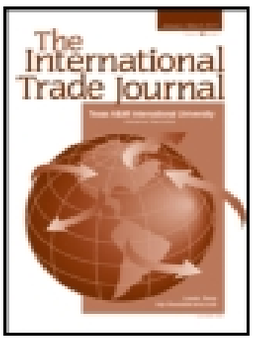

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# Foreign Presence and Export Performance: The Role of Portuguese Commercial Diplomacy

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**ABSTRACT**

This article studies whether export supporting activities developed by Portuguese diplomatic representations in the last decade have had any impact on Portugal's international trade. It used data for 187 destination countries, for the period of 2008 to 2017, controlling for other determinants of trade through a gravity model. Complementing the econometric analysis of the macro data, a survey was applied to 238 Portuguese exporting firms. The results imply a less relevant role for embassies and consulates in export promotion and facilitation. These results highlight the necessity to change the way that national diplomatic representations interact with exporting firms, in particular SMEs.

**KEYWORDS**

Internationalization; commercial diplomacy; SMEs; gravity model

## I. Introduction

In order to overcome the global economic crisis, Portugal sought to increase the internationalization degree of its economy. The global economic power shift to the East, with the increasing preponderance of emerging economies over the traditional restricted group of Western countries, fueled developed countries' governmental initiatives to support national business involvement in the process of internationalization and expansion across borders. International trade data for the Portuguese economy showed a greater dynamism in the last decade amid the incorporation of new political entities designed to stimulate and deepen bilateral relations. The commercial diplomacy activities constituted a means for government bodies to increase international trade and support the national economy, amid a scenario of internal budget cuts and lackluster growth. As argued by Carreras and Moriconi (2018, 142), "the necessity to encourage economic growth because of the crisis led Portugal to reinvent both its political and its economic position, achieve more openness, seek new markets and draw new strategic partnerships to increase

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exports, balance its trade deficit and create new profitability and productivity opportunities for Portuguese companies."

Why do countries spend so many resources on diplomatic services and infrastructures? Commercial diplomacy is an answer increasingly given, due to the recognized relevance attributed to the development and maintenance of export markets. The objective of this article is to study the strength of this link, assessing if export supporting activities developed by Portuguese diplomatic representations in the last decade had any impact on Portugal's international trade, by helping firms as a whole add new destination countries or new export products. Since these diplomatic activities could also facilitate imports, the potential impacts on Portuguese imports are also explored. This study uses data for 187 destination countries, in the period between 2008 to 2017, controlling for other determinants of trade through a standard gravity model. Complementing the econometric analysis of the macro data set, the article also presents the results of a survey to 238 Portuguese exporting firms. This alternative micro perspective allows us to check the robustness of the macro results. To the best of our knowledge, no previous study has used both sources of empirical data analysis to try to clarify the significance of the embassies-export-import nexus.

As argued by Naray and Bezençon (2017, 348–349), "possible reasons for the relatively limited scientific literature to date on this topic may include the confidential nature of the job; the competition between nations, diplomatic services, and governments; and the very fact that commercial diplomacy, as a profession, is not organized sufficiently or professionalized to invest in research." Nevertheless, it is crucial to estimate the impact of commercial diplomacy empirically, since the rejection of the hypothesized positive impact of embassies and consulates would necessarily imply a negative outcome for a cost-benefit analysis.

The rest of the article is structured as follows. The next section presents the background and motivation of the study (together with a presentation of the Portuguese context), followed by a review of the relevant literature. Section 4 presents the methods and the data. The fifth section presents and discusses the econometric results, and Section 6 presents the results of the survey. The final section concludes, analyzing the article's main limitations and suggesting future research possibilities.

## II. Background and motivation

In an increasingly complex and global environment, small and medium enterprises (SMEs) face many challenges in international trade, finding it difficult to enter and explore the potential opportunities provided by the different markets. Informal trade barriers, cultural and institutional differences, act as intangible barriers, generating frictions. As stated by Ruël, Lee,

and Visser (2013, 14), "the idea that successful international business is just a matter of a clear business strategy and good business management is naïve and outdated," since diplomacy and business go hand in hand in the highly dynamic current political and economic environment. Ever since the first application of the gravity model of international trade by Tinbergen (1962), empirical trade analysts have acknowledged the need to take political factors into account when explaining the geography of international trade.

First and foremost, it is important to distinguish the intertwined concepts of commercial diplomacy and economic diplomacy. States were created to protect their citizens and promote their interests – both internally and abroad. Therefore, foreign policy is the set of activities and strategies to best meet those objectives in a country's relations with other international agents. Under the scope of diplomacy, states create, maintain, and interrupt relations not only with other sovereign peers of the international community, but also with diverse agents, such as international organizations. As argued by Ruël, Lee, and Visser (2013), diplomacy typically involves information gathering, lobbying, advocacy, and the representation of interests in a negotiation. Economic diplomacy arises as the use of political tools to meet economic objectives, including the necessary negotiations and subsequent trade agreements (Yakop and Bergeijk 2009, 8).

On the other hand, commercial diplomacy targets business support, trade, and export promotion. Commercial diplomacy is often confused with economic diplomacy and other types of diplomacy such as trade diplomacy and financial diplomacy (Saner and Yiu 2003; Zuidema and Ruël 2012), but the concept of economic diplomacy goes beyond the traditional concept of commercial diplomacy, which is focused on export promotion and subordinated to political diplomacy (Okano-Heijmans 2011; van Bergeijk and Moons 2018). Economic diplomacy is, thus, more related to international economic policy and with the management of relations with international economic organizations and trade agreements. As argued by Ruël, Lee, and Visser (2013), commercial diplomacy lies at the heart of the intersection of international relations and international business, combining the functions and interests of both government and business (Naray and Bezençon 2017). In organizational terms, it encompasses the activities developed by diplomatic missions, in connection with other public entities, toward (mainly private) national economical and financial interests (Lee 2004; Sousa 2019).

In the last decades, most governments have created an infrastructure with a set of services aimed at assisting businesses in their internationalization efforts. International promotion activities (foreign missions, visits, commercial diplomacy by embassies, etc.) have been widely used to promote countries' export activities. So, as argued by Ruël and Visser (2014, 305), "international business is not just an activity between businesses, it is conducted together with governments and international and societal organizations." Commercial

diplomacy, the topic of our research, is being increasingly recognized as a political means that can be used to deal with some severe intangible barriers to trade (Moons and van Bergeijk 2017).

Information incompleteness constitutes a relevant barrier to export expansion, either in terms of the extensive margin (export new goods or enter into new markets) or either in terms of the intensive margin (increase volumes of exports to current trade partners). In a world without frictions, international promotion activities should play no role, but given the severe information problems involved in exporting activities, adding new destination countries or new products may be challenging, in particular for SMEs with limited international experience and a scarcity of human resources. As argued by several authors (Martincus and Carballo 2010; Martincus et al. 2010; Moons and van Bergeijk 2017), incomplete information creates frictions in the process of matching between buyers and sellers across national borders, therefore being an obstacle to the development of export activities. These problems are even more significant for SMEs located in a peripheral country such as Portugal and producing differentiated products, which partly explains the weights of the Spanish market and the former colonies in Portuguese international trade.

Trade promotion activities, specifically those conducted by diplomatic representations abroad, might be seen as correcting market failures. In that sense, they mitigate those asymmetries in information and the fixed costs associated with exporting, increasing the firms' possibilities to start exporting to new countries and/or increase their portfolio of international clients. In sum, by supplying information to firms, the physical presence of commercial diplomats reduces transaction costs, facilitates international trade and investment flows, and contributes to a more efficient allocation of capital (Moons and van Bergeijk 2017). Nevertheless, the effectiveness of such supporting activities and the potential dangers deriving from the subsidization of firms, thereby ultimately hampering their long-term competitiveness and innovation prospects, must be evaluated (van Veenstra, Yakop, and Bergeijk 2010). As argued by Martincus et al. (2010, 92), "whether these public interventions have been actually effective in correcting such market failures thus allowing for increased trade has been object of an intense debate."

Yakop and Bergeijk (2009, 5) argue that "embassies and consulates may be of interest for two distinct reasons. Firstly, good and stable political relations by building on mutual trust provide the first best instrument to reduce the risk of future distortions and trade disruptions. Secondly, embassies and consulates help to generate knowledge about (future) opportunities for trade and investment and thus may add to the stock of knowledge about foreign markets which – if shared with (potential) exporters – reduces the costs that may have to be incurred for exporting to and investing in these markets."

Yet, in the particular case of Portugal, as a European Union (EU) member-state, some public policies to promote its firms' internationalization are

prohibited by EU norms. Most distinguishably, the Treaty on the Functioning of the European Union in its Article 107 clearly states that: "any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market" (EU 2016). Hence, the EU, in order to protect its open market economy, seeks to ensure that the principle of free competition is not compromised – even though some exceptions are legally binding as well.

During the first decade of the twenty-first century, Portuguese trade and foreign policy were oriented toward the country's integration in the European Union and the Community of Portuguese-Speaking Countries (Carreras and Moriconi 2018). The Portuguese crisis was aggravated because of its heavy dependence on the European market and the idea that trade in other markets was secondary. In 2011, the recently elected government acknowledged that economic growth was key to overcoming the crisis and that, for this reason, it was imperative to strengthen the export market and seek new destinations, especially in Africa, Asia, and Latin America. According to Neves (2017), the identification of the need for reform aimed at strengthening the effectiveness of the system, rationalizing the articulation of competencies between the Ministry of Foreign Affairs and the Ministry of Economy, as well as unifying external networks, were all positive aspects of a pragmatic rationalization effort to be implemented in a difficult environment. Thus, substantive changes were implemented in foreign relations, with the Decree-Law 229/2012 reformulating the objectives of the Portugal Global Trade and Investment Agency (AICEP) to make it suitable for the objectives of the new administration. These legal changes converted the role of the Ministry of Foreign Affairs as an essential part in the Portuguese export promotion efforts, namely regarding SMEs.

The rationalization of the external representation network – embassies, consulates, and permanent representations – in order to resize and adapt it to the new objectives, that is the promotion of Portuguese exports, market diversification, FDI attraction, and tourist flows, began in 2011. In November 2011, the closure of several Portuguese embassies and consulates was announced, to be used to open new foreign delegations where the country should be better represented.

This new strategy intended to transform embassies and consulates into "business centers" for Portuguese firms, products, and brands, promoting the coordination between official visits and business missions, and the collaboration between ministries and public agencies. Focused on the business dimension, there was an expectation of an increased dissemination of information and the provision of a set of tools fostering firms' internationalization. In sum, an economic foreign policy organizing external economic activities,

not only with internal economic objectives, but also expected to improve Portugal's external image (Sousa 2019).

Accordingly, the Portuguese authorities created an institutional framework to promote the Portuguese brand and generate events and business missions in the search for new markets. Besides traditional agreements, conventions, and trade agreements, official visits were organized and public agents, alongside local businessmen, visited different countries with potential trade opportunities. Among those changes, the AICEP's mission was focused on the idea of proximity to firms, working together with Portuguese embassies and reinforcing the external network. The commercial diplomacy activities in external markets frequently meant official state visits with business entourages. These activities were developed by the presence in major trade and investment international fairs, by business missions to foreign markets, road shows, etc. AICEP also provided services related to the identification of business opportunities, lobbying, provision of contacts of potential clients and importers, and resolution of context costs, namely bureaucratic and fiscal issues.

Beginning in November 2014, AICEP launched a process to reinforce its external presence, adding a set of new countries. This strategic choice was essentially due to two factors: following foreign investment trends (flows presenting greater growth potential) and answering the requests made by domestic firms. With this and other subsequent enlargements focused on increasing foreign commercial relations with Portugal, currently, AICEP has delegations in 76 countries.[1] As a result of factors such as country dimension, international relevance, cultural proximity, and commercial strategy, Portugal attributes different degrees of importance to different countries. Consequently, there are relatively more embassies, consulates, and AICEP offices in certain countries. Notice that embassies and AICEP offices share the same facilities and knowledge, in order to maximize resources, cover more markets, and provide greater support to firms in their internationalization efforts.

## III. Previous literature

Since the study by Rose (2007), the impact of diplomatic representations on bilateral trade has been studied by several authors, albeit mainly for a single year and applied to major European or North-American countries. In a seminal article, Rose (2007), using a gravity model for the year 2002 for 22 exporting countries and 200 importing countries, showed that diplomatic exchanges foster bilateral trade through diplomatic representations. As argued by Yakop and Bergeijk (2009), his finding of a significant and economically meaningful impact has stimulated a lot of research, and some follow-up studies consistently found significant relevant indications of trade creation

[1]According to http://www.portugalglobal.pt.

by means of commercial diplomacy. Replicating Rose (2007) with a larger sample of exporting countries and for a more recent year, Yakop and Bergeijk (2009) supported his finding that embassies and consulates facilitate trade, obtaining positive significant estimates ranging from 0.06 to 0.16 for export facilitation. Gençtürk and Kotabe (2001) evidenced that the profitability of firms which made use of commercial diplomacy increased, and Wilkinson and Brouthers (2006) found that firms which used state support programs enjoyed greater export success. Gil, Llorca, and Serrano (2008), closely following the Rose approach to research the export promotion agencies of Spanish regional governments, evidenced that regional agencies increased exports by over 50%.

In a related study, Afman and Maurel (2010) estimated that the opening of an embassy in an emerging market in Eastern Europe is equivalent to an ad valorem tariff reduction of 2 to 12%. Hayakawa, Lee, and Park (2014, 258) used the Japanese and Korean examples for "a significant positive effect of EPAs [Export Promotion Agencies] on exports." Furthermore, these authors also conclude that "the export promotion effect of establishing an EPA office in a country is not smaller than half of the effects of signing an FTA [Free Trade Agreement] with that country" and that "the effect of EPA is larger for exports to low-income countries than for exports to high-income countries."

Martincus et al. (2010), using data on bilateral exports from 26 Latin American countries, examined the impact of foreign representations of trade promotion organizations and embassies and consulates on the extensive margin of trade, that is, the number of products exported, controlling for standard gravity variables. Their results evidenced that export promotion agencies seem to favor the expansion of the extensive margin of exports of more differentiated goods, while embassies and consulates are associated with increased exports of a larger number of homogeneous goods. However, Head and Ries (2010), carrying out a single country analysis by investigating the impact of the Canadian trade missions on the exports of Canada, casted doubts about such effects of commercial diplomacy on trade. Handling the reverse causality by controlling unobserved characteristics with fixed effects and including the lag of the dependent variable among the control variables, the authors found no statistically significant effect on exports.

Studying differences between destinations' level of development, van Veenstra, Yakop, and Bergeijk (2010) showed that commercial diplomacy only works in developing countries, but there is not a relevant trade-enhancing factor for intra-OECD trade, a result which was also evidenced by Yakop and Bergeijk (2009). These authors highlighted that: i) export promotion is not statistically significant in developed countries; ii) trade related institutions outside the OECD are less developed; and iii) there is a stronger impact when contacts with emerging markets are at an initial stage. Creusen and Lejour (2011) found a significant export promoting effect of trade missions of 5 to 20% for low-income countries and OECD countries, respectively.

Their estimates for missions to high-income countries are insignificant (so that commercial diplomacy would hardly seem to be effective in intra-OECD trade). In a subsequent study, Creusen and Lejour (2013) corroborated that the presence of trade posts and trade missions particularly to middle-income countries stimulates entry into new markets, whereas it has no significant impact on market entry in higher-income countries. These results suggest that commercial diplomacy should be focused on countries with significant market entry barriers. On a case study with these particularities, Vitalis (2017) concluded that New Zealand should consider the benefits of establishing new preferential trade agreements, bearing in mind the utilization of its short human and material resources. Zuidema and Ruël (2012) conducted a survey among commercial diplomats stationed at foreign posts, arguing that commercial diplomacy is somehow overestimated but evidencing that it is highly relevant and valuable in markets which are very different from the one at home. As argued by Moons and van Bergeijk (2017), the impact of commercial diplomacy seems to be significant in North-South, South-South, and South-North trade and weak for the flows between developed countries. Information research costs are much higher in countries with different business practices and cultural values. So, commercial diplomacy intervention is needed to solve these market failures. In fact, this issue assumes an increasing importance since Portuguese firms continue to explore new trade opportunities in distant and rather unknown foreign markets.

Ruël and Visser (2014) present a literature review based on 56 relevant publications, evidencing that research on commercial diplomacy consists of many subtopics, resulting in a diffuse understanding of the topic. Also, Moons and van Bergeijk (2017), in a meta-analysis of 32 empirical studies published in the period of 1986 to 2011, confirm rather heterogeneous findings regarding the relationship between commercial diplomacy and the macro impact on international flows, a fact which could be explained by differences in the characteristics of the primary studies. In another recent survey, Naray and Bezençon (2017) review the literature of commercial diplomacy during the period of 1960 to 2014 from a management angle, organizing it around four major themes: i) government's export/trade promotion function; ii) institutional/organizational arrangements; iii) managerial roles and activities; and iv) interaction between commercial diplomats and businesses. The authors underline the scarcity of commercial diplomacy literature focusing on the business and management dimension, namely researching the effectiveness of commercial diplomacy from a trade expansion perspective, thus identifying some gaps in the literature.

A relevant fact brought forward by the literature is that the export promotion activities of embassies take a somewhat different form depending of their location within or outside the European Union. European integration makes the norms, rules, procedures, and regulations more uniform, and most

individual companies already know these markets quite well. Hence, their access becomes less demanding and requires less assistance from a supporting body. The extra-EU promotion is different, with many Portuguese SMEs facing difficulties in dealing with faraway markets and expecting some assistance and support from their embassy or consulate.

In sum, the main research question addressed in this study is the following: *Did Portugal's diplomatic representations have any impact on the country's international trade in the last decade, either in terms of exports or imports?*

Notice that the different studies presented are mainly focused on major world economies, being absent a similar study dedicated to a small economy such as Portugal and encompassing an historic period instead of a single year. Additionally, as referred above, the OECD vs. non-OECD dichotomy hides differences, and the fact that Portugal ranks 28th out of 34 countries on the basis of per capita GDP amongst OECD countries highlights the relevance of the Portuguese case study.

## IV. Methods and data

### Methods

The present study uses a conventional bilateral "gravity" model of trade, linking exports positively to economic mass (proxied by population and income), and negatively to economic distance. The gravity model was developed by Tinbergen (1962) and Linnemann (1966), having a long-standing history in analyzing the international pattern of bilateral trade and investment flows. In addition to international trade flows, the gravity equation has also been applied to a whole range of "social interactions" such as migration, tourism, or foreign direct investment. The gravity model takes into account more traditional economic reasons for international trade where, in its simplest form, the bilateral trade flow is assumed to be a function of the economic masses of the two trade partners and the inverted distance between the two countries. Usually, the populations of the trade partners are added to this equation as are a number of other (often binary or dummy) variables that represent trade enhancing and trade resistance factors that are typically relevant in bilateral exchanges. Examples of such factors comprise, among others, a common border, a common language, a common currency, an (ex) colonial relationship, or individual country characteristics such as the area of the country or the fact of being an island or a landlocked country. This kind of model has a rather long history in international and regional economics, with robust theoretical foundations and an excellent empirical fit (e.g., Evenett and Keller (2002); and Anderson and van Wincoop (2003)).

As this research deals with the actual impact of commercial diplomacy on the level and pattern of bilateral trade flows, the choice of the gravity model is

almost unavoidable because the gravity model provides an empirical explanation for the geography and level of bilateral trade flows. In this article, we broadly follow the methodology applied by Rose (2007), Yakop and Bergeijk (2009), Afman and Maurel (2010), and others, introducing the presence of an embassy as an additional control variable to the augmented gravity equation:

$$\mathrm{Ln}\left(\mathrm{X_{i,j}}\right)=\beta_0+\beta_1\ln\left(\mathrm{Y_{i,j}}\right)+\beta_2\ln\left(\mathrm{Pop_{i,j}}\right)+\beta_3\ln(\mathrm{Area_i})+\beta_4\mathrm{Lang_i}$$
$$+\beta_5\mathrm{lnD_i}+\beta_6\mathrm{Landl_i}+\beta_7\mathrm{Island_i}+\beta_8\mathrm{EU_i}+\beta_9\mathrm{Emb_{i,j}}+\varepsilon_{ij}$$

where *i* denotes the importer, *j* denotes the corresponding year, and $\varepsilon_{ij}$ is the error term. The relevant variables are as follows: The dependent variable $X_{i,j}$ is merchandise exports in euros, for country *i* in year *j*. The Equation is also estimated sector by sector, given the fact that estimating the equation using aggregate data would only be appropriate if the parameters were constrained to be equal across sectors. Later, the regressions are also repeated with imports as the dependent variable in order to study the presence of a reverse effect. $Emb_{i,j}$ is the number of embassies that Portugal has in country *i* in year *j* (0 or 1) – the joint number of embassies and consulates is also employed; $D_i$ is the log of the great circle distance between Portugal and country *i;* $Y_{i,j}$ is the GDP per capita of country *i* in year *j;* $Pop_{i,j}$ is the average population of country *i* in year *j;* $Area_i$ is the log of the area of country *i* (in square kilometers); and the following is the set of dummy variables: $Lang_i$ is 1 if country *i* speaks Portuguese, 0 otherwise; $Landl_i$ is 1 if country *i* is landlocked, 0 otherwise; $Island_i$ is 1 if country *i* is an island, 0 otherwise; and $EU_{i,j}$ is 1 if country *i* belongs to the European Union, 0 otherwise. Notice that other dummy variables traditionally used in models of this kind were also tested – e.g., contiguous country, historical colonial relationship, euro-area member country – but the results were not significant.

The effects derived from the existence of AICEP missions in foreign countries are also tested and if the results are affected when differentiating between high- and low/middle-income importers. Finally, as in Afman and Maurel (2010), we add foreign missions of the importing country in the exporting country (*EMB_F*) as a variable of interest (since this type of diplomatic relation could also facilitate imports). As argued by Yakop and Bergeijk (2009), many of the functions of embassies and consulates such as providing information, building trust, or public involvement matter as much for imports as for exports. Indeed, attracting business and imports toward the domestic economy is a function of commercial diplomacy. Moreover, several countries also opened their embassies in Portugal simultaneously. A significant role of that variable would leave a policy-oriented role to attract diplomatic representations if a country would like to export more to a certain destination, since good and reciprocal bilateral ties would matter.

As argued by Moons and van Bergeijk (2017), prior studies' results indicate that research taking embassies and consulates as one variable may lead to a problematic generalization about the effectiveness of the diplomatic network. Our regression analysis illustrates that regressions using embassies alone yield more significant coefficients than the variable joining embassies and consulates, with consulates systematically associated with lower levels of significance.

The focus on diplomacy and trade has to address the key issue of reversed causality and simultaneity (Afman and Maurel 2010; Martincus et al. 2010; van Bergeijk and Moons 2018). For instance, trade could be promoted by the existence of an embassy, but the same trade stimulates the demand for opening the very same embassy. Following Head and Ries (2010), we do not employ instrumental variable methods because we do not believe that there exist valid instruments: exogenous variables that influence the likelihood of trade missions but do not exert direct effects on trade. However, we argue that even if the specifications we use contain some bias, they provide upper and lower bounds on the true effects. Additionally, since we also perform sectoral estimates, those are less likely to be affected by endogeneity biases. Thus, we begin with a pooled ordinary least squares (OLS) regression. Then, applying the Breusch-Pagan and Hausman tests to choose the most appropriate regression technique, the Breusch-Pagan test leads to the rejection of the null hypothesis, indicating that a random effects model (REM) is more appropriate than pooled OLS, and the Hausman test leads to the acceptance of the null hypothesis that REM is preferable to a fixed-effects model. REM is used with and without year-dummies, and finally, following Afman and Maurel (2010), it is used a two-phase estimation as a robustness test.

## Data

Data on Portuguese trade flows in millions of euros at free-on-board prices were collected from the National Statistics Office (INE). GDP per capita and population (millions of people) data were obtained from the IMF's *World Economic Outlook*. Data on distance, area, common language, common border, colonial relationship, and landlockedness were collected from CEPII (Center d'Études Prospectives et d'Informations Internationales) which provides the area of countries in $km^2$ and the geodesic distances between countries using the great circle formula. A high- or low/middle-income country is defined according to the World Bank data. The data set for the number of embassies and consulates has been constructed on the basis of the website of the Portuguese Ministry of Foreign Affairs.

We count an embassy and a separate chancery or consulate in the same city as a single foreign mission and also exclude honorary consulates. When an embassy located in country $i$ is also responsible for country $k$, we only consider

the presence in country *i*. Unfortunately, it is not possible to identify the exact number of individuals in a given embassy/consulate that are actively engaged in export promotion. So, since there is no easy way to measure the importance of different foreign missions, we treat them all as equal.

## V. Results from the econometric analysis

Before estimating the different models, we present in Table 1 the correlation matrix of the variables. According to Gujarati and Porter (2008), when the correlation coefficients are above 50%, the problem of collinearity becomes significant. Observing the correlation coefficients between the independent variables, only in six circumstances are they above 50%, albeit in several circumstances those variables will not be used jointly. Therefore, the problem of collinearity between explanatory variables will not be particularly relevant.

Table 2 presents the most significant results for the pooled OLS model. The log of exports is the dependent variable in the first six columns, replaced by the log of imports in the last two columns. Column 1 presents the results for a traditional gravity model, excluding the embassies' variable, allowing us to check whether the gravity equation works well and how it is affected by the inclusion of embassies (Column 2). Column 3 includes a lagged dependent variable, and Column 4 includes the effect of foreign embassies present in Portugal. Columns 5 and 6 present the regression for the sub-samples of high-income or low/middle-income countries of destination, respectively.

The traditional variables in gravity models present the expected signs and are significant, with the equation explaining around three quarters of the bilateral trade flows. Portuguese firms export more to large countries, pertaining to the European Union and to countries sharing the same language, but export less to distant and isolated countries. The coefficient of the key variable – EMB – is positive and statistically significant in almost all specifications, suggesting that the presence of an embassy in the partner country increases exports to that country by 22% (considering the coefficient from Column 3). The presence of a foreign embassy leads to an increase of around 70% in total import value.

Focusing our attention to Columns 5 and 6, results indicate that foreign presence exerts a stronger impact on trade for countries at low/middle levels of development, a result typically found in previous articles (e.g., Yakop and Bergeijk (2009); and Creusen and Lejour (2011, 2013)). Interestingly, we find that the effect within the group of higher-income countries is not significant, possibly because transparent and easily accessible market information is available to a much larger extent for developed countries. Information about these markets and their institutions is sufficiently well established so that public intervention is not necessary. However, for relations with developing countries, the network of embassies provides a significant useful trade

**Table 1.** Correlation matrix between independent variables.

| | GDP | POP | AREA | LANG | DIST | LANDL | ISL | EU | EMB | EMB_F | AICEP |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GDP | 1 | 0.773 (***) | 0.576 (***) | 0.113 (***) | −0.095 (***) | −0.120 (***) | −0.457 (***) | 0.293 (***) | 0.611 (***) | 0.470 (***) | 0.568 (***) |
| POP | | 1 | 0.789 (***) | −0.063 (***) | 0.058 (**) | 0.035 | −0.530 (***) | −0.007 | 0.438 (***) | 0.445 (***) | 0.396 (***) |
| AREA | | | 1 | −0.084 (***) | 0.031 | 0.107 (***) | −0.553 (***) | −0.023 | 0.396 (***) | 0.418 (***) | 0.299 (***) |
| LANG | | | | 1 | 0.079 (***) | −0.103 (***) | 0.111 (***) | −0.087 (***) | 0.203 (***) | 0.059 (***) | 0.299 (***) |
| DIST | | | | | 1 | −0.042 (*) | 0.232 (***) | −0.528 (***) | −0.270 (***) | −0.201 (***) | −0.128 (***) |
| LANDL | | | | | | 1 | −0.226 (***) | 0.031 | −0.154 (***) | −0.005 | −0.225 (***) |
| ISL | | | | | | | 1 | −0.150 (***) | −0.227 (***) | 0.387 (***) | −0.144 (***) |
| EU | | | | | | | | 1 | 0.381 (***) | 0.164 (***) | 0.177 (***) |
| EMB | | | | | | | | | 1 | 0.445 (***) | 0.646 (***) |
| EMB_F | | | | | | | | | | 1 | 0.307 (***) |
| AICEP | | | | | | | | | | | 1 |

Note: * $p < .10$; ** $p < .05$; *** $p < .01$.

**Table 2.** Pooled OLS model results.

| | Dependent variable: log of Exports | | | | | | Dependent variable: log of Imports | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| C | 0.47 | 1.48 | 0.58 | 1.648 | −5.46*** | 4.06*** | −14.57*** | −14.65*** |
| | (1.88) | (1.95) | (0.41) | (1.96) | (0.85) | (0.92) | (2.66) | (2.63) |
| GDP | 0.96*** | 0.86*** | 0.14*** | 0.82*** | 0.98*** | 0.72*** | 1.07*** | 1.04*** |
| | (0.06) | (0.08) | (0.03) | (0.08) | (0.03) | (0.04) | (0.11) | (0.12) |
| AREA | | | | | | | 0.20** | 0.18** |
| | | | | | | | (0.09) | (0.09) |
| LANG | 4.31*** | 3.75*** | 0.61*** | 3.65*** | 2.26*** | 3.71*** | 1.92*** | 1.82*** |
| | (0.62) | (0.58) | (0.15) | (0.55) | (0.20) | (0.21) | (0.57) | (0.55) |
| DIST | −1.75*** | −1.61*** | −0.30*** | −1.56*** | −1.15*** | −1.61*** | −0.69*** | −0.63*** |
| | (0.13) | (0.13) | (0.05) | (0.13) | (0.07) | (0.08) | (0.23) | (0.23) |
| LANDL | −1.06*** | −1.00*** | −0.28*** | −1.04*** | −0.64*** | −1.04*** | | |
| | (0.26) | (0.25) | (0.06) | (0.25) | (0.16) | (0.12) | | |
| EU | | | | | 0.38*** | 0.42*** | 1.14*** | 1.17*** |
| | | | | | (0.10) | (0.12) | (0.36) | (0.35) |
| EMB | | 0.81*** | 0.20*** | 0.72*** | 0.06 | 0.76*** | 1.04*** | 0.97** |
| | | (0.28) | (0.05) | (0.26) | (0.16) | (0.12) | (0.38) | (0.50) |
| EXP(−1) | | | 0.83*** | | | | | |
| | | | (0.02) | | | | | |
| EMB_F | | | | 0.56* | 0.51** | 0.69* | | 0.53 |
| | | | | (0.32) | (0.21) | (0.15) | | (0.50) |
| *F* | **1391.5*** ** | **1161.5*** ** | **3123.6*** ** | **990.6*** ** | **540.6*** ** | **426.4*** ** | **586.7*** ** | **507.2*** ** |
| $R^2$ | **0.75** | **0.76** | **0.92** | **0.76** | **0.89** | **0.69** | **0.65** | **0.66** |
| *Adj.* $R^2$ | **0.75** | **0.76** | **0.92** | **0.76** | **0.88** | **0.68** | **0.65** | **0.66** |

Notes: Standard deviations presented in brackets. * $p < .10$; ** $p < .05$; *** $p < .01$.

enhancing role, solving or reducing some of the existing market failures (including intangible barriers to trade such as lack of trust, cultural differences, and ineffective governance).

Regarding the regressions with imports as the dependent variable (Columns 7 and 8), the import enhancing effect of Portuguese embassies is an interesting result, evidencing a bilateral role played by foreign representations. The fact that representations abroad seem to be relevant for both exports and imports adds a new element to the discussion, namely the need to establish good political relationships to breed trust as an important facilitator of mutually beneficial trade.

Table 3 presents the results of the random effects model, with or without time dummies. Regarding exports, for the traditional variables – GDP, language, distance, and landlockeness – the results are quite similar to the pooled OLS estimation. Nevertheless, the results for the parameter of interest are less significant and of lesser magnitude.

Columns 2 and 7 present the regressions for the low/middle-income countries sub-sample. Here, the results evidence the significance of foreign representations either in terms of exports or imports. Particularly regarding imports, if in the full sample the impact of Portuguese embassies completely disappears, considering only the low/middle-income countries sub-sample, the significance of Portuguese foreign presence in explaining imports from those countries is evidenced.

**Table 3.** Random effects model results.

| | Dependent variable: log of Exports | | | | | Dependent variable: log of Imports | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| C | −2.31 | 4.07*** | −2.16 | 0.40 | 0.60 | −16.69*** | −15.38*** | −16.75*** | −16.57*** | −16.60*** |
| | (2.07) | (0.90) | (2.08) | (1.86) | (1.87) | (2.73) | (1.28) | (2.68) | (2.68) | (2.63) |
| GDP | 1.06*** | 0.79*** | 1.03*** | 0.94*** | 0.90*** | 1.21*** | 0.98*** | 1.18*** | 1.21*** | 1.18*** |
| | (0.07) | (0.04) | (0.08) | (0.06) | (0.07) | (0.11) | (0.07) | (0.12) | (0.11) | (0.12) |
| AREA | | | | | | 0.20** | 0.28** | 0.18** | 0.21*** | 0.18** |
| | | | | | | (0.09) | (0.06) | (0.09) | (0.09) | (0.09) |
| LANG | 4.41*** | 3.89*** | 4.33*** | 4.09*** | 3.97*** | 2.65*** | 1.68*** | 2.51*** | 2.65*** | 2.51*** |
| | (0.73) | (0.21) | (0.71) | (0.62) | (0.58) | (0.65) | (0.25) | (0.63) | (0.66) | (0.63) |
| DIST | −1.71*** | −1.73*** | −1.68*** | −1.68*** | −1.63*** | −0.82*** | −0.47*** | −0.74*** | −0.82*** | −0.74*** |
| | (0.13) | (0.70) | (0.13) | (0.13) | (0.13) | (0.23) | (0.11) | (0.23) | (0.23) | (0.24) |
| LANDL | −0.97*** | −0.97*** | −1.00*** | −1.01*** | −1.05*** | | | | | |
| | (0.25) | (0.12) | (0.25) | (0.25) | (0.25) | | | | | |
| EU | | | | | | 1.31*** | | 1.32*** | 1.32*** | 1.34*** |
| | | | | | | (0.39) | | (0.38) | (0.40) | (0.38) |
| EMB | 0.06 | 0.88*** | 0.045 | 0.37** | 0.34** | 0.06 | 1.43*** | 0.03 | 0.05 | 0.02 |
| | (0.17) | (0.12) | (0.16) | (0.15) | (0.14) | (0.24) | (0.18) | (0.23) | (0.23) | (0.23) |
| EMB_F | | | 0.31 | | 0.51 | | | 0.58 | | 0.59 |
| | | | (0.34) | | (0.33) | | | (0.50) | | (0.50) |
| *time dummies* | **No** | **No** | **No** | **Yes** | **Yes** | **No** | **No** | **No** | **Yes** | **Yes** |
| $R^2$ | **0.75** | **0.68** | **0.75** | **0.76** | **0.77** | **0.65** | **0.57** | **0.65** | **0.65** | **0.65** |

Notes: Standard deviations presented in brackets. * $p < .10$; ** $p < .05$; *** $p < .01$.

According to Martincus et al. (2010), the estimation using aggregate data would only be appropriate if the parameters were constrained to be equal across sectors, but that restriction is unlikely to hold in general. As argued by van Bergeijk and Moons (2018, 15), "disaggregating trade data is a powerful research strategy because economic diplomacy may correlate with the level of total trade but is much less likely to do so with trade in a specific product (category)." While Portugal may decide to open a foreign representation in countries where its aggregate exports are higher, it is less clear that it will do so on the basis of international trade in a particular sector. Thus, following previous authors (e.g., Lapeyronie, Maurel, and Meunier (2018); and Ciuriak (2014)), we estimate our equation for the different sectors, thus reducing potential endogeneity problems. Our sample is divided into eight sectors resulting from the aggregation of the 21 sections of the Harmonized System from the World Customs Organization. Table 4 presents the results for the sector estimations using a random effects model specification with time effects.

Regarding exports (Panel A), the results for *EMB* appear more significant and of higher magnitude in Sectors 5, 7, and 8, potentially sectors with a higher variety of differentiated goods, where the presence of an embassy could reduce the information asymmetries faced by new entrants. Albeit those results are not presented, when replacing the variable *EMB* with the variable *AICEP*, the results for *AICEP* are not significant when considering the full sample and, in terms of sectors, they are only significant in Sectors 1, 6, and 8. The results for imports in Panel B do not evidence any significant effects of *EMB* and *EMB_F* when considering the different sectors' imports.

As a robustness test to our results, we now estimate the panel in the way proposed by Cheng and Wall (2004) and applied by Afman and Maurel (2010), Lapeyronie, Maurel, and Meunier (2018), and others to control for the so-called heterogeneity bias. Thereafter, we estimated the relationship in two steps in order to assess how the above results hold up when controlling for the pair-wise heterogeneity bias. First, we estimate the most basic version of the gravity equation on time-varying variables (GDP and population, with time dummies). The second stage regression, which uses the residues from the first stage as the dependent variable – has only a qualitative interpretation – shows many striking results, but the positive association between embassies and trade does not hold. As argued by Afman and Maurel (2010), the coefficient's meaning in this second stage is weaker, since a significant coefficient cannot be interpreted as a causal relation running from embassies to trade. So, this second estimation procedure perhaps does not permit drawing some causal inferences, but the fact that the foreign mission coefficient invariantly comes out as not significant cannot be a coincidence.

Columns 1 and 2 of Table 5 present the results for the first stage, where we notice that the estimates for population are negative and significant. Regarding the second stage (Columns 3 and 4), the language, distance, and landlockness

**Table 4.** Random effects model results (for sectors).

| | Dependent variable: log of Exports | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Panel A** | Sector 1 | Sector 2 | Sector 3 | Sector 4 | Sector 5 | Sector 6 | Sector 7 | Sector 8 |
| C | 1.90 | −1.99 | 6.13** | 6.67** | −6.15*** | −1.67 | −7.59*** | −2.71 |
| | (2.70) | (2.85) | (2.74) | (3.21) | (2.34) | (2.54) | (2.27) | (2.54) |
| GDP | 0.93*** | 0.95*** | 1.04*** | 0.92*** | 1.06*** | 0.92*** | 0.84*** | 0.80*** |
| | (0.11) | (0.09) | (0.08) | (0.11) | (0.08) | (0.08) | (0.08) | (0.09) |
| LANG | 6.66*** | 6.17*** | 4.32*** | 1.11* | 3.34*** | 4.01*** | 3.66*** | 4.15*** |
| | (0.68) | (0.58) | (0.82) | (0.62) | (0.76) | (0.77) | (0.64) | (0.79) |
| DIST | −2.34*** | −1.81*** | −1.68*** | −1.49*** | −1.66*** | −1.77*** | −1.12*** | −1.55*** |
| | (0.24) | (0.21) | (0.20) | (0.26) | (0.18) | (0.19) | (0.16) | (0.20) |
| LANDL | −1.67*** | −1.49*** | −1.57*** | −1.09** | −1.45*** | −1.68*** | −0.68** | −0.94*** |
| | (0.31) | (0.40) | (0.35) | (0.49) | (0.35) | (0.36) | (0.31) | (0.32) |
| EMB | −0.02 | 0.28 | 0.48** | 0.13 | 0.61*** | 0.36* | 0.75*** | 0.92*** |
| | (0.67) | (0.20) | (0.23) | (0.49) | (0.22) | (0.19) | (0.25) | (0.34) |
| EMB_F | 0.20 | 0.12 | 0.59 | 0.59 | 0.57 | 0.70* | 0.62* | −0.10 |
| | (0.39) | (0.41) | (0.41) | (0.50) | (0.40) | (0.40) | (0.36) | (0.35) |
| $R^2$ | **0.64** | **0.65** | **0.69** | **0.52** | **0.70** | **0.67** | **0.61** | **0.52** |
| | **Dependent variable: log of Imports** | | | | | | | |
| **Panel B** | Sector 1 | Sector 2 | Sector 3 | Sector 4 | Sector 5 | Sector 6 | Sector 7 | Sector 8 |
| C | 23.79*** | −17.23*** | −25.23*** | −13.10*** | −20.92*** | −16.10*** | −19.54*** | −20.62*** |
| | (4.29) | (3.37) | (3.29) | (3.34) | (3.74) | (3.00) | (3.30) | (3.17) |
| GDP | 0.72*** | 0.74*** | 1.82*** | 0.76*** | 1.12*** | 1.27*** | 1.45*** | 1.09*** |
| | (0.15) | (0.13) | (0.14) | (0.13) | (0.13) | (0.12) | (0.12) | (0.13) |
| AREA | 0.42*** | 0.05 | −0.24*** | 0.14 | 0.03 | −0.20** | −0.41*** | −0.13** |
| | (0.10) | (0.10) | (0.09) | (0.10) | (0.09) | (0.08) | (0.08) | (0.07) |
| LING | 3.26*** | 1.77 | 1.98* | 1.64*** | 1.79 | 2.61*** | 3.03*** | 2.45*** |
| | (0.90) | (1.14) | (1.08) | (0.63) | (1.17) | (0.85) | (0.71) | (0.66) |
| DIST | 0.69*** | 0.20 | −1.38*** | −0.53 | −0.34 | −1.10*** | −0.90*** | −0.24 |
| | (0.46) | (0.38) | (0.31) | (0.35) | (0.37) | (0.26) | (0.29) | (0.31) |
| EU | 4.03*** | 3.54*** | 0.90* | 3.67*** | 2.81*** | 2.71*** | 3.11*** | 4.22*** |
| | (0.71) | (0.64) | (0.51) | (0.62) | (0.59) | (0.46) | (0.43) | (0.54) |
| EMB | −0.69 | 0.82 | 0.07 | 0.04 | −0.27 | 0.75 | 0.79** | −0.73 |
| | (0.60) | (0.58) | (0.48) | (0.47) | (0.38) | (0.57) | (0.35) | (0.77) |
| EMB_F | 0.76 | 0.82 | 0.30 | 0.48 | 0.19 | −0.26 | 0.50 | −0.08 |
| | (0.62) | (0.58) | (0.53) | (0.49) | (0.51) | (0.41) | (0.44) | (0.37) |
| $R^2$ | **0.43** | **0.45** | **0.68** | **0.56** | **0.53** | **0.69** | **0.72** | **0.64** |

Notes: Regression with time dummies. Sectors according to the World Customs Organization Harmonized System: Sector 1 – live animals and animal and vegetal products; Sector 2 – animal and vegetal fats and oils, prepared foodstuffs, beverages and tobacco; Sector 3 – mineral products, chemical industries, plastic, rubber and leather articles; Sector 4 – wood and cork articles, pulp and paper; Sector 5 – textiles and footwear; Sector 6 – articles of stone, cement, glass, jewelry and metal articles; Sector 7 – machinery, electrical equipments, vehicles and transport equipment, optical and precision instruments, arms; Sector 8 – miscellaneous manufactured articles and works of art, collectors' pieces and antiques. Standard deviations presented in brackets. * $p < .10$; ** $p < .05$; *** $p < .01$.

variables maintain their signs, magnitudes, and significance, but the variables *EMB* and *EMB_F* are always not significant, reinforcing the potential weak effects of Portuguese commercial diplomacy.

## VI. Results from the survey

An important issue is to know the perception of firms regarding the relevance of commercial diplomacy activities. So, it is important to know how firms were able to achieve internationalization or, in particular, to know the factors that allowed or facilitated the process of firms' internationalization. With this

**Table 5.** Random effects model in two steps.

| | Dependent variable: log of Exports | | | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| C | −20.48*** | −16.68*** | 12.53*** | 12.30*** |
| | (2.22) | (1.98) | (1.34) | (1.25) |
| GDP | 1.48*** | 1.27*** | | |
| | (0.12) | (0.12) | | |
| POP | −0.41*** | −0.32*** | | |
| | (0.12) | (0.11) | | |
| LANG | | | 4.76*** | 4.37*** |
| | | | (0.87) | (0.72) |
| DIST | | | −1.50*** | −1.49*** |
| | | | (0.14) | (0.14) |
| LANDL | | | −0.61** | −0.74*** |
| | | | (0.27) | (0.25) |
| EMB | | | −0.15 | 0.14 |
| | | | (0.13) | (0.12) |
| EMB_F | | | 0.24 | 0.42 |
| | | | (0.34) | (0.32) |
| *time dummies* | **No** | **Yes** | **No** | **Yes** |
| $R^2$ | **0.54** | **0.55** | **0.38** | **0.43** |

Notes: Standard deviations presented in brackets. * $p < .10$; ** $p < .05$; *** $p < .01$.

purpose, during the last semester of 2019, a questionnaire was elaborated – titled "Factors that contribute to the effectiveness of corporate internationalization" – and sent by e-mail to those responsible for the internationalization of Portuguese exporting firms and firms that intend to export, taken from the AICEP database. Two-hundred thirty-eight (238) complete answers were obtained, from firms representing all sectors of activity. Given the nature of the database to be explored and the specific objectives of this research, this preliminary data set is analyzed here only through exploratory statistics methods.

The average respondent firm has an age of 26 years and presents regular exporting activities for the last 14 years. The different firms' capital is mainly domestic, with an average weight of only 7.6% of foreign capital, and mainly owned by a single family (156 firms, that is, 65.5% consider themselves a "family firm"), with almost 70% of the capital in the hands of the members of the same family. In terms of size, the majority of firms in the sample have less than 50 employees (76.4%), with only 5 large firms.

When asked to classify the importance of Portuguese embassies and consulates in supporting their exporting activities, 84 firms (35.3%) answered "nothing" and 71 (29.8%) answered "little", with only 10.9% of firms indicating that that support was "very" or "extremely" important. Table 6 presents the complete answers to that question.

Table 6 evidences that, according to firms, embassies and consulates are one of the least important entities when regarding export supporting activities to firms. On the contrary, AICEP and IAPMEI seem to be more relevant and

**Table 6.** Answers to the question: In which way do you consider that the following "support/ incentives to internationalization" were important?

| Not important | Little important | Important | Very important | Extremely important | Not applicable | Average | Standard deviation |
|---|---|---|---|---|---|---|---|
| AICEP (*Portugal Global Trade and Investment Agency*) | | | | | | | |
| 49 | 51 | 54 | 42 | 36 | 6 | 2.78 | 1.42 |
| (20.6%) | (21.4%) | (22.7%) | (16.7%) | (15.1%) | (2.5%) | | |
| IAPMEI (*Agency* for Competitiveness and Innovation) | | | | | | | |
| 63 | 50 | 52 | 42 | 24 | 7 | 2.55 | 1.39 |
| (26.5%) | (21.0%) | (21.8%) | (17.6%) | (10.1%) | (2.9%) | | |
| AEP (*Portuguese Entrepreneurial Association*) | | | | | | | |
| 79 | 55 | 53 | 31 | 13 | 7 | 2.26 | 1.28 |
| (33.2%) | (23.1%) | (22.3%) | (13.0%) | (5.5%) | (2.9%) | | |
| Local or regional Business Associations | | | | | | | |
| 90 | 62 | 44 | 21 | 11 | 10 | 2.04 | 1.23 |
| (37.8%) | (26.1%) | (18.5%) | (8.8%) | (4.6%) | (4.2%) | | |
| Sector specific entities | | | | | | | |
| 77 | 56 | 39 | 36 | 20 | 10 | 2.31 | 1.39 |
| (32.4%) | (23.5%) | (16.4%) | (15.1%) | (8.4%) | (4.2%) | | |
| Trade Chambers | | | | | | | |
| 78 | 79 | 52 | 18 | 6 | 5 | 2.08 | 1.04 |
| (32.8%) | (33.2%) | (21.8%) | (7.6%) | (2.5%) | (2.1%) | | |
| **Embassies and consulates** | | | | | | | |
| **84** | **71** | **51** | **21** | **5** | **6** | **2.05** | **1.10** |
| **(35.3%)** | **(29.8%)** | **(21.4%)** | **(8.8%)** | **(2.1%)** | **(2.5%)** | | |
| Other entities | | | | | | | |
| 161 | 23 | 16 | 13 | 9 | 16 | 1.48 | 1.14 |
| (67.6) | (9.7%) | (6.7%) | (5.5%) | (3.8%) | (6.7%) | | |

Notes: N = 238. Based on answers according to a Likert scale: 0 – not applicable; 1 – not important; 2 – less important; 3 – important; 4 – very important; 5 – extremely important.

their help is greatly acknowledged by firms. Regarding AICEP, these results underline the important role that has been developed by this agency in recent years, in work coordinated with embassies and consulates. Potentially, the activities developed by Portuguese representatives abroad are relevant but not perceived by the majority of firms. Albeit not presented in the table, it is observed that those firms exporting to distant markets (e.g., Asia or Oceania) attribute a greater relevance to AICEP and embassies and consulates. Regarding that relevance, there seems to be no evidence of significant differences related to firm age or the fact of being a family firm. In sum, according to our survey, firms attribute a minor role to embassies and consulates in the promotion or facilitation of their export activities.

## VII. Conclusion

This article analyzes the Portuguese foreign missions' impact on trade, using a balanced panel data set for the period of 2008 to 2017, as opposed to the traditional cross-sectional estimations. Additionally, a survey is applied to exporting firms in order to measure the relevance attributed by firms to commercial diplomacy.

Our econometric results evidence that commercial diplomacy efforts seem to matter only for export promotion in low- or middle-income countries, which usually present higher formal and informal barriers to exports. These results suggest that it is more meaningful to establish a presence in developing countries rather than in developed countries, so that Portuguese commercial diplomacy can focus on countries with significant market entry barriers. Uncertainty may be a significant barrier for trade as long as two countries do not trade with each other. However, once they are already exchanging goods, either information flows between them or the remaining uncertainty is something international promotion agencies cannot help to overcome. Regardless of the reason, it is hard to find an economic justification for the increasing proliferation of export promotion offices among trading partners, based on uncertainty as their justification, with the answer probably being exclusively political. So, our results sustain the view that the pattern of international trade (at least North-North) is increasingly determined by macro-economic factors, with a potentially relevant role for commercial diplomacy in North-South trade, i.e., trying to expand the intensive margin of trade. The results from the survey also seem to corroborate the greater relevance attributed by firms to commercial diplomacy when exporting to distant markets. These results have meaningful implications for the future definition of Portuguese export promotion initiatives involving foreign representations, namely the necessity to focus on distant destinations, working together with SMEs and their representatives.

Nevertheless, our results call for further research, suggesting that trade depends heavily on a large set of factors. So, further research should, inter alia: (i) This article studied the effectiveness of commercial diplomacy mostly at a macro-economic level. So, it would be interesting to develop the micro-analysis, studying in more detail firm-specific cases in which diplomatic representations had a significant role. The study's main conclusion, also supported by the survey, that embassies' efforts only impact low- or middle-income countries, reinforces the need to study how businesses, particularly SMEs, interact with diplomats and what kind of support they obtain or ask of them; (ii) Another possible avenue of research is to study the commercial diplomacy effectiveness at an operational level. That is, what are the most relevant players of the commercial diplomacy infrastructure in terms of successful export promotion?; and (iii) Regarding the potential endogeneity problems in our results, future research could employ alternative econometric procedures to deal with that issue and alternatively estimate the gravity equations using Poisson pseudo-maximum likelihood estimators. Nevertheless, if we admit that the decision to open a foreign mission or trade office is not based on past exports but on the existence of market opportunities combined with barriers to entry in these markets, because they are more unfamiliar than others, then there is not an endogeneity problem.

Finally, the evolution of Internet use in business internationalization and trade processes will further influence the expected roles of commercial diplomacy. Foreign representations and firms need to face those changes. Research is also potentially exposed to the risk of being used increasingly in political and ideological debates concerning the relevance, funding/cost, and forms of commercial diplomacy, an issue that was not considered in this article.

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## References

Afman, E., and M. Maurel. 2010. "Diplomatic Relations and Trade Reorientation in Transition Countries." In *The Gravity Model in International Trade: Advances and Applications*, Chapter 10, edited by P. van Bergeijk and S. Brakman, 278–295. New York: Cambridge University Press.

Anderson, J., and E. van Wincoop. 2003. "Gravity with Gravitas: A Solution to the Border Puzzle." *American Economic Review* 93 (1): 170–192. doi:10.1257/000282803321455214

Carreras, L., and M. Moriconi. 2018. "The Pursuit of the (Latin) American Dream in the Time of Crises: Portugal's Diplomatic and Commercial Changes Towards the Region (2005–15)." *Portuguese Journal of Social Science* 17 (2): 141–165. doi:10.1386/pjss.17.2.141_1

Cheng, I., and H. Wall 2004. "Controlling for Heterogeneity in Gravity Models of Trade and Integration." The Federal Reserve Bank of St. Louis Working Paper series, The Federal Reserve Bank of St. Louis working paper 1999-010E, St. Louis, MO.

Ciuriak, D. 2014. "The Impact of Diplomatic Representation Abroad on Canada's Exports." Technical Paper, e-briefs 173, C.D. Howe Institute, Toronto

Creusen, H., and A. Lejour 2011. "Uncertainty and the Export Decisions of Dutch Firms." CPB Discussion Paper 183, CPB, The Hague.

Creusen, H., and A. Lejour. 2013. "Market Entry and Economic Diplomacy." *Applied Economic Letters* 20 (5): 504–507. doi:10.1080/13504851.2012.714066

EU. 2016. "Treaty on the Functioning of the European Union." *Official Journal C202/2016*,59.

Evenett, S., and W. Keller. 2002. "On Theories Explaining the Success of the Gravity Equation." *Journal of Political Economy* 110 (2): 281–316. doi:10.1086/338746

Gençtürk, E., and M. Kotabe. 2001. "The Effect of Export Assistance Program Usage on Export Performance: A Contingency Explanation." *Journal of International Marketing* 9 (2): 51–72. doi:10.1509/jimk.9.2.51.19886

Gil, S., R. Llorca, and J. Serrano. 2008. "Measuring the Impact of Regional Export Promotion: The Spanish Case." *Papers in Regional Science* 87 (1): 139–146. doi:10.1111/j.1435-5957.2007.00155.x

Gujarati, D., and D. Porter. 2008. *Basic Econometrics*. 5th ed. New York: Irwin/McGraw-Hill.

Hayakawa, K., H. Lee, and D. Park. 2014. "Do Export Promotion Agencies Increase Exports?" *The Developing Economies* 52 (3): 241–261. doi:10.1111/deve.12048

Head, K., and J. Ries. 2010. "Do Trade Missions Increase Trade?" *Canadian Journal of Economics* 43 (3): 754–775. doi:10.1111/j.1540-5982.2010.01593.x

Lapeyronie, H., M. Maurel, and B. Meunier. 2018. "Impact of Hard and Soft Infrastructure: Evidence from North Africa and CECs." In *Research Handbook on Economic Diplomacy*, edited by Peter van Bergeijk and Selwyn Moons, Vol. 21, 347–372. Cheltenham, U.K.: Edward Elgar Publishing.

Lee, D. 2004. "The Growing Influence of Business in U.K. Diplomacy." *International Studies Perspectives* 5 (1): 50–54. doi:10.1111/j.1528-3577.2004.00154.x

Linnemann, H. 1966. *An Econometric Study of International Trade Flows* (No. 42). Amsterdam: North-Holland.

Martincus, C., and J. Carballo. 2010. "Entering New Country and Product Markets: Does Export Promotion Help?" *Review of World Economics* 146 (3): 437–467. doi:10.1007/s10290-010-0062-x

Martincus, C., A. Estevadeordal, A. Gallo, and J. Luna. 2010. "Information Barriers, Export Promotion Institutions, and the Extensive Margin of Trade." *Review of World Economics* 146 (1): 91–111. doi:10.1007/s10290-009-0043-0

Moons, S., and P. van Bergeijk. 2017. "Does Economic Diplomacy Work? A Meta-analysis of Its Impact on Trade and Investment." *The World Economy* 40 (2): 336–368. doi:10.1111/twec.12392

Naray, O., and V. Bezençon. 2017. "Management and Business Research on Commercial Diplomacy: Examining Trends and Themes." *The International Trade Journal* 31 (4): 332–359. doi:10.1080/08853908.2017.1291379

Neves, M. S. 2017. "Economic Diplomacy, Geo-economics and the External Strategy of Portugal." *JANUS. NET E-Journal of International Relations* 8 (1): 88–118.

Okano-Heijmans, Maaike. 2011. "Conceptualizing Economic Diplomacy: The Crossroads of International Relations, Economics, IPE and Diplomatic Studies." *The Hague Journal of Diplomacy* 6 (1–2): 7–36. doi:10.1163/187119111X566742

Rose, A. 2007. "The Foreign Service and Foreign Trade: Embassies as Export Promotion." *The World Economy* 30 (1): 22–38. doi:10.1111/j.1467-9701.2007.00870.x

Ruël, H., D. Lee, and R. Visser. 2013. "Commercial Diplomacy and International Business: Inseparable Twins?" *AIB Insights* 13 (1): 14–17.

Ruël, H. J. M., and R. Visser. 2014. "An Exploration of Commercial Diplomacy as a Set of Facilities to Support International Business to and from Emergent Markets." In *Multinational Enterprises, Markets and Institutional Diversity* (Progress in International Business Research), Chapter 12, edited by A. Verbeke, R. Van Tulder, and S. Lundan, vol. 9, 303–322. Bingley, UK: Emerald Group Publishing Limited.

Saner, R., and L. Yiu 2003. "International Economic Diplomacy: Mutations in Post-modern Times." Discussion Papers on Diplomacy, No. 84, Netherlands Institute of International Relations Clingendael, The Hague.

Sousa, P. 2019. "A Diplomacia Económica Na Política Externa Portuguesa Contemporânea: Problemas Teórico-conceptuais." *Relações Internacionais* 61:47–61. doi: 10.23906/ri2019.61a05.

Tinbergen, J. 1962. *Shaping the World Economy - Suggestions for an International Economic Policy*. New York: Twentieth Century Fund.

van Bergeijk, P., and S. Moons. 2018. "Introduction to the Research Handbook on Economic Diplomacy." In *Research Handbook on Economic Diplomacy*, edited by Peter van Bergeijk and Selwyn Moons, Vol. 1, 1–29. Cheltenhan, U.K.: Edward Elgar Publishing.

van Veenstra, M., M. Yakop, and P. Bergeijk 2010. "Economic Diplomacy, the Level of Development and Trade." Discussion Papers on Diplomacy, No. 119, Netherlands Institute of International Relations Clingendael, The Hague.

Vitalis, V. 2017. "Economic Diplomacy and Small Developed Economies: The Case of New Zealand." In *The New Economic Diplomacy: Decision-Making and Negotiation in International Economic Relations*, Chapter 11, edited by Nicholas Bayne and Stephen Woolcock, 4th ed., 187–206. New York: Routledge.

Wilkinson, T., and L. E. Brouthers. 2006. "Trade Promotion and SME Export Performance." *International Business Review* 15 (3): 233–252. doi:10.1016/j.ibusrev.2006.03.001

Yakop, M., and P. Bergeijk 2009. "The Weight of Economic and Commercial Diplomacy." ISS Working Paper No 478, August. International Institute of Social Studies, Erasmus University, Rotterdam (ISS), The Hague.

Zuidema, L., and H. Ruël. 2012. "Chapter 4 the Effectiveness of Commercial Diplomacy: A Survey among Embassies and Consulates." In *Commercial Diplomacy and International Business: A Conceptual and Empirical Exploration*, (Advanced Series in Management), edited by H. Ruël, Vol. 9, 105–140. Bingley: Emerald Group Publishing Limited.