reassurance or insurance - a reflection of the influence of governmental indices, even if it this was not a standalone decisive factor.

> *"You have to trust it, it's the same thing as trusting your insurance company."*
> (Fabric, Goods, Medium, Investing overseas)

> *"I can't think of an example where we would have had to call on IIAs. Because I think ultimately, if there's a dispute, or essentially you're not getting paid, I guess that's when the insurance will kick in."*
> (Retail, Goods, Medium, Investing overseas)

Overall, while participants had their reservations and noted that they would not depend on such an agreement, most expressed an interest in exploring the potential benefits of these agreements further.

Efficacy and Relevance

Several businesses expected that the protections would be **unlikely to apply to them**. One business referenced intellectual property (IP) protections, based on their limited understanding, they would expect that if their technology was stolen an IIA should, under ideal circumstances, protect their business. However, they acknowledged that this protection would be impossible, and they could not see how an agreement would be able to fully retract their stolen technology from local markets even with the potential legal backing.

> *"If you're getting into a situation where you want to be referring and relying on arbitration, you're lost already. You know, it's a bit like worrying about which Divorce Lawyer you're going to use before you get married."*
> (Electronics, Goods, Medium, Investing overseas).

Other businesses referenced that the products they sell **do not necessitate the degrees of protection and or safeguarding offered by IIAs**. They felt IIAs would have minimal impact on their business and industry. Rather, to better support businesses investing overseas, they would welcome streamlining and standardising of regulations to allow more efficient trade.

Application of dispute and resolution mechanisms

Businesses raised questions over the dispute and resolution mechanisms and how they would be enforced. Acknowledging their lack of familiarity with any IIA dispute mechanism such as ISDS, they did however share concerns over what conducting a dispute would entail. Businesses were reluctant to engage with long or costly solutions over disputes. Many saw legal action against another state as a **significant and complex undertaking** that would consume large amounts of limited resources with no guarantee of a timely positive outcome and that the **bureaucratic challenges** would be impractical.

"I'd like to think I would trust it if it existed but it's difficult. It's not something I've had to deal with or can see myself needing to deal with. [...] I just think it's just not in our ballpark really."
(Legal services, Services, Small, Investing overseas)

5.6.3 Future role of IIAs

Concerns and questions raised by participants relating to how IIAs would influence their investment decisions draw attention to possible improvements that could maximise the impact of IIAs. Despite these agreements not currently being perceived to be a decisive factor, businesses acknowledged that they do have a range of beneficial secondary effects. Indeed, IIAs may be impacting on ODIs without businesses making that explicit connection.

Signalling

Beyond the intrinsic value of IIAs as agreements and treaties to protect UK investments overseas, IIAs were also perceived to have a strong and prominent signalling value. The IIA would show that the signatory country was open and welcoming towards investments (see 4.2.2 Variation of IIA impacts by country characteristics and government indices). The commitment to an IIA, even if perceived to be difficult or impossible to implement, would show good faith and intentions to foster environment for exchange and business growth. These could help mitigate some challenges of estimating costs linked with political and economic instability and help businesses better assess the riskiness of the business environment and eco-system. This signalling would act as a positive marker that the country is interested and agreeable to overseas investors. Businesses suggested that this would be particularly useful for smaller economies or unfamiliar markets where the risks of investing may be greater.

"They pass laws and create environments that are much more amenable to foreign companies coming here or going elsewhere. We have a Department of International Trade because we think it's necessary. So, in those senses, I think the international agreements probably directly don't make a huge difference to us. But the fact that they exist, indicates that those companies want international investment."
(Electronics Manufacturing, Goods, Medium, Investing overseas)

"If it's a government backed agreement then it would have the clout, then we would rely on it to be trustworthy. If you seek government support, then they have the resources to protect businesses,

it's more about that than them being trustworthy as such"
(Tech software, Goods, Small, Investing overseas)

Information and awareness raising

The qualitative research highlighted that there was a need for further information on the content and value of IIAs. Participants raised several concerns and challenges, ranging from the appropriation of funds to the protection of IPs, some of which are typically encompassed within the safeguards and guarantees of IIAs.

Participants familiar with other forms of international agreements shared their existing experience and mentioned that the texts available about these agreements were overly complex and information was hard to access. They noted that it was only through their background specialisation that they were able to access and use this information in their decision making.

Understanding that concerns that may be addressed by IIAs still presented themselves as barriers for businesses looking to invest overseas underscores how information and communication around IIAs could be improved. If businesses remain uninformed most will not be able to take advantage of what IIAs have to offer. Tackling the information deficit is a key area for future development.

Section summary

Awareness of IIAs was extremely limited and therefore discussion around how these agreements could influence overseas investment decisions and mitigate risks was based on hypothetical scenarios.

Participants were unsure whether IIAs were enforceable, particularly in countries considered as high-risk, or whether the provisions would be relevant to their business. However, they still recognised the value of IIAs in signalling that a host country was open to investors and believed IIAs could potentially offer a degree of reassurance and insurance. Businesses were interested in the principles of IIAs and keen to find out more about the potential benefits.

6   Conclusions

ODI is a significant component of the UK's economy, providing UK businesses with easier access to overseas markets, as well as supply chain benefits and knowledge transfers. As a result, it is important to understand the factors that influence the choice of where UK ODI is located, as well as to understand the efficacy of IIAs which aim to stimulate UK ODI. Similar factors are highlighted as influential in the choice of FDI location in both the review of the existing literature concerning FDI location choice and the interviews undertaken with a range of businesses, which include:

- business growth and market potential, which was the primary driver identified in interviews with businesses,
- regulation and related costs (such as understanding and complying with differences in regulations between the UK and other countries),
- language and other cultural differences, and
- access to natural resources.

The relative importance of these factors, as well as other secondary factors, inevitably differ across business sizes, their risk appetite, their expansion objectives, the economic and legal environment in other countries, and the available resources in the host country.

The quantitative analysis finds a positive association between the location of UK ODI stock and the ratification of an IIA with the UK in the host country, using a global sample between 2000 and 2020. There are 95 IIAs in force by the end of the sample, with the majority coming into force in the 1990s. The stock of UK ODI in countries with an IIA has become more significant, rising from 6.4% of total UK ODI stock in 2000 to 11.7% in 2020. The econometric analysis suggests that an IIA with the UK in force in a country is associated with that country receiving on average £1.88bn additional UK ODI stock. This impact is not realised immediately within the first five years of ratification and reduces in value after 20 to 25 years after ratification.

This positive association is confirmed using a variety of robustness checks, such as the use of propensity score matching and Arellano Bond estimators. This is also consistent with some research in the existing literature (such as Neumayer and Spess, 2005; Buthe and Milner, 2008; Falvey and Foster-McGregor, 2018; Uttama, 2021), although other work (such as Hallward-Driemeier, 2003; Tobin and Rose-Ackerman, 2003; Aisbett, 2007; Yackee, 2008; and Peinhardt and Allee, 2012) is uncertain whether conclusions reached in the literature can be interpreted as causal estimates.

A total of 20 semi-structured depth interviews were conducted with businesses, drawn from a range of business sizes, business activity, and by sector. An important conclusion from the interviews with businesses was the lack of awareness about IIAs (although a small number were able to recall some of their features when prompted). This is consistent with other findings, such as the evaluation of market opportunities playing a more significant role than the choice of IIAs. Many businesses rely on other measures, rather than IIAs, to reduce risk. One example is the use of local knowledge to overcome barriers such as an understanding of the host country's legislation, language, and cultural attitudes.

Some businesses expressed concern about the efficacy of IIAs, even when the existence of IIAs and their benefits were explained. These concerns were primarily focused on the efficacy of IIAs in legal action against states where enforcement may be less feasible, efficacy in preventing potentially irreversible damages from occurring and the complexity and costliness of undertaking legal action through IIAs.

Some differences between quantitative and qualitative findings can be explained through the different samples used by the two research strands. Some countries were excluded from the econometric analysis to ensure that the analysis was not overly influenced by a few countries with disproportionately large UK ODI stocks where pass-through investments constitute a significant proportion of FDI (as a result, the final destination of UK ODI is not certain). The United States (where there is no IIA with the UK) was excluded as it is a clear outlier in UK ODI stock and also due to long-standing economic, social, and political connections with the UK that would not be a suitable counterfactual for other countries that have IIAs with the UK. EU countries are also removed as it is not clear how agreements between the UK and EU compare to other IIAs, or whether it was comparable to other IIAs. These excluded countries are often the countries that the interviewed businesses were engaged with.

Further, the econometric analysis does not estimate the impact of IIAs across different businesses and sectors and could be influenced by the decisions made by a few large businesses.

The lack of awareness of IIAs presents an opportunity to disseminate information about the benefits of IIAs, even if some businesses interviewed have reservations about the efficacy of IIAs in some scenarios. This may be through more accessible information, with some businesses suggesting that existing documentation is often overly complex. Raising awareness of IIAs within particular countries may also provide a positive signal of beneficial investment environments in those countries.

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Annex 1   Econometric results tables

Table 16   Impact of IIAs on UK ODI, full results

	Without controls	Baseline	Including the US	Including pass-through outliers	Including EU countries
IIA	**2.54 ****	**1.88 ***	**1.77**	**2.10**	**2.39**
	(1.14)	**(1.13)**	**(1.98)**	**(1.93)**	**(1.96)**
Real GDP, Host country (2015 £ millions, log transformed)		0.75	-3.53 *	3.68 *	1.94
		(1.21)	(2.11)	(2.04)	(1.76)
Natural resource rents (% GDP)		0.02	0.05	0.04	0.02
		(0.03)	(0.06)	(0.06)	(0.06)
Inflation (%)		0.00	-0.01	0.00	-0.01
		(0.01)	(0.01)	(0.01)	(0.01)
GDP Growth (%)		-0.05	0.00	-0.09 *	-0.04
		(0.03)	(0.06)	(0.05)	(0.05)
Trade (% GDP)		0.03 ***	0.03 **	0.00	0.01
		(0.01)	(0.01)	(0.01)	(0.01)
WTO membership		-1.09	-1.75	-0.92	-0.65
		(0.87)	(1.52)	(1.48)	(1.50)
HF Freedom Index (Overall score)		-0.05	-0.11	-0.12	-0.13 *
		(0.04)	(0.08)	(0.08)	(0.07)
WGI (Control of corruption)		-2.21 **	-4.05 ***	-2.73 *	-2.23 *
		(0.88)	(1.53)	(1.47)	(1.31)
WGI (Government Effectiveness)		0.08	0.63	0.76	-2.51 *
		(0.88)	(1.53)	(1.48)	(1.29)
WGI (Political stability)		-1.07 **	-0.98	-0.45	0.14
		(0.43)	(0.74)	(0.72)	(0.68)
WGI (Rule of law)		2.99 ***	3.70 *	0.66	0.77
		(1.10)	(1.91)	(1.85)	(1.66)
WGI (Regulatory quality)		3.68 ***	4.19 ***	6.33 ***	5.90 ***
		(0.92)	(1.59)	(1.55)	(1.39)
WGI (Voice and accountability)		-1.26 *	-3.12 **	-1.06	-1.51
		(0.71)	(1.24)	(1.21)	(1.18)
Controls included	No	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
R-squared	0.08	0.12	0.09	0.06	0.06
No. obs.	1442	1442	1461	1480	1878

Note: Standard errors are reported in parentheses and are clustered at the country level. Significance levels: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Sources: LE calculations, various data sources (see methodology)

Table 17 **Impact of IIAs on UK ODI stock, interaction with host country characteristics**

	Interaction with GDP	Interactions with all controls
IIA	7.11 **	25.93 ***
	(3.41)	(6.40)
IIA X Real GDP, Host country (2015 £ billions, log transformed)	-1.01 *	-1.86 **
	(0.62)	(0.80)
IIA X Natural resource rents (% GDP)		-0.08
		(0.07)
IIA X Inflation (%)		0.03
		(0.02)
IIA X GDP Growth (%)		-0.05
		(0.06)
IIA X Trade (% GDP)		0.04 **
		(0.02)
IIA X WTO membership		-0.72
		(1.75)
IIA X HF Freedom Index (Overall score)		-0.23 **
		(0.09)
IIA X WGI (Control of corruption)		-2.95
		(1.82)
IIA X WGI (Government Effectiveness)		1.25
		(1.79)
IIA X WGI (Political stability)		-1.71 *
		(0.92)
IIA X WGI (Rule of law)		7.48 ***
		(2.21)
IIA X WGI (Regulatory quality)		1.70
		(1.78)
IIA X WGI (Voice and accountability)		0.54
		(1.48)
Controls included	Yes	Yes
Country fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
R-squared	0.12	0.14
No. observations	1442	1442

Note: Control variables concerning the host country include real GDP, natural resource rents (% GDP), inflation, GDP growth, trade (% GDP), WTO membership, Heritage Foundation overall score, World Governance Indices for control of corruption, government effectiveness, political stability, rule of law, regulatory quality, and voice and accountability. Standard errors are reported in parentheses and are clustered at the country level. Significance levels: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Sources: LE calculations, various data sources (see methodology)

Table 18   Impact of IIAs on UK ODI flows, full results

	Without controls	Baseline
IIA	**0.42**	**0.13**
	(0.54)	**(0.56)**
Real GDP, Host country (2015 £ millions, log transformed)		0.32
		(0.65)
Natural resource rents (% GDP)		0.01
		(0.03)
Inflation (%)		0.00
		(0.00)
GDP Growth (%)		0.03
		(0.02)
Trade (% GDP)		0.00
		(0.00)
WTO membership		-0.33
		(0.63)
HF Freedom Index (Overall score)		0.03
		(0.03)
WGI (Control of corruption)		-0.28
		(0.60)
WGI (Government Effectiveness)		0.84
		(0.63)
WGI (Political stability)		-0.28
		(0.30)
WGI (Rule of law)		0.21
		(0.71)
WGI (Regulatory quality)		0.61
		(0.58)
WGI (Voice and accountability)		0.06
		(0.55)
Controls included	No	Yes
Country fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
R-squared	0.07	0.09
No. obs.	701	701

Note: Standard errors are reported in parentheses and are clustered at the country level. Significance levels: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Sources: LE calculations, various data sources (see methodology)

Table 19   Impact of IIAs on UK ODI stock (current prices), full results

	Without controls	Baseline	Including the US	Including pass-through outliers	Including EU countries
IIA	**0.55**	**-0.03**	**-0.17**	**-0.06**	**0.56**
	(1.10)	**(1.09)**	**(2.45)**	**(1.71)**	**(1.81)**
Real GDP, Host country (2015 £ millions, log transformed)		0.38	-6.85 ***	0.82	1.46
		(1.17)	(2.60)	(1.80)	(1.62)
Natural resource rents (% GDP)		0.04	0.07	0.04	0.02
		(0.03)	(0.08)	(0.05)	(0.05)
Inflation (%)		-0.01	-0.01	-0.01	-0.01
		(0.01)	(0.02)	(0.01)	(0.01)
GDP Growth (%)		-0.06 **	0.00	-0.11 **	-0.05
		(0.03)	(0.07)	(0.05)	(0.05)
Trade (% GDP)		0.03 ***	0.03	0.05 ***	0.03 ***
		(0.01)	(0.02)	(0.01)	(0.01)
WTO membership		-0.28	-1.30	-0.15	0.33
		(0.84)	(1.87)	(1.31)	(1.38)
HF Freedom Index (Overall score)		-0.06	-0.17 *	-0.16 **	-0.19 ***
		(0.04)	(0.10)	(0.07)	(0.06)
WGI (Control of corruption)		-2.47 ***	-5.14 ***	-0.95	-0.86
		(0.85)	(1.89)	(1.30)	(1.21)
WGI (Government Effectiveness)		0.21	1.03	-0.55	-4.22 ***
		(0.85)	(1.90)	(1.30)	(1.19)
WGI (Political stability)		-1.06 **	-0.70	-0.51	0.05
		(0.41)	(0.92)	(0.64)	(0.63)
WGI (Rule of law)		2.89 ***	4.51 *	0.81	0.77
		(1.05)	(2.36)	(1.64)	(1.53)
WGI (Regulatory quality)		3.02 ***	2.90	5.07 ***	5.76 ***
		(0.88)	(1.96)	(1.37)	(1.28)
WGI (Voice and accountability)		-1.25 *	-4.00 ***	-1.24	-1.39
		(0.69)	(1.54)	(1.07)	(1.08)
Controls included	No	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
R-squared	0.15	0.19	0.12	0.14	0.14
No. obs.	1442	1442	1461	1480	1878

Note: Standard errors are reported in parentheses and are clustered at the country level. Significance levels: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Sources: LE calculations, various data sources (see methodology)

Table 20   Impact of IIAs on UK ODI flows (current prices), full results

	Without controls	Baseline	Including the US	Including pass-through outliers	Including EU countries
IIA	**-0.07**	**-0.28**	**-0.53**	**-0.25**	**0.24**
	(0.46)	**(0.48)**	**(1.29)**	**(0.69)**	**(1.42)**
Real GDP, Host country (2015 £ millions, log transformed)		0.23	-0.75	1.12	2.93 **
		(0.56)	(1.49)	(0.80)	(1.30)
Natural resource rents (% GDP)		0.01	-0.03	-0.02	-0.01
		(0.03)	(0.07)	(0.04)	(0.08)
Inflation (%)		0.00	0.00	0.00	0.00
		(0.00)	(0.01)	(0.00)	(0.01)
GDP Growth (%)		0.02	-0.01	0.01	-0.02
		(0.02)	(0.06)	(0.03)	(0.05)
Trade (% GDP)		0.00	0.00	0.00	0.00
		(0.00)	(0.01)	(0.01)	(0.01)
WTO membership		0.38	-0.08	0.63	0.11
		(0.54)	(1.45)	(0.78)	(1.59)
HF Freedom Index (Overall score)		0.03	-0.06	0.02	-0.09
		(0.02)	(0.07)	(0.03)	(0.06)
WGI (Control of corruption)		-0.56	-1.45	-0.04	0.12
		(0.52)	(1.35)	(0.70)	(1.09)
WGI (Government Effectiveness)		0.79	1.36	-0.24	1.33
		(0.54)	(1.44)	(0.74)	(1.09)
WGI (Political stability)		-0.11	0.10	0.09	1.06 *
		(0.26)	(0.68)	(0.37)	(0.64)
WGI (Rule of law)		0.35	0.78	-0.15	-1.23
		(0.60)	(1.61)	(0.86)	(1.39)
WGI (Regulatory quality)		-0.02	1.57	0.29	-0.35
		(0.49)	(1.30)	(0.70)	(1.14)
WGI (Voice and accountability)		-0.06	-1.07	-0.04	-0.72
		(0.47)	(1.27)	(0.68)	(1.24)
Controls included	No	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
R-squared	0.06	0.07	0.04	0.08	0.04
No. obs.	701	701	720	739	1123

Note: Standard errors are reported in parentheses and are clustered at the country level. Significance levels: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Sources: LE calculations, various data sources (see methodology)

Annex 2   Qualitative analysis

A2.1   Sample profile

Table 21   Sample profile

HQ	Countries engaged in
West Yorkshire	None: interested in France and Germany
Midlands	Global
London	Global
London	Global
South East England	Asia, Middle East
UK	None: interested in China or India
UK	UK, Europe, Asia, Middle East, Africa
London	Europe
UK	Europe
South East England	Europe, Asia Pacific
UK	Africa, Asia
UK	Export globally, operating in US, China. Distribution via Holland
UK	Europe, North America
London	Europe, North America, Asia
Northwest	Europe
Scotland	Global
South East England	North America, Europe, Middle East
West Midlands	Middle East
London	Global

A2.2   Case studies

Case Study One: A medium size business based in the Northwest with satellite operations in the United States, Holland and France.

Global exporter of industrial grade fabrics, selling principally to the healthcare and hospitality sectors across sixty countries across the globe: Europe, Middle East, Asia Pacific (including China), the US, and South America. This business described several key challenges which they have had to overcome by adapting their business model and making specific investment decisions.

In response to the increased costs and complexity of exporting to European markets, the business set up a fiscal representation in Holland to import and export into Europe. It planned to expand that investment further by buying a distribution site to clear products for export and a warehouse in Portugal to store inventory.

Whilst they had not experienced explicit discriminatory practices, the business chose to use agents and employ local people via subsidiaries to improve their access to the market.

Barriers to entry in the Middle East meant that they were exploring the possibility of a shared entity rather than an acquisition.

They used royalty charges to limit any potential financial risks when working with entities. This also helped the business manage their brand. These agreements, and other terms of sale, were covered

by English Law which they believed protected them and avoided potential legal action in the host country.

Copywrite infringement was 'rife in the industry' and whilst they trademarked their products, they acknowledged this does not remove the risks entirely. They were pragmatic about whether to pursue an infringement of their copywrite, carefully considering the time and costs associated with taking legal action.

They were aware of IIAs in terms of existing FTAs, which they valued as a means of reducing taxes and duties and making their products competitive. However, whilst they benefited from an FTA with Turkey, as other countries in Europe did not recognise the agreement, they had to pay the export duties, therefore, they perceived the impact to be limited.

They did not envisage that MFN provisions would protect their business from discrimination as their customers were price conscious, and they were unsure how they could prove their case.

However, overall, they could see how an IIA could act as an insurance policy, giving them additional reassurance with some legal protection. Although they were unclear exactly how the IIA would operate, they felt it could be trusted.

"We can go in without the need for third parties instructing us, not spending thousands on getting legal advice. We could go in with that security...having an insurance in place. You have to trust it, it's the same thing as trusting your insurance company. I would trust it regardless of the country we went into." (Advanced manufacturing, Good, Medium, Investing overseas)

They intend to look at IIAs in more detail as they planned to invest in South America, which they had identified as a new and potentially challenging market for their business.

Case Study Two: A medium size business based in the Northwest with the parent company operating out of the United States.

Global exporters of industrial chemical adhesives, selling principally to the automotive industry across the globe. Their sales are primarily to Europe, Asia, and the Americas. They have not invested overseas but are looking to make an investment abroad to enhance their business.

This business described several key benefits of investments abroad. These related to shipping costs, production capacity, and client proximity. Currently restrained by capacity they expressed the need to either upgrade their production facilities and or produce new facilities.

Faced with such an undertaking, the decision to invest abroad would allow the exploration of new opportunities for the business. Increased efficiencies would allow for enhanced competitiveness. Establishing a new facility closer to clients would have tangible benefits such as reducing lead-time, reducing shipping costs, and reducing import duties, while the intangible benefits are those that come with being in closer proximity to their market.

"We make adhesive that are 75% solvent, or 75% water, the actual active ingredient, the magic is in that 25%. […] effectively we are sending water around the world" (Manufacturing and Distribution, Goods, Medium, Investing overseas).

However, this did not come without its own challenges. They faced the challenges of protecting their intellectual property, navigating market regulations, as well as securing set-up costs.

The challenges of intellectual property remain a key focal point as they were one of only a handful of competitors who possessed the technology for their industry. The theft of this technology would irreversibly result in the permanent loss of control over it – even with legal protections. As a result, the business shared that they would not rely on an IIA for protection. They did, however, note that the presence of an IIA offered a degree of reassurance.

Market regulation has also posed a challenge as the transfer of chemicals necessitates complex regulatory compliance. With multiple differing standards pertaining to chemical regulation, the lack of any common agreement poses a challenge for shipping and production of this advanced good.

A2.3   Standards and accreditations

Ipsos' standards and accreditations provide our clients with the peace of mind that they can always depend on us to deliver reliable, sustainable findings. Our focus on quality and continuous improvement means we have embedded a "right first time" approach throughout our organisation.

ISO 20252
This is the international market research specific standard that supersedes BS 7911/MRQSA and incorporates IQCS (Interviewer Quality Control Scheme). It covers the five stages of a Market Research project. Ipsos was the first company in the world to gain this accreditation.

Market Research Society (MRS) Company Partnership
By being an MRS Company Partner, Ipsos endorses and supports the core MRS brand values of professionalism, research excellence and business effectiveness, and commits to comply with the MRS Code of Conduct throughout the organisation. We were the first company to sign up to the requirements and self-regulation of the MRS Code. More than 350 companies have followed our lead.

ISO 9001
This is the international general company standard with a focus on continual improvement through quality management systems. In 1994, we became one of the early adopters of the ISO 9001 business standard.

ISO 27001
This is the international standard for information security, designed to ensure the selection of adequate and proportionate security controls. Ipsos was the first research company in the UK to be awarded this in August 2008.

The UK General Data Protection Regulation (GDPR)
and the UK Data Protection Act (DPA) 2018
Ipsos is required to comply with the UK GDPR and the UK DPA. It covers the processing of personal data and the protection of privacy.

HMG Cyber Essentials
This is a government-backed scheme and a key deliverable of the UK's National Cyber Security Programme. Ipsos was assessment-validated for Cyber Essentials certification in 2016. Cyber Essentials defines a set of controls which, when properly implemented, provide organisations with basic protection from the most prevalent forms of threat coming from the internet.

Fair Data
Ipsos is signed up as a "Fair Data" company, agreeing to adhere to 10 core principles. The principles support and complement other standards such as ISOs, and the requirements of Data Protection legislation.