

European Accounting Harmonisation: Consequences of IFRS Adoption on Trade in Goods and Foreign Direct Investments

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Abstract

This paper focuses on the importance of accounting harmonisation on foreign activities at a macroeconomic level. International Financial Reporting Standards (IFRS) adoption is considered to reduce information costs among countries and is, therefore, an important way to encourage international trade in goods and investments. The fixed-effects vector decomposition (FEVD) procedure is used to estimate panel data characterised by the presence of time invariant variables in a gravity model approach. The results provide evidence that benefits exist in terms of trade in goods and FDI when IFRS are adopted.

Keywords: IFRS, trade in goods, FDI, gravity, FEVD.

JEL code: F40

1. Introduction

This paper is related to the home bias literature on trade in goods and equity portfolios. It is well-known that people mainly consume domestically produced goods and that stock market investors prefer domestic assets. Obstfeld and Rogoff (2000) initiated a new stream in empirical literature when they cited these facts as two of the six major puzzles in international economics. Moreover, these two

¹ This paper has benefited from presentations at the 10th Annual Conference of SALISES, the 32nd Annual Congress of the European Accounting Association, the 2009 Far East and South Asia Meeting of the Econometric Society and Universidad Carlos III. I acknowledge the financial support of the European Commission Research Training Network INTACCT (Contract MRTN-CT-2006-035850). I am grateful to Anita Attanasova, Fanya Filipova, Juan Manuel García-Lara, Beatriz García-Osma, Belén Gill de Albornoz, Manuel Illueca, Inmaculada Martínez-Zarzoso and Vera Troeger for their helpful comments and suggestions that helped to improve this paper.

puzzles are related since countries which are more open to trade in goods are also more financially open (Lane, 2000).

Portes and Rey (2005) uncovered a specific geographical pattern of international asset transactions and proved that the information required to evaluate financial assets is not equally available to all market participants, and that the lack of this information is much more important than the diversification opportunities in foreign markets. Therefore, increasing the comparability and transparency of financial information and making accounting information more easily understood worldwide may have substantial consequences on foreign activities.

A number of international organisations, such as the United Nations, the World Bank and the World Trade Organisation (WTO), are involved in attempts to harmonise accounting.² These organisations support the effort of the International Accounting Standards Board (IASB) to eliminate the barriers to investments flows among different countries and to strengthen the international financial architecture.³

International Accounting Standards (IAS) are rapidly converging. Over 100 countries have already moved to International Financial Reporting Standards (IFRS) for financial reporting purposes. Hence, the question of whether the adoption of IFRS fosters foreign activities is of special interest, particularly in light of the European Union's recent adoption of IFRS by listed companies. IFRS adoption may help IFRS-users from other countries to understand financial

² For instance, the World Bank assists the modernisation of accounting in China (*Project Appraisal Document on a Proposed Loan to the People's Republic of China for an Accounting Reform and Development Project*, Report No. 18312-CHA, February 1, 1999). The United Nations Conference for Trade and Development (UNCTAD) assists developing countries and transition economies to improve their financial accounting and reporting practices under the ISAR programme (Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting).

³ The International Monetary Fund (IMF) states that this architecture is the institutions, markets, and practices that governments, businesses, and individuals use when they carry out economic and financial activities (<http://www.imf.org/external/index.htm>)

information, thus reducing information asymmetries between users of financial statements in different countries.

This paper aims to provide empirical evidence of the effect of IFRS adoption in Europe by focusing on the importance of European accounting harmonisation on bilateral international trade in goods and foreign direct investments (FDI) at a macroeconomic level. Whether transition economies and uncertainty-averse countries may benefit more from accounting harmonisation is also analysed since companies in different countries are expected to participate in foreign activities to a greater extent when information costs and risks of doing business with unfamiliar partners are reduced. The results support IFRS adoption having an important effect on reducing information costs and investor uncertainty. Hence, foreign activities increase among European countries.

This paper is arranged as follows. Section 2 describes key issues in European accounting harmonisation, establishes a theoretical link between IFRS adoption and information asymmetries, and highlights the main hypotheses. Section 3 presents the estimated equation and the fixed-effects vector decomposition methodology (FEVD). Section 4 describes data, sources and variables. Section 5 covers an empirical analysis where the main results are presented. Finally, Section 6 puts forward the conclusions drawn.

2. Accounting harmonisation and information asymmetries

2.1. The accounting harmonisation process in the European Union

The free movement of goods and production factors are the fundamental freedoms of the European common market, as they move to the area where they are most valued, improving the efficiency of resource allocation. To achieve the free movement of goods and factors of production, the infrastructure of national

markets has to be harmonised and financial accounting can be considered a part of this infrastructure (Choi et al, 2001).

As regards the European accounting harmonisation process, the main instruments used to promote accounting harmonisation within the European Union (EU) were the Fourth and the Seventh Company Law Directives. The former (1978) aimed to harmonise the national laws on the accounting regulations and intended to make it easier for investors, lenders and suppliers to obtain, understand and rely on the accounts of companies in other Member States, and to promote fair competition among Member State companies (Roberts et al., 2002). The latter (1983) concerned consolidated accounting in Member States. The implementation of the Directives into national laws brought about a change in the aim of accounting in many Continental European countries which shifted from the purpose of determining tax and dividend payments to provide timely and useful information to investors for their decision-making. Moreover, the Directives have had a real positive impact since the quality of financial reporting increased in Member States. Nonetheless, as the Commission of the European Communities (1995) pointed out “the adoption and implementation of the Fourth and Seventh Directives were only achieved with difficulty and no further progress has been made at the EU level in harmonising the basic rules on accounting and financial reporting”⁴ since the Directives were originally negotiated by the inclusion of numerous options open to different interpretations. Consequently, large European companies seeking capital in the international capital markets had to prepare a second set of accounts and a clear preference was expressed for the need to take into account the harmonisation efforts at a broader international level (European Communities, 1995; page 3). As a result, the EU began to support the efforts of

⁴ European Communities, 1995; page 3.

the IASB to develop IAS. Finally, in 2002, the EU adopted an IAS Regulation requiring that all listed EU companies prepare their consolidated financial statements in accordance with IFRS from the year 2005 onwards. As a consequence, about 7,000 listed EU companies were required to prepare financial statements according to IFRS. Additionally, EU countries have the option to require/permit IFRS for unlisted companies and in parent company (unconsolidated) financial statements and, thus, there is heterogeneity in the status of the implementation of IAS in the EU (see Implementation of the IAS Regulation – 1606/2002 – in the EU and EEA).

Nonetheless, barriers to increased harmonisation in the EU should be reflected. First, the large number of exceptions and exemptions permitted by IFRS 1: *First-time Adoption of IFRS*,⁵ means that the degree of cross-country harmonisation in accounting practices may have been limited in the period immediately following the mandatory adoption by EU countries. Second, ignoring transitional arrangements implies that the adoption of IFRS does not guarantee significant improvements in EU accounting practices because of the continued absence of a recognised set of international Generally Accepted Accounting Principles (GAAP). Therefore, whether predicted increases in the comparability of financial reporting post-IFRS adoption leads to improved flows in foreign activities has to be analysed from an empirical perspective.

2.2. Accounting information, information asymmetries and economic performance

There are three channels through which financial accounting information affects economic performance (Bushman and Smith, 2001). First, better identification of good versus bad projects by managers and investors, second, discipline in project

⁵ IFRS 1 sets out the procedures that an entity must follow when it adopts IFRSs for the first time as the basis for preparing its general purpose financial statements (see Deloitte's Guide to IFRS 1, <http://www.iasplus.com/standard/ifrs01.htm>).

selection and expropriation by managers and, third, reduction of information asymmetries between investors. Young and Guenter (2003) focus on the third channel and show that countries where financial accounting environments lead to lower information asymmetries among investors - this being said, countries which institutional factors leading to greater disclosure of value-relevant accounting information- are more likely to have higher international capital mobility. In addition, accounting theory argues that financial reporting reduces information asymmetry by disclosing relevant and timely information (e.g. Frankel and Li, 2004). Indeed, information asymmetries play an important role in equity flows (Portes and Rey, 2005), and also in foreign investments and international trade in goods (Guerin, 2006).

The information asymmetries arising from differences in financial reporting influence foreign investments since they affect the firms' performance to locate and invest abroad. Otherwise, the relationship through which financial accounting information matters on trade in goods is not so straightforward, and may be related to the common practice in international trade to deliver trade credits (Becker and Greenberg, 2003).⁶ Recently, Manova (2008) established a causal link which goes from finance to trade in goods. This author proves that the cost of capital is reduced in equity liberalising economies, thus increasing output and exports. Therefore EU initiatives, such as harmonisation of accounting standards, are expected to foster not only foreign investments, but also trade in goods.

A uniform set of accounting standards such as IFRS can lower the levels of existing information asymmetries among investors.⁷ The implication of

⁶ An example of how financial accounting information affects trade is the case of "factoring". In this case, trade is related to the quality of financial reporting, since large institutions deliver credit to firms and they focus on the quality of the accounts receivable (Berger and Udell, 2006).

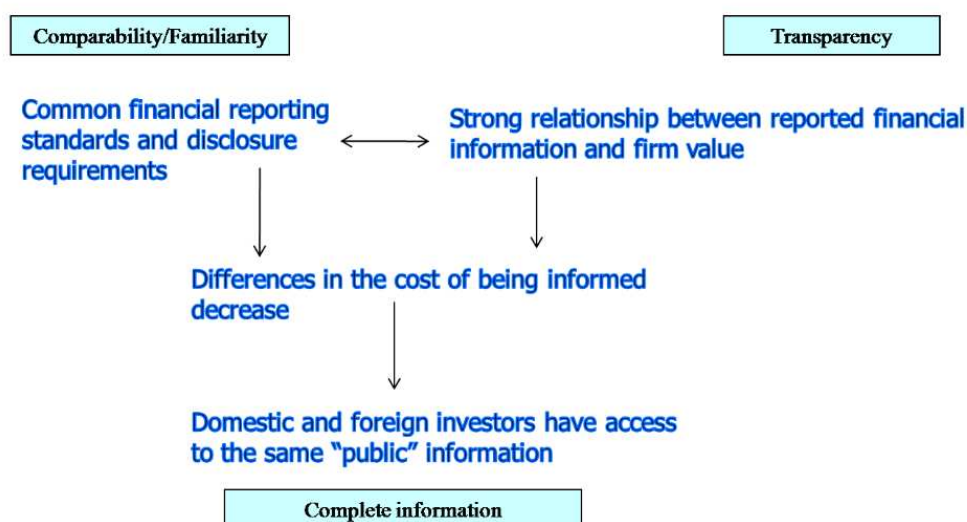
⁷ Portes and Rey (2005) stated that knowledge of accounting practices is part of the required information to evaluate markets, whereas Ahearne et al (2004) highlighted the importance of

mandatory IFRS adoption on equity markets and debt markets has been recently studied at the firm's level. Florou and Pope (2009) document increases in institutional investor demand for equity in mandatory IFRS adopters, whereas Kosi and Florou (2009) show that mandatory IFRS adopters are more likely to raise debt at a lower cost. Additionally, these authors contribute to the growing literature by highlighting the importance of institutional country factors in achieving the benefits of IFRS. At a country level, Amiram (2009) finds that foreign investors have higher holdings of foreign equity portfolio investments in countries that use IFRS. This relationship is stronger if the foreign investors are from countries that have also adopted IFRS, whereas Beneish et al. (2009) show that IFRS adoption has a positive effect on cross-border debt investments, and that this increase is driven by those countries with weaker investor protection and higher financial risk. In short, these papers show that benefits are expected from enhanced comparability and reduced information processing costs.

Figure 1 distinguishes two effects through which IFRS adoption might reduce cross-border information asymmetries at a macroeconomic level, thus being a transparency effect of IFRS adoption (i.e., compared to local GAAP, the transparency of the financial statements increases); then comparability and, hence, familiarity, are an effect of IFRS adoption (i.e., firms in country i and j use the same accounting standards).

informational barriers constituted by different national accounting standards, disclosure requirements and regulatory environments.

Figure 1. The transparency and comparability effect of IFRS adoption.



The transparency effect implicitly assumes that accounting quality increases by switching from local GAAP to IFRS (Barth et al. 2008). An increase in transparency is understood as a stronger relationship between reported financial information and the firm's value and is, therefore, considered a key factor for any good investment relationship. Additionally, the transparency effect reinforces the comparability effect which increases the familiarity required to allow markets to operate more efficiently. Both the transparency and comparability effects decrease the informational differences of domestic and foreign agents and are expected to have an effect on economic performance.⁸

It is well-known that causality can work in the opposite direction; that is, countries may adopt IFRS as a result of foreign activities or, what is even more likely, there may be a factor affecting both foreign activities and IFRS adoption. The importance of investigating this reverse effect has been acknowledged, but

⁸ The US monetary authorities' response to the 2008 financial crash is the most recent case study in how lack of transparency and information flow can harm economic performance. See "Federal Reserve Loses Suit Demanding Transparency," Reuters, August 24, 2009, at <http://www.reuters.com/article/wtUSInvestingNews/idUSTRE57O03P20090825> (November 1, 2009).

this work focuses exclusively on how IFRS adoption *per se* affects trade in goods and foreign direct investments. Reverse causation will be the object of future research.

2.3. Main Hypotheses

The first hypothesis to be tested is that IFRS adoption has benefited European countries in terms of trade in goods and FDI since IFRS adoption has increased comparability among adopters. The results obtained in both international trade and FDI regressions support this first hypothesis.

The second hypothesis predicts that an improvement in transparency in IFRS-adopting countries has reinforced the comparability effect. The results obtained only support this hypothesis in the case of trade in goods. As a result, the third hypothesis states that the effect of IFRS adoption differs according to the type of instrument used for making the investment, namely equity capital, reinvested earnings and loans. The obtained results support this hypothesis since the comparability effect is statistically significant for equity investments and retained earnings. Additionally, the results show that transparency improvements in the destination country lead to a higher comparability effect of IFRS adoption on FDI abroad.

Furthermore, a differential impact of IFRS adoption on well-established capitalist EU Member States and EU transition countries should be expected. The fourth hypothesis predicts that there is an ambiguous effect of IFRS adoption on foreign activities. On the one hand, the adoption of a high quality set of harmonised accounting standards in transition countries, as a means of giving credibility to corporate financial statements, may have important positive consequences on foreign activities. On the other hand, many international firms use the same accounting standards after IFRS adoption, which has made it more difficult for

investors to distinguish between financially transparent and opaque firms (transparency effect). Additionally, the comparability effect also has an ambiguous effect in transition countries. On the one hand, IFRS adoption is expected to have a positive effect on trade in goods and FDI due to higher familiarity which leads to markets functioning more efficiently. On the other hand, a number of authors report that the primary beneficiaries of IFRS adoption in terms of improvements in accounting quality are voluntary adopters rather than firms that are forced to switch to IFRS (Daske et al., 2008; Christensen et al., 2008); however, transition countries are less likely to have voluntary adopters (Broadman et al., 2004). This is likely to bias against the prediction that IFRS adoption in transition countries fosters trade in goods and FDI. The results obtained in this paper show that the positive comparability effect of IFRS adoption on foreign activities predominates in transition countries, which seem to have benefited the most from accounting harmonisation in the EU. Nonetheless, the indirect transparency effect is only significant in trade regressions, thus suggesting a hypothesis which poses that the positive transparency effect predominates in exporting transition countries.

With regard to the information asymmetries among the pre-IFRS adoption European countries, one would expect the benefits of IFRS adoption to be lower for neighbouring countries in terms of comparability because information asymmetries between such countries are likely to be less pronounced prior to IFRS adoption. Therefore, the fifth hypothesis states that there is a lower impact of IFRS adoption on countries sharing a border. The obtained results show that benefits of IFRS adoption in terms of trade in goods are lower for neighbouring countries. Furthermore, legal origins relate to other aspects such as enforcement and shareholder rights. Then, the sixth hypothesis analyses whether IFRS is

implemented and interpreted differently in countries with different legal systems. The effect of IFRS-adoption is expected to have a higher positive effect in those countries with stronger enforcement commitments and shareholder rights. Indeed, the obtained results show that those countries with French legal traditions benefit the least from adopting IFRS in terms of trade in goods.

The seventh hypothesis states that the IFRS is a well-understood set of financial reporting standards in use around the world. Then, countries may not require both exporting and importing countries to use IFRS to benefit from the comparability effect. The results provide evidence that exports across European countries have increased after switching to a high quality and widely used and understood accounting standards setting.

Finally, the last hypothesis states that the comparability effect of IFRS adoption on foreign investments differs across countries according to behavioural factors. The adoption of harmonised accounting standards should lower the perceived risk of doing business with unfamiliar people in more uncertainty-averse countries to a greater extent since uncertainty-averse economic agents dislike situations in which information is less readily available. The results obtained in the present paper show that those countries with high uncertainty aversion have, to a greater extent, increased equity flows abroad.

These results contribute to the understanding of the literature on IFRS adoption and foreign activities by providing evidence of a differential impact of comparability and transparency effects of European accounting harmonisation on foreign activities at a macroeconomic level.

3. Model specification and methodology

One of the main devices used to analyse the determinants of international trade flows is the gravity model of trade. Some authors have referred to this model as

the “workhorse” of empirical trade studies (Eichengreen and Irwin, 1998; Cheng and Wall, 2005). De Ménil (1999) finds that a gravity model accounts well for FDI among European countries and, more recently, Portes and Rey (2005) state that the empirically observed complementarity between trade and FDI flows is an argument for a gravity model of FDI. Therefore, the gravity model (Deardorff, 1995) is the modelling framework used in this paper. The estimated equation is:

$$\ln X_{ijt} = \alpha_0 + \alpha_1 \cdot EU_{ijt} + \alpha_2 \cdot IFRS_{ijt} + \alpha_3 \cdot Adj_{ij} + \alpha_4 \cdot \ln Dist_{ij} + \alpha_5 \cdot Lang_{ij} + \alpha_6 \cdot comcol_{ij} + \alpha_7 \cdot col45_{ij} + \alpha_8 \cdot smctry_{ij} + \alpha_9 \cdot \ln Y_i + \alpha_{10} \cdot \ln Y_j + u_{ij} + \varphi_t + \varepsilon_{ijt} \quad (1)$$

where \ln denotes natural logarithms, X_{ij} denotes the value of bilateral exports/FDI flows from country i to j at time t . As in Portes and Rey (2005), the dependent variables are expressed in nominal terms. EU_{ijt} takes a value of 1 when countries are members of the EU in the year t . $IFRS$ are a dummy that takes a value of 1 when listed companies in both exporting and importing countries use IFRS for domestic reporting in year t . This dummy aims to proxy for the comparability effect which is expected to increase after two trading partners adopt a common set of accounting standards.⁹ Adj_{ij} is a dummy that takes a value of 1 when countries share the same border, and zero otherwise. $Dist_{ij}$ is calculated based on bilateral distances between the largest cities of country i and j , the intercity distances being weighted by the share of the city in the overall country’s population. $Lang_{ij}$ is a dummy for countries sharing a language that is spoken by at least 9% of the population in both countries. Dummy variables indicating whether the two countries had a common colonizer after 1945 ($comcol$), have had a colonial relationship after 1945 ($col45$) or were the same country ($smctry$), are also included in the model. Adjacency, language and colonial links control for

⁹ Accounting assumes the way to communicate a firm’s results and position. The American Accounting Association defines accounting as the process of identifying, measuring and communicating economic information to permit informed judgements and decisions by users of the information and then, accounting can be understood as the “language of business”.

similarities in history, traditions, culture, and institutional relationships among countries,¹⁰ whereas geographical distance controls for all the costs involved in undertaking transactions. Y_i and Y_j represent the economic size of the origin and destination countries, which is measured with gross domestic product (GDP). Finally, u_{ij} is a bilateral specific effect, φ_t is a time-specific effect, and ε_{ijt} is the error term.

Since the data-set is a panel, special estimation techniques are needed. One technique could be to control for fixed effects.¹¹ However, the model contains a number of time-invariant parameters such as distance, language and border. Therefore using a fixed effect estimator leads to the omission of these time-invariant variables, which are key variables in the estimated gravity model. Plümper and Troeger (2007) discussed the problem of time-invariant variables in panel data with unit effects. These authors propose a FEVD methodology (Fixed Effects Vector Decomposition) that has the advantage of controlling fixed-effects without omitting time-invariant variables. The FEVD estimator is a three-stage estimator.

Plümper and Troeger (2007) recall a fixed effects model where the x variables are time-varying, the z variables are time-invariant, and u_i denotes the unit-specific effects:

$$y_{it} = \alpha + \sum_{k=1}^K \beta_k x_{kit} + \sum_{m=1}^M \gamma_m z_{mi} + u_i + \varepsilon_{it} \quad (2)$$

¹⁰ Mayer and Zignano (2006) use the colonisation term to describe a relationship between two countries, irrespectively of their level of development, in which one has governed the other over a long period of time and contributed to the current state of its institutions.

¹¹ There is evidence of correlation of the unobserved characteristics with a number of the explanatory variables. Although IFRS are positive and significant when estimating by random effects, this estimator leads to biased and inconsistent estimates of the parameters.

In the first stage, the FEVD procedure estimates a standard fixed effects (FE) model. The FE transformation can be obtained by demeaning the time-variant variables:

$$y_{it} - \bar{y}_i = \beta_k \sum_{k=1}^K (x_{kit} - \bar{x}_{ki}) + \varepsilon_{it} - \bar{\varepsilon}_i \quad (3)$$

This transformation removes the individual effects and the time-invariant variables. It is run for the purpose of obtaining estimates of the unit effects:

$$\hat{u}_i = \bar{y}_i - \sum_{k=1}^K \hat{\beta}_k^{FE} \bar{x}_{ki} \quad (4)$$

where $\hat{\beta}_k^{FE}$ is the pooled-OLS estimate of the demeaned model in Equation (3).

At stage 2, the unit effects \hat{u}_i from the first stage are regressed on the observed time-invariant variables (z variables). The estimated unit effect is decomposed into two parts: an explained and an unexplained part (h_i).

$$\hat{u}_i = \sum_{m=1}^M \gamma_m z_{mi} + h_i \quad (5)$$

The unexplained part, h_i , is obtained by computing the residuals from Equation (5):

$$h_i = \hat{u}_i - \sum_{m=1}^M \gamma_m z_{mi} \quad (6)$$

In the third stage, the full model in Equation (2), by excluding the unit effects but including the unexplained part h_i , is estimated by the pooled OLS:

$$y_{it} = \alpha + \sum_{k=1}^K \beta_k x_{kit} + \sum_{m=1}^M \gamma_m z_{mi} + \delta h_i + \varepsilon_{it} \quad (7)$$

h_i no longer correlates with any of the time-invariant variables. Hence, it is possible to account for individual fixed-effects.

4. Data, sources and variables

The sample used in the empirical analysis includes data on bilateral exports of goods in the EU from 2002 to 2007, as well as data on bilateral FDI flows (namely investments by resident entities in affiliated enterprises abroad) from 2002 to 2007. FDI data also include a control group that consists of the United States, China, Japan, EFTA members (Switzerland, Norway, and Iceland) and candidate countries (Croatia, Turkey). Total FDI flows are broken down by the type of instrument used for making the investment: equity capital, reinvested earnings and loans. Equity capital comprises equity in branches, all shares in subsidiaries and associates, and other contributions (such as the provision of machinery). Reinvested earnings consist in the direct investor's share of earnings that are not distributed by the direct investment enterprise. Loans cover borrowing and lending funds. This variable includes debt securities and trade credits between direct investors and direct investment enterprises. Both trade and FDI data were obtained from Eurostat.¹²

Data about the use of IFRS around the world was obtained from Deloitte (2003-2008) and Amiram (2009). Distance, adjacency, colonial links and language were taken from Centre d'études prospectives et d'informations internationales (CEPII),¹³ whereas income was obtained from World Development Indicators online.

To contrast the entire hypothesis outlined in Section 2, additional variables are required. Firstly, to analyse whether an improvement in transparency in IFRS-adopting countries has reinforced the comparability effect, a transparency measure is needed. Since the transparency effect reflects a stronger relationship between

¹² Data on bilateral exports were obtained from "EU27 Trade Since 1995 By SITC" (External Trade Data), while data on bilateral foreign investments were obtained from the Economy and Finance section (Balance of payments - International transactions).

¹³ The dist_cepil file was taken from <http://www.cepii.fr/anglaisgraph/bdd/distances.htm>.

reported financial information and the firm's value, a firm-level variable should be used. Nonetheless, the approach used in the present paper does not allow to capture the firm-level transparency effect. So, only the indirect country-level transparency effect, which reinforces the comparability effect, is proxied. To this end, the Index of Economic Freedom is considered to control for the reinforcing transparency effect which IFRS adoption leads to, as well for other initiatives on the EU-level to foster bilateral trade and investments, such as the EU transparency directive.¹⁴ Secondly, to analyse whether IFRS is implemented and interpreted differently in countries with different legal systems, legal origins are used (La Porta et al. 2007). Finally, the Uncertainty Avoidance Index (UAI)¹⁵ is used to analyse whether the comparability effect differs across countries according to behavioural factors.

Table 1¹⁶ shows a summary of the variables used in the empirical analysis and Table 2 presents summary statistics of a number of variables included in the analysis. First, legal origins are detailed by country. Second, Table 2 shows the mean of bilateral exports (in millions of euro) that all the 27-EU Members export to their EU trading partners from 1999 onwards. The data show that the most important intra-EU exporters of goods are Belgium, France, Germany, Italy, the Netherlands and the United Kingdom. Nonetheless, transition countries, such as Bulgaria, Czech Republic, Latvia, Lithuania, Poland, Romania and Slovakia, have experienced the highest increase in terms of intra-EU exports. Finally, Table 2

¹⁴ This index measures ten components of economic freedom, and assigns a grade in each using a scale from 0 to 100, where 100 represents maximum freedom. The Index of Economic Freedom and the Opacity Index constructed by Kurtzman and Yago strongly correlate. The Opacity Index distinguishes five areas that can confound global investment and trade; thus corruption, legal system, economic policy, accounting standards and governance rules, and the regulatory structure of the financial system (The Kurtzman Group at <http://www.kurtzmangroup.com/>). Due to data availability, the Index of Economic Freedom is used.

¹⁵ The UAI deals with a society's tolerance for uncertainty and ambiguity. It indicates to what extent a culture makes its members to feel either uncomfortable or comfortable in novel, unknown, surprising or different situations from the usual ones.

¹⁶ Table 1: The first column lists the variables used for the empirical analysis; the second column outlines a description of the variables, and the third column shows the data sources.

shows the mean of FDI inflows (in millions of euro) in all the 27-EU Members from their EU partners, along with the United States, China, Japan, EFTA Members and candidate countries from 1999 onwards. The data show that the “oldest” EU Members, such as Belgium, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Spain and the United Kingdom, receive the highest FDI inflows in the EU. Nonetheless, the highest increase in terms of FDI inflows is experienced in transition countries, such as Bulgaria, Estonia, Hungary, Latvia and Romania. Overall, the highest increase in both exports and FDI inflows from 1999 onwards has been experienced by transition economies.

5. Empirical results

5.1. The effect of IFRS adoption on international trade

To analyse the effect of IFRS adoption on trade in goods, Equation (1) is estimated with the data of the 27-EU Member countries from 2002 to 2007.¹⁷ In order to determine which RHS variables are time invariant (or rarely time changing), the *xtsum* command in STATA is used and only those variables in which the between standard deviation is at least 2.5 times larger than the within standard deviation are included in the second stage of the model.

Table 3 shows the estimation results. The obtained results in Column (1) not only shows that income, EU and IFRS dummies, to speak a common language, to have had a recent colonial relationship, a common coloniser, and to have ever been a same country are significant, but also show the expected positive sign. Distance is significant and negatively signed, as expected. These results show that IFRS adoption has benefited European countries in terms of trade in goods. Furthermore, the results in Column (2) corroborate that increasing transparency reinforces the comparability effect of IFRS adoption since the interaction of the

¹⁷ The dataset includes a maximum of 702 (27x26) cross-country trade flows and 6 years, resulting in a maximum of 4,212 observations. The presence of missing/zero values in the bilateral trade flows data reduces the sample to 2,804 observations.

IFRS dummy and the Index of Economic Freedom in the exporting country is positively signed and significant, thus indicating that exports have increased among the post-IFRS adoption European countries due to both the comparability and transparency effects which IFRS adoption leads to.

For half a century, the EU has pursued ever-deeper integration while taking in new members. With the EU's recent enlargement to 27 Members in 2007, and the agreement to extend the EU perspective to countries in south-eastern Europe, analysing country-heterogeneity issues in the European integration process is of great importance, particularly in line with the incorporation of countries which have abandoned the traditional tools of communist economic control, and have moved towards free market systems. Therefore, the differential impact of IFRS adoption on established EU Member States versus transition countries is considered. The effect of IFRS adoption on trade in goods in both Western Europe and transition economies as exporters, and importers, is analysed in Columns (3)-(10).¹⁸ The obtained results show that the comparability effect associated with IFRS adoption occurs mainly owing to the transparency improvements in the "oldest" European countries since only the interaction term between IFRS and Economic Freedom is positive and significant in Column (4). Otherwise, the obtained results reveal that transition countries have benefited from the comparability effect to a greater extent. Additionally, the transparency effect has also occurred. When analysing transition countries as importers, the obtained results show that the comparability effect leads to a higher increase of incoming foreign goods than in Western European countries.

Given that the information asymmetries between countries sharing geographical similarities are likely to be less pronounced prior to IFRS adoption, the adjacency

¹⁸ The eight countries, which joined the EU on 1 May 2004 (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia), and Bulgaria and Romania, which joined the EU in 2007, are those considered to be transition countries.

dummy is interacted with IFRS since the benefits of IFRS adoption are expected to be lower with contiguous countries. Column (11) in Table 3 shows that there is a lower impact of IFRS adoption on countries sharing a border, as expected.

Furthermore, one would not expect IFRS to be uniformly implemented across all the EU member states given the differences in the support infrastructure. Hence, the role of market forces and institutional environment are also considered a driving force behind macroeconomic benefits when analysing whether IFRS adoption leads to a comparability effect which fosters trade in goods across European countries. Column (12) indicates that IFRS is implemented and interpreted differently in countries with different legal systems. According to the results obtained, those countries with English and German legal traditions benefit the most from adopting IFRS in terms of trade in goods.

Finally, the IFRS indicator variable captures effects when both countries i and j report using IFRS. This means that those cases where only one country in a given pair has implemented IFRS, and the cases where neither country has adopted them, are pooled together in the 'zero' category. To separate out these effects, two *IFRS* dummy variables in exporter (in importer) are constructed which take the value of one when the exporter (importer) country requires IFRS for domestic listed companies, and zero otherwise. Column (13) in Table 3 shows that both variables are positive and significant.

5.2. The effect of IFRS adoption on FDI

Equation (1) is also estimated with the FDI data of the 27-EU Member countries, the United States, China (excluding Hong Kong) and Japan, EFTA countries (except Liechtenstein) and candidate countries (Croatia and Turkey) from 2002 to

2007.¹⁹ Columns (14), (15) and (16) in Table 4 offer the estimation results for FDI, equity (EQ) and retained earnings (RE), respectively.²⁰ Income, common coloniser and recent colony dummies are significant and show the expected sign in all cases. Contiguity and same country dummy are positive and significant only for equity, whereas the comparability IFRS adoption effect is positive and significant only for equity and retained earnings, thus supporting the hypothesis that the effect of IFRS adoption differs according to the type of instrument used for making the investment. The obtained results are in line with those obtained in Kosi and Florou (2009), who show that mandatory IFRS reporting has no impact on the cost of loans. Therefore, IFRS are of great importance to foster investments in equity capital and retained earnings.²¹ According to the results obtained, increasing transparency in the destination country reinforces the comparability effect of IFRS adoption on FDI abroad. Nonetheless, the indirect effect of transparency on fostering FDI does not occur thorough the origin country.²²

In relation to the country-heterogeneity across European countries, Manova (2008) hypothesises that equity market liberalisations should result in resources that flow from capital-abundant developed countries, where expected returns are low, to capital-scarce emerging countries, where expected returns are high. Therefore, increasing investment flows are expected to go from the “oldest” EU countries to transition countries. Equation (1) is then re-estimated by only including well-established capitalist and transition countries as origin and destination countries, respectively. Columns (17), (18) and (19) show the results obtained for equity, retained earnings and loans, respectively. According to these

¹⁹ The dataset includes a maximum of 1,190 (35x34) cross-country FDI flows and 6 years, resulting in a maximum of 7,140 observations. The presence of missing/zero values in the bilateral FDI flows data considerably reduces the sample.

²⁰ Results for loans are available upon request from the authors.

²¹ Leuz et al (2003) highlighted the existence of a linkage between investor protection and the quality of accounting earnings reported to market participants. Therefore, the level of retained earnings may be related to an issue of shareholder rights, which is left for further research.

²² These results are available upon request from the author.

results, the comparability effect of IFRS adoption fosters retained earnings and loans from well-established capitalist countries to transition countries to a greater extent. These results are in line with Beneish et al. (2009), who show that IFRS adopting countries with weaker investor protection and greater financial risk are able to attract more foreign debt. The results also indicate the importance of other variables to receive a larger amount of inflows, such as to have ever been a same country, for retained earnings, and speaking a common language, in the case of equity and loans. Then the familiarity effect seems to predominate in the FDI relationship between well-established capitalist and transition countries.

To analyse whether the comparability effect of IFRS adoption on foreign investments differs across EU countries according to behavioural factors, unfamiliarity aversion heterogeneity is taken into account. A cluster analysis is performed to classify EU countries according to their UAI. Table 5 shows that three groups are distinguished. The first group (with the lowest UAI) includes countries with English and Scandinavian legal origins, the second group mostly includes countries with a German legal tradition. Finally, the third group includes countries with a relatively high uncertainty-aversion in the EU. A dummy variable is constructed for all these groups, then those dummies indicating groups with medium- and high-uncertainty aversion interact with the IFRS dummy. The obtained results show that those countries with high-uncertainty aversion have increased equity flows abroad to a greater extent.

5.3. Robustness analysis

For the sake of comparison, and in a first step, in order to introduce the effect of currency volatility in the analysis, an exchange rate stability dummy variable (FIX) is constructed for each bilateral relationship, as done in Portes and Rey (2005). When Equation (1) is augmented by this indicator variable, which is unity

if the destination country maintained a fixed or pegged exchange rate with the Euro during the sample period, this variable takes on a insignificant coefficient for the case of FDI. Hence, exchange rate stability does not seem to have a positive influence on cross-border investment transactions, unlike trade, for which this variable is positive and significant. Therefore, exchange rate stability has fostered international trade relationships in Europe.²³

Finally, whereas the exports model has been estimated using only European countries, the FDI model has been estimated including the US, China and Japan. In order to test whether the obtained results hold without the presence of the aforementioned countries, these countries were excluded from the sample. Similar results are obtained when these countries were excluded from the sample.²⁴

6. Conclusions

The present paper shows that the accounting harmonisation process in Europe is a way to reduce information costs and unfamiliarity between countries and, therefore, an important way of encouraging international trade and foreign direct investments. From a gravity framework, and using a methodology to estimate panel data with time-invariant variables, this paper analyses IFRS adoption by taking into account heterogeneity among European Union Members and uncertainty aversion diversity in countries. First, the results show that transition economies have benefited the most from IFRS adoption in terms of trade in goods and FDI inflows in the period 2002 onwards. Second, the information asymmetries between neighbouring countries are less pronounced prior to IFRS adoption and, therefore, the benefits of IFRS adoption are lower. Third, there is evidence that IFRS is differently implemented and interpreted in countries with different legal systems since those countries with French legal traditions benefit

²³ The results are available upon request from the author.

²⁴ The results are available upon request from the author.

the least from adopting IFRS in terms of trade in goods. Finally, uncertainty-averse countries benefit the most from IFRS adoption in terms of equity flows. Then, accounting standards harmonisation can be considered a strategy to reduce the perceived risks of investing abroad.

In sum, the adoption of a high quality set of harmonised accounting standards fosters trade and FDI since the improvement of accounting information, in turn, fosters financial transparency and comparability, and reduces information asymmetries and unfamiliarity among agents in different countries. Nonetheless, the diversity in the implementation of the European accounting harmonisation process, the conditional impact of IFRS on enforcement of financial reporting rules and underlying financial incentives, and whether the dominant reporting choice among listed firms before the mandatory adoption in 2005 had important consequences in terms of trade in goods and FDI are issues for further research.

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TABLES

Table 1. Variable descriptions and sources of data

Variable	Description	Source
$a) X_{ijt}$: Exports from i to j	Value of exports, in euros from the year 2002 to 2007	Eurostat (2008)
$b) X_{ijt}$: Foreign direct investments from i to j	Value of FDI, in millions of euros from the year 2002 to 2007	Eurostat (2008)
$Equity_{ijt}$: Equity capital investments from i to j	Value of equity capital, in millions of euros from the year 2002 to 2007	Eurostat (2008)
RE_{ijt} : Earnings not distributed by the direct investment from i to j	Value of reinvested earnings, in millions of euros from the year 2002 to 2007	Eurostat (2008)
$Loans_{ijt}$: borrowing funds from i to j	Value of other FDI capital, in millions of euros from the year 2002 to 2007	Eurostat (2008)
Adj_{ij} : Adjacency dummy	Dummy variable = 1 if the trading partners share a common border, 0 otherwise.	CEPII (2007)
$Dist_{ij}$: Distance	Distance between two countries based on bilateral distances between the biggest cities of those two countries, those inter-city distances being weighted by the share of the city in the overall country's population.	CEPII (2007)
$Lang_{ij}$: Language dummy	Dummy variable = 1 if the trading partners countries share language that is spoken by at least 9% of the population in both countries, 0 otherwise.	CEPII (2007)
$Comcol_{ij}$: Common colonizer dummy	Dummy variable = 1 if the trading partners have had a common colonizer after 1945, 0 otherwise	CEPII (2007)
$Col45_{ij}$: Colony dummy	Dummy variable = 1 if the trading partners have had a colonial link after 1945, 0 otherwise.	CEPII (2007)
$Smctry_{ij}$: Colony dummy	Dummy variable = 1 if the trading partners were/are the same country, 0 otherwise	CEPII (2007)
EU dummy	Dummy variable = 1 if the trading partners are members of European Union, 0 otherwise	
English origins	Dummy variable = 1 if the trading partners have English legal origins, 0 otherwise	La Porta et al. (2007)
French origins	Dummy variable = 1 if the trading partners have French legal origins, 0 otherwise	La Porta et al. (2007)
German origins	Dummy variable = 1 if the trading partners have German legal origins, 0 otherwise	La Porta et al. (2007)
Scandinavian origins	Dummy variable = 1 if the trading partners have Scandinavian legal origins, 0 otherwise	La Porta et al. (2007)
IFRS _{ijt} dummy	Dummy variable = 1 if in both trading partners listed companies use IFRS for domestic reporting as of the year t, 0 otherwise. Proxy for comparability effect	Deloitte (several years); Amiram (2009)
Index of Economic Freedom	Proxy for transparency effect	The Heritage Foundation (2010). From http://www.heritage.org/Index/
GDP _i	GDP (current US\$) in country i	World Development Indicators online (2010)
GDP _j	GDP (current US\$) in country j	World Development Indicators online (2010)
UAI	Uncertainty Avoidance Index	From http://www.geert-hofstede.com

Table 2. Summary statistics. Trade and FDI according to country and year.

Country	Origins	1999		2000		2001		2002		2003		2004		2005		2006		2007		% increase (99-07)	
		Exports	FDI	Export	FDI	Export	FDI	Exports	FDI	Exports	FDI	Exports	FDI	Exports	FDI	Exports	FDI	Exports	FDI	Exports	FDI
Austria	German	1,820	125.21	2,110	754.87	2,270	261.84	2,400	182.21	2,490	162.44	2,690	334.24	2,780	0.26	3,020	-57.14	3,310	723.65	81.87	477.93
Belgium	French	5,090	2,196.50	6,020	1,708.17	6,370	4,162.50	6,630	1,385.19	6,710	240.77	7,310	609.41	7,930	930.50	8,620	915.79	9,270	1,164.54	82.12	-46.98
Bulgaria	German	82.1	16.56	113	46.33	133	9.24	145	50.10	162	20.79	191	22.96	213	56.08	264	51.88	314	103.13	282.46	522.94
Cyprus	English	8.78	-28.29	10	8.50	10.4	4.15	9.95	10.75	9.94	3.26	18.4	15.46	28	74.92	22.7	78.40	23.2	244.91	164.24	2781.33 ^a
Czech Republic	German	838	107.00	1,040	213.73	1,240	177.39	1,340	96.29	1,450	-31.15	1,860	55.96	2,060	175.26	2,490	149.62	2,930	174.00	249.64	62.62
Denmark	Scand.	1,290	267.73	1,510	688.18	1,540	82.50	1,630	112.26	1,590	157.69	1,670	44.00	1,850	138.97	2,010	143.89	2,040	24.74	58.14	-90.76
Estonia	German	74.6	9.43	117	4.33	116	8.68	114	3.19	127	7.96	147	5.41	185	84.38	194	8.54	215	35.20	188.20	273.33
Finland	Scand.	988	185.06	1,200	74.36	1,110	104.87	1,120	528.04	1,090	96.26	1,100	93.84	1,150	175.46	1,350	272.81	1,430	178.22	44.74	-3.70
France	French	7,640	962.56	8,810	1,338.0	8,890	724.77	8,740	1,632.42	8,850	804.67	9,170	778.25	9,050	434.87	9,930	951.00	10,000	910.24	30.89	-5.44
Germany	German	12,800	2,741.42	14,900	10,954.9	15,600	1,507.83	15,900	1,708.92	16,600	1,329.35	18,200	105.17	19,300	1,266.72	21,500	1,368.90	24,100	967.42	88.28	-64.71
Greece	French	265	45.07	303	28.53	310	138.65	234	38.77	295	75.08	304	27.92	328	45.39	406	164.50	424	105.23	60.00	133.49
Hungary	German	763	41.29	982	94.00	1,090	110.56	1,190	18.29	1,230	179.64	1,430	181.92	1,570	575.47	1,830	167.21	2,090	518.96	173.92	1157.0
Ireland	English	1,700	902.47	1,990	1,327.93	2,210	448.11	2,340	1,613.22	1,970	803.16	2,030	780.58	2,160	344.80	2,110	987.21	2,160	1,087.41	27.06	20.49
Italy	French	5,440	503.78	6,160	570.06	6,410	632.00	6,300	492.61	6,340	413.18	6,760	458.89	7,060	839.06	7,810	1,038.63	8,280	1,452.85	52.21	188.39
Latvia	German	48.3	9.08	62.8	2.50	67.5	8.06	72.3	0.85	78.1	-7.14	92.3	19.68	122	5.73	137	16.61	169	46.27	249.90	409.78
Lithuania	French	73.3	17.31	111	2.83	135	18.53	148	13.89	149	13.62	193	8.30	240	7.67	276	97.72	312	21.63	325.65	24.94
Luxembourg	French	260	3,075.00	303	3,733.29	369	4,430.46	362	1,041.22	398	741.77	447	922.21	504	-412.67	623	189.36	551	2,664.24	111.92	-13.36
Malta	French	35	20.60	34.7	1.33	41.1	5.15	39.1	1.38	37.4	30.50	38	45.27	37.4	111.00	40.6	494.52	41.6	-83.61	18.86	2300.59 ^b
Netherlands	French	6,470	2,619.47	7,890	909.18	8,070	463.52	7,980	4,689.00	8,090	1,684.86	8,820	3,497.07	10,000	1,244.45	11,200	3,133.45	12,000	8,407.84	85.47	220.97
Poland	German	806	562.57	1,070	553.33	1,260	289.68	1,360	70.14	1,500	75.85	1,860	353.00	2,170	102.77	2,680	218.39	3,060	356.86	279.65	-36.57
Portugal	French	746	181.14	827	504.71	841	133.95	857	123.05	875	311.45	886	252.82	905	252.27	993	248.23	1,070	133.75	43.43	-26.16
Romania	French	224	51.73	313	57.50	368	54.88	417	27.05	452	26.89	544	111.81	600	78.74	699	281.73	813	208.26	262.95	302.61
Slovakia	German	330	45.00	442	115.54	490	96.72	524	194.18	638	-21.74	744	59.63	859	55.96	1,110	76.07	1,410	60.00	327.27	33.33
Slovenia	German	228	37.29	263	23.20	281	30.53	289	59.89	296	31.33	341	11.96	406	24.75	487	14.79	584	19.00	156.14	-49.04
Spain	French	2,750	544.06	3,460	812.50	3,680	565.21	3,790	465.91	3,960	377.80	4,150	539.64	4,240	750.79	4,580	483.43	4,680	2,113.33	70.18	288.44
Sweden	Scand.	1,850	935.94	2,120	1,521.28	1,850	-123.82	1,890	595.36	1,990	241.66	2,190	194.67	2,290	123.41	2,710	475.46	2,890	125.00	56.22	-86.64
United Kingdom	English	5,860	6,424.88	6,960	5,895.61	6,910	2,484.18	6,950	2,248.08	6,120	2,512.66	6,290	2,969.76	6,800	4,880.26	8,570	2,947.83	7,070	2,724.54	20.65	-57.59

Sources: Deloitte (2003-2008), Eurostat, La Porta et al (2007) and own elaboration. **Note:** The mean exports to the rest of 27-EU members is presented in millions of euros. The mean FDI inflows from the rest of 27-EU members, the United States, China, Japan, EFTA members and candidate countries, is also shown in millions of euros. A negative sign for flows indicates disinvestment. a) 2000-2007; b) 1999-2006.

Table 3. Determinants of trade in goods in Europe.

Variable	(1) 27_EU	(2) 27-EU	(3) “oldest” EU as exporters	(4) “oldest” EU as exporters	(5) Transition EU as exporters	(6) Transition EU as exporters	(7) “oldest” EU as importers	(8) “oldest” EU as importers	(9) Transition EU as importers	(10) Transition EU as importers	(11) 27_EU	(12) 27_EU	(13) 27_EU
EU dummy	0.05*** (0.002)	0.05*** (0.002)	0.02*** (0.003)	0.02*** (0.003)	-0.01*** (0.003)	-0.01*** (0.003)	0.06*** (0.004)	0.06*** (0.004)	0.01*** (0.002)	0.01*** (0.002)	0.05*** (0.002)	0.05*** (0.002)	0.05*** (0.002)
IFRS dummy	0.04*** (0.001)	0.02*** (0.001)	0.02*** (0.001)	-0.02*** (0.001)	0.10*** (0.002)	0.06*** (0.002)	0.04*** (0.001)	0.02*** (0.002)	0.10*** (0.001)	0.08*** (0.002)	0.40*** (0.01)	0.04*** (0.001)	
Adjacency	0.001 (0.001)	0.001 (0.00)	-0.01*** (0.001)	-0.01*** (0.001)	0.04*** (0.001)	0.04*** (0.001)	0.04*** (0.001)	0.04*** (0.001)	-0.23*** (0.001)	-0.22*** (0.001)	0.06*** (0.001)	0.01*** (0.001)	0.0005 (0.001)
Distance	-1.43*** (0.001)	-1.43*** (0.001)	-1.27*** (0.001)	-1.27*** (0.001)	-1.49*** (0.001)	-1.49*** (0.001)	-1.22*** (0.001)	-1.22*** (0.001)	-1.94*** (0.001)	-1.94*** (0.001)	-1.40*** (0.001)	-1.42*** (0.001)	-1.43*** (0.001)
Language	0.15*** (0.001)	0.15*** (0.001)	0.22*** (0.001)	0.22*** (0.001)	0.33*** (0.002)	0.33*** (0.002)	0.27*** (0.002)	0.27*** (0.002)	0.03*** (0.001)	0.03*** (0.001)	0.13*** (0.001)	0.15*** (0.002)	0.15*** (0.002)
Common coloniser	2.00*** (0.002)	2.00*** (0.002)	1.12*** (0.01)	1.12*** (0.01)	2.17*** (0.002)	2.17*** (0.002)	0.66*** (0.008)	0.66*** (0.008)	1.88*** (0.001)	1.88*** (0.001)	1.86*** (0.002)	2.01*** (0.002)	2.00*** (0.002)
Recent colony	1.20*** (0.003)	1.20*** (0.003)	1.29*** (0.003)	1.29*** (0.003)			1.01*** (0.004)	1.01*** (0.004)			1.18*** (0.003)	1.18*** (0.003)	1.20*** (0.003)
Same country	0.14*** (0.001)	0.14*** (0.001)	0.03*** (0.001)	0.02*** (0.001)	0.17*** (0.001)	0.17*** (0.001)	-0.03*** (0.001)	-0.03*** (0.001)	0.03*** (0.001)	0.03*** (0.001)	0.12*** (0.001)	0.13*** (0.001)	0.14*** (0.001)
Exporter’s income	1.01*** (0.001)	1.01*** (0.001)	1.10*** (0.001)	1.10*** (0.001)	0.99*** (0.001)	1.00*** (0.001)	0.99*** (0.001)	0.99*** (0.001)	1.07*** (0.001)	1.07*** (0.001)	1.01*** (0.001)	1.01*** (0.001)	1.01*** (0.001)
Importer’s income	0.83*** (0.001)	0.83*** (0.001)	0.83*** (0.001)	0.83*** (0.001)	0.85*** (0.001)	0.85*** (0.001)	0.84*** (0.001)	0.84*** (0.001)	0.68*** (0.001)	0.68*** (0.001)	0.83*** (0.001)	0.83*** (0.001)	0.83*** (0.001)
Exporter’s IFRS*Economic Freedom		0.01*** (0.001)		0.01*** (0.001)		0.01*** (0.001)		0.01*** (0.001)		0.01*** (0.001)			
IFRS*Adjacency											-0.10*** (0.002)		
IFRS*English origin												0.05*** (0.01)	
IFRS*French origin												-0.06*** (0.003)	

IFRS*German origin													0.08***	
													(0.002)	
IFRS*Scand. origin													0.01***	
													(0.003)	
IFRS in exporter														0.03***
														(0.001)
IFRS in importer														0.02***
														(0.001)
Constant Term	-17.88***	-17.88***	-21.43***	-21.43***	-17.47***	-17.54***	-19.21***	-19.22***	-12.05***	-12.06***	-18.09***	-18.06***	-17.90***	
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Observations	2804	2804	1764	1764	1040	1040	1768	1768	1036	1036	2804	2804	2804	
Adjusted R-Squared	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	
RMSE	0.3	0.3	0.29	0.29	0.3	0.3	0.3	0.3	0.28	0.28	0.3	0.3	0.3	

Notes: ***, **, *, indicate significance at 1%, 5% and 10%, respectively. Robust standard errors are provided in brackets. The dependent variable in trade regressions is the natural logarithm of exports in value (euros). The estimation uses a robust Huber-White Sandwich estimator. The trade regressions includes an AR(1) Prais-Winsten transformation of the original data.

Table 4. Determinants of FDI in Europe.

Variable	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
	FDI: All countries	EQ: All countries	RE: All countries	EQ: Cap-Trans	RE: Cap-Trans	Loans: Cap-Trans	FDI: All countries	EQ: All countries	RE: All countries	Loans: All countries
EU dummy	0.05 (0.17)	0.09 (0.08)	-0.05 (0.1)	0.001 (0.09)	0.01 (0.06)	0.11 (0.27)	0.09 (0.17)	0.1 (0.08)	-0.05 (0.1)	0.01 (0.17)
IFRS dummy	-0.07 (0.06)	0.05* (0.02)	0.09** (0.04)	-0.01 (0.05)	0.12*** (0.05)	0.21* (0.14)	-0.08 (0.11)	-0.01 (0.05)	0.07 (0.06)	-0.03 (0.13)
Adjacency	0.13 (0.1)	0.18*** (0.05)	-0.001 (0.06)	0.24*** (0.06)	-0.19** (0.07)	0.24 (0.17)	0.14 (0.1)	0.17*** (0.05)	0.01 (0.06)	0.01 (0.11)
Distance	-0.05* (0.02)	-0.02 (0.01)	-0.01 (0.01)	-0.26*** (0.03)	-0.04* (0.02)	0.16 (0.11)	-0.03 (0.03)	-0.03*** (0.01)	-0.02 (0.02)	0.02 (0.03)
Language	-0.12 (0.12)	-0.06 (0.05)	-0.13 (0.09)	0.37*** (0.13)	0.08* (0.04)	0.44** (0.17)	-0.12 (0.13)	-0.09 (0.06)	-0.18 (0.1)	0.04 (0.15)
Common coloniser	0.43* (0.22)	0.46*** (0.08)	0.32* (0.17)				0.41* (0.22)	0.44*** (0.08)	0.3* (0.17)	-0.01 (0.32)
Recent colony	0.35*** (0.16)	0.26*** (0.06)	0.47*** (0.1)				0.37** (0.17)	0.32*** (0.06)	0.52*** (0.1)	0.25 (0.24)
Same country	0.1 (0.14)	0.13** (0.07)	0.09 (0.08)	0.02 (0.08)	0.59*** (0.07)	0.04 (0.35)	0.09 (0.14)	0.11* (0.07)	0.08 (0.08)	-0.14 (0.17)
Exporter's income	0.12*** (0.01)	0.08*** (0.01)	0.12*** (0.01)	0.04*** (0.01)	0.1*** (0.01)	-0.01 (0.03)	0.11*** (0.01)	0.07*** (0.01)	0.11*** (0.01)	0.03* (0.02)
Importer's income	0.04*** (0.01)	0.05*** (0.01)	0.01 (0.01)	0.18*** (0.02)	0.06*** (0.01)	0.02 (0.05)	0.03** (0.01)	0.04*** (0.01)	0.01 (0.01)	-0.01 (0.02)
IFRS*Medium-uncertainty aversion in the country of origin							0.14 (0.18)	0.08 (0.07)	0.01 (0.1)	0.03 (0.2)
IFRS*High-uncertainty aversion in the country of origin							0.04 (0.17)	0.18** (0.08)	0.08 (0.1)	0.14 (0.2)
Constant Term	2.4*** (0.43)	2.48*** (0.2)	2.14*** (0.25)	2.28*** (0.33)	1.56*** (0.31)	4.36 (1.17)	2.58*** (0.51)	2.92*** (0.24)	2.33*** (0.29)	5.06*** (0.57)
Observations	5339	4719	4403	976	856	814	4801	4289	4010	3841
Adjusted R-Squared	0.1	0.13	0.15	0.23	0.24	0.1	0.09	0.13	0.14	0.04
RMSE	1.03	0.78	0.85	0.7	0.64	1	1.03	0.78	0.85	1.03

Notes: ***, **, *, indicate significance at 1%, 5% and 10%, respectively. Robust standard errors are provided in brackets. The dependent variable is the natural logarithm of FDI, equity, retained earnings or loans. The estimation uses a robust Huber-White Sandwich estimator.

Table 5. The effect of IFRS adoption according to the degree of uncertainty aversion in the country of origin.

Low uncertainty aversion	Middle uncertainty aversion	High uncertainty aversion
DENMARK	AUSTRIA	BELGIUM
IRELAND	CZECH REPUBLIC	BULGARIA
SWEDEN	ESTONIA	FRANCE
UNITED KINGDOM	FINLAND	GREECE
	GERMANY	HUNGARY
	ITALY	MALTA
	LUXEMBOURG	POLAND
	NETHERLANDS	PORTUGAL
	SLOVAKIA	ROMANIA
		SPAIN