Tourism Management Perspectives 33 (2020) 100614

Contents lists available at ScienceDirect

Tourism Management Perspectives

journal homepage: www.elsevier.com/locate/tmp

Foreign Direct Investment in the tourism sector: The case of France

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ARTICLE INFO

Keywords:
Foreign direct investment
Gravity model
Hospitality industry
Panel data regression model

ABSTRACT

This study investigates the determinants of inward Foreign Direct Investment (FDI) stock in the French hospitality industry. A panel gravity model is applied to bilateral inward FDI stock between France and nineteen investor countries in Hotels and the Restaurant industry over 2000–2017. Results show that bilateral inward FDI stocks between France and investor countries are positively affected by their income and are inversely proportional to the distance between them. It is also found that differentials between France and the investing countries in terms of taxes, labour costs, abundance of skilled labour, supply of public goods and total FDI stock also play a significant role in understanding the foreign location decisions. Finally, the results show that France is particularly successful in attracting FDI in the hospitality industry from French-speaking countries with a common border and cultural proximity to France.

1. Introduction

Traditionally, the tourism sector has received a lower priority of policy makers than the manufacturing or agriculture sector, since it has not been recognized as an appropriate and significant source of growth (UNCTAD 2007: 1). However, the tourism industry has been increasingly valued for its contribution to economic growth, employment, poverty reduction, earning exports revenues, consumer demand, capital formation, tax income, promotion of economic diversification and a more services-oriented economy, helping to stimulate urban areas and cultural activities in decline (Endo, 2006; UNCTAD, 2007). But given that the tourism industry needs capital (some tourism activities are relatively capital-intensive), knowledge, infrastructure and access to global marketing and distribution chains, Foreign Direct Investment (FDI) is often considered the most effective way to access this critical success factors (UNCTAD, 2007: 6).

Despite the importance of FDI in the tourism industry, the dynamics of FDI and its impact on tourism has been relatively little studied (Endo, 2006, UNCTAD, 2007). Endo (2006) and Song, Dwyer, Li, and Cao (2012) refer the lack of comprehensive FDI data in the hospitality industry as the main inhibitor factor. Few studies have investigated the country-specific location determinants of FDI activity in the hospitality industry (e.g. Assaf, Josiassen, & Agbola, 2015; Dunning & Kundu, 1995; Falk, 2016; Guillet, Zhang, & Gao, 2011; Johnson & Vanetti, 2005; Kristjánsdóttir, 2016; Kundu & Contractor, 1999; Li, Huang, & Song, 2017; Snyman & Saayman, 2009; UNCTAD, 2007; Zhang, Guillet, & Gao, 2012). The studies can be divided into two different lines of investigation. The most recent studies investigate the country-specific location determinants of hospitality FDI industry using regression analysis (e.g. Assaf et al., 2015; Falk, 2016; Kristjánsdóttir, 2016; Li et al., 2017; Zhang et al., 2012), while previous studies use mostly questionnaire surveys to know the opinion of hotel investors, estate agencies specialized in FDI or hotel managers/owners about the main location factors (e.g. Dunning & Kundu, 1995; Johnson & Vanetti, 2005; Kundu & Contractor, 1999; Snyman & Saayman, 2009; Steiner, 2010; UNCTAD, 2007).

As mentioned before, the compilation of standardized FDI statistics in tourism is practically impossible. France is perhaps the only country that provides bilateral stock FDI data in tourism publicly available segmented by industry and investor country. According to The Global Competitiveness Report (2018) published by the World Economic Forum and French Ministry of Foreign Affairs and International Development,[1] France is the world's leading destination with 87 million foreign tourist arrivals in 2017 and tourism is a key sector of the French economy. Both studies report that in 2017 French tourism sector accounted for nearly 8% of the Gross Domestic Product (GDP), €54 billion in tourism receipts, generated two million jobs directly and indirectly and was among the top 10 most attractive countries for FDI in that year.

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[1] Please see https://www.diplomatie.gouv.fr/en/french-foreign-policy/tourism/.

https://doi.org/10.1016/j.tmp.2019.100614
Received 31 January 2019; Received in revised form 11 November 2019; Accepted 12 November 2019

Nevertheless, the FDI in hotels and restaurants (that will be used by us as proxy of FDI in tourism) represented only 2.5% of total FDI in France in 2017. The importance of the tourism industry in that country and the availability of FDI data in the tourism sector are the reasons why France has been selected by us.

The present paper differs from previous studies in two ways. First, as Falk (2016) we use a gravity model to study the determinants of FDI activity in the hospitality industry. As mentioned by Morley et al. (2014: 2) the gravity models have the advantage of taking into account the source country characteristics and the geographical distance. But our study differs from Falk (2016) to the extent that we use French bilateral inward FDI stock in hospitality industry disaggregated by 19 countries and he uses a database of 2420 FDI projects in 104 host countries. On the other hand, we include in our analysis three different measures of tax rates, agglomeration economies and supply of public goods variables which were not considered in Falk's (2016) model. Second, by focusing on France, we are able to provide new insights into the determinants of FDI stocks in hospitality industry, given the special characteristics of the country – the world's top tourist destination and one of the most attractive countries for FDI (e.g. World Economic Forum, 2018)

The purpose of this research is to identify the key factors influencing inward FDI in the hospitality industry in France. A generalized panel gravity model is estimated to investigate the determinants of bilateral inward FDI stock in the French hospitality industry, from 2000 to 2017. These factors can assist government agencies to successfully attract and sustain FDI as well as to remain globally competitive. These factors can also assist researchers to get a better understanding of this important aspect that is part of tourism development and marketing.

The structure of the remaining paper is as follows. Section 2 provides some conceptual background and a review of previous studies and Section 3 the empirical model. Data is presented in Section 4, and Section 5 reports and discusses the results. Section 6 concludes the paper.

2. Literature review

2.1. Eclectic paradigm and modes of entry into foreign markets

The question why a given country has been successful in attracting FDI can be answered with reference to the Eclectic Paradigm or OLI[2] Paradigm Theory (Dunning, 1977, 1981, 2000; Dunning & McQueen, 1981; Markusen, 1995). The Eclectic Paradigm merges various theories (e.g. Trade Theory, Theory of Industrial Organization and Theory of the Firm) and asserts that the firm's FDI activities will be determined by its advantages related to ownership, internationalization and location (Dunning, 2000).

Ownership advantages are the competitive advantages that devolve from multinational enterprises. In the hotel industry, ownership advantages are associated with service quality, reservation systems, and brand names. Internalization advantages are associated with owning production assets rather than other types of indirect cooperation such as licensing or joint ventures. In the hotel industry, these types of advantages are created through both equity and contract control to minimize costs and maximize returns. Location advantages are created when value-adding activities for multinational enterprises are performed in other countries. Specifically, in the hotel industry, elements of location advantages include the size and rate of tourism growth, the tourism infrastructure, the availability and quality of hotel inputs, the host government's policy toward FDI, and political, social, and economic stability (for more details see Dunning, 1977, 1981; Dunning & McQueen, 1981; Markusen, 1995; Johnson & Vanetti, 2005).

According to IMF and OECD definitions, direct investment *"reflects the aim of obtaining a lasting interest by a resident entity of one economy (direct investor) in an enterprise that is resident in another economy (the direct investment enterprise). The 'lasting interest' implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the latter"*. *"A direct investment relationship is established when the direct investor has acquired 10 % or more of the ordinary shares or voting power of a company abroad"* (Duce, 2003, page 2 and 3). Therefore, FDI investment in a foreign country can take the form of mergers and acquisitions (sole-venture or joint-venture) or Greenfield investment. However, the major kind of foreign entry into the tourism industry is non-equity participation – leasing agreement, management contract and franchise agreement or some form of marketing agreement, instead of equity modes such as FDI (see for example Altinay, 2005; Contractor & Kundu, 1998; Dunning & McQueen, 1982; Endo, 2006).

According to the literature the entry modes into foreign markets vary across host country characteristics. In high-income countries the franchising is the preferred way of entry into foreign markets (Dunning & McQueen, 1981). On the other hand, Contractor and Kundu (1998) refer that equity investment contracts are quite common in developing countries, whereas non-equity models such as management and franchising contracts are preferred in high-income countries. Finally, in risky markets or countries the preferred way of entry are the non-equity modes such as management and franchising contracts to the extent that ways of entry are commonly regarded as less risky models of entry (Chen & Dimou, 2005: 1739).

2.2. Determinant factors of hotel FDI attraction process

Although FDI has played an important role in the development of the tourism industry, the country-specific location determinants of FDI activity in hospitality industry appears to be a neglected area (Endo, 2006). As observed by Song et al. (2012: 1669) the lack of comprehensive data has bedevilled researchers. Consequently, the studies about country-specific location determinants of FDI activity in the tourism sector actually remain quite low compared to FDI in other sectors. Endo (2006: 600) argues that "*a wide range of activities that tourism covers (e.g. transportation, restaurants and hotels, tour operators, tour guides, travel agents, marketing and supply of souvenirs and financial services for tourists) makes the compilation of standardized FDI statistics in tourism at international level almost impossible*". As mentioned by Endo (2006:605) surprisingly, "*the relevant data are scarce even among developed countries*".

Hecock and Jepsen (2014) refer that the majority of studies have sought to explain the basis for total net inflows of FDI regardless of sector or industry. However, recent work in the policy literature and reports by several international financial institutions suggest that there is a need for greater attention to sectoral differences of FDI flows (Hecock & Jepsen, 2014). Few studies have investigated the country-specific location determinants of FDI activity in the hospitality industry. These studies can be divided into two different lines of investigation. The most recent studies investigate the country-specific location determinants of hospitality FDI industry using regression analysis and quantitative data on FDI activity (e.g. Assaf et al., 2015; Falk, 2016; Kristjánsdóttir, 2016; Li et al., 2017; Zhang et al., 2012), while previous studies use mostly questionnaire surveys to know the opinion of hotel investors, estate agencies specialized in FDI or hotel managers/owners about the main location factors (e.g. Dunning & Kundu, 1995; Johnson & Vanetti, 2005; Kundu & Contractor, 1999; Snyman & Saayman, 2009; Steiner, 2010; UNCTAD, 2007). The study carried out by Guillet et al. (2011) is an exception to these two lines of research. The authors use data collected from secondary sources using keyword research to identify proposed new hotel developments and future trends in China. They point out that the decisions of multinational hotel groups with respect to business formats, the direction trends of investments, and the attractiveness of the Chinese market are affected by the happening of

[2] OLI is an acronym for Ownership-, Location- and Internalization-advantage.

mega-events, Chinese government policies, the presence of local entrepreneurs, and market potential.

However, with the exception of Falk (2016) and Li et al. (2017), none of the mentioned studies have used bilateral FDI flow data to investigate the determinants of FDI flows in the hotel sector. Based on the FDI Markets database, which contains a register of cross-border investment projects from around the world from 2003 onwards, Falk (2016: 223) analyses the bilateral FDI flow of 2417 FDI projects in hotel industry related to the construction of new and expansion of existing hotels by an international investor. More recently, Li et al. (2017) employing a panel dataset involving 21 host countries for 10 years (2004–2013) investigate the factors that influence China's outward foreign direct investment in tourism. They show that Chinese outbound investment in tourism is, at least in part, determined by the volume of tourism flows to the host country, the scale of tourism in that country and the openness to inbound investment. In contrast to Endo (2006), wherein the determinants of FDI in tourism are virtually the same as the other sectors, Li et al. (2017) indicate a divergence of Chinese firms' outward FDI in tourism from its general outward FDI choice pattern and confirms that sector-specific may be playing a more significant part in China's outward FDI in tourism.

Zhang et al. (2012); Assaf et al. (2015) and Kristjánsdóttir (2016) conduct estimations in a panel regression framework. Zhang et al. (2012) analyse the factors that determine the location strategies of multinational hotel groups (MHG). The study finds that the market demand and market size measured by number of inbound tourists, tourist spending, and actual foreign direct investment, the business environment measured by GDP per capital, and dummy variables measured by policy and mega events are all significant factors in affecting MHG's locational choices for investment. Assaf et al. (2015) investigate the factors that matter most for international hotels when selecting host destinations. The authors identify 23 factors that make a destination an attractive (or unattractive) location for international hotels. Welcomeness, infrastructure, and crime rate are the three most important factors that influence the location of international hotels in host destinations. Kristjánsdóttir (2016) analyses if FDI in Iceland and Norway hospitality industry is driven by factors such as economic and market size of the headquarters home country, value-added tax increase, and skilled labour of the headquarters home country, compared to that of the host country.

There is unanimity among the aforementioned authors on the importance of market size, tax rates, actual foreign direct investment and availability of skilled workers and wages in the attraction of FDI. In this regard, Barros (2005) highlights that to maximize production efficiency, hotel managers should control costs and improve the product. According to the author, product and cost are the traditional policy variables of management; therefore, their use can help the hotels to catch up with the frontier of best practices. Other studies highlight the importance of availability and quality of hard and soft infrastructures (e.g. electricity and water supply, roads, airport facilities, labour costs, local knowledge and capabilities, availability of local suppliers) (e.g. Bénassy-Quéré, Fontagné, & Lahréche-Révil, 2005; Endo, 2006; Hansson & Olofsdotter, 2013; Kinda, 2010). Kinda (2010) reports that service sectors are negatively affected by physical infrastructures constraints. In fact, if a country has good airport facilities, roads and soft infrastructures, it can receive high flows of tourists which consequently contribute to the increase of the return of the investments in the tourism sector.

In addition to the above determinants, some studies have referred to the importance of diplomatic political risks (e.g. Desbordes, 2010; Desbordes & Vicard, 2009; Egger & Pfaffermayr, 2004). Desbordes and Vicard (2009: 373) highlight that "*multinational enterprises (MNEs) face two kinds of political risks when investing abroad: (i) systemic domestic risk, which is common to all investors, related to the quality of domestic institutions, and (ii) an idiosyncratic risk specific to each pair of home and host countries, resulting from interstate political relations*". According to the authors, the interstate political relations have a significant effect on MNEs' decisions to invest abroad. Gartzke, Li, and Boehmer (2001) emphasizes that, after corruption, diplomatic pressure is an important means for MNE to gain business advantages. More crucially, foreign firms may suffer from the retaliatory consequences of deteriorating diplomatic relations between their home and host countries, through various types of expropriation. Foreign investors are, therefore, likely to be sensitive to the quality of interstate political relations, as any deterioration may increase the risk of seizure of their investment return in a given host country. In this framework, Bilateral Investment Treaty (BIT) should increase the volume of bilateral FDI not only directly by reducing costs, but also indirectly through two channels: first, by offsetting political tensions between countries and the resulting expropriation risks; second, as a costly signal that the host government will not diminish the protection of property rights granted by domestic institutions (Egger & Pfaffermayr, 2004 and Desbordes & Vicard, 2009).

Desbordes and Vicard (2009) and Egger and Pfaffermayr (2004) investigate the effect of the implementation of a Bilateral Investment Treaty (BIT) on the bilateral stocks of FDI. Egger and Pfaffermayr (2004) refer that investment treaties exert a significant positive effect on outward FDI. Desbordes and Vicard (2009) show that the effect of the entry into force of a BIT crucially depends on the quality of political relations between the signatory countries. BITs have a greater effect when implemented between countries with political tensions while they have no significant effect between friendly countries. According to the authors, BITs should therefore be understood as a mechanism for host governments to credibly commit not to expropriate investors in the future. An identical conclusion is obtained by Desbordes (2010) who shows that global and diplomatic risks matter to U.S. MNEs investing in developing countries.

Since the publication of the UNCTAD (2007) report, a growing number of studies have begun to analyse tourism-FDI relationship. The primary focus in the literature is the relationship between tourism (for which the number of arrivals and revenues are used as a proxy) and tourism-related FDI (i.e. FDI inflows into a setting up tourism infrastructures such as accommodation, restaurants, and transportation) in less-developed countries. This is the case of studies carried out by Tang, Selvanathan, & Selvanathan, 2007 for China; Craigwell & Moore, 2008 for Small Island Developing States; Salleh, Othman, & Sarmidi, 2011 for 5 Asian countries; Selvanathan, Selvanathan, & Viswanathan, 2012 for India; Samimi, Sadeghi, & Sadeghi, 2013 for 20 developing countries; Jayaraman, Chen, & Bhatt, 2014 for Fiji; Yazdi, Nateghian, & Rezaie, 2017 for Iran). Enhanced tourism is expected to contribute to the development of an economy through increased FDI inflows into tourism-related industries. Thus, tourism-related FDI is assumed to be a primary channel for economic development. There are few studies for developed countries (e.g. Tomohara, 2016 for Japan; Yazdi, Salehi, & Soheilzad, 2017 for EU). Most of these studies analyse the long-run causality between tourism development and FDI. The exception is the study of Tomohara (2016) that analyses the determinants of FDI in a dynamic context after introducing international tourism and controlling for other factors determining FDI. Table 1 presents a summary of the main location determinants of the hospitality FDI industry.

Given the limitations in obtaining data, we use a panel-gravity model to study the bilateral inward FDI in tourism – using stock data on FDI in hotels and restaurants as a proxy – for France. France is perhaps the only country that provides FDI stock data publicly available segmented by industry (with data for the hotel and restaurant industry) and investor country, and for that reason it has been selected. The FDI gravity model is explained in detail in the next section.

3. Modelling FDI in tourism in a gravity setting

3.1. The gravity model

The gravity model applies the Newton's universal law of gravitation

Table 1
Summary of location factors of hotel FDI attraction process.

Author(s)	Location factors for FDI	Sample data	Methodology
Dunning and Kundu (1995)	• Market Size • Growth Rate • Tourism Opportunities • Availability of Infrastructure • Political and Economic Stability	• 34 leading multinational hotel chains based in 30 countries. • Period: 1992	• Questionnaire Survey sent to hotel executives to identify and rank the factors influencing their competitive advantages.
Kundu and Contractor (1999)	• Market Size proxied by GDP and Tourism Revenues has the main location factors • Other explanatory variables: – Population – Ratio of Exports to GDP – Country FDI rating – Total Inward FDI into nation	• Data on FDI flow in the hotel sector for 67 host countries • The 67 countries in the sample encompass over 60% of all FDI-related hotel investment in the world.	• Questionnaire Survey for global hotel chains • Cross Sectional Analysis using OLS regression procedure
Johnson and Vanetti (2005)	• Home-Country Proximity • Market Size and Growth • Infrastructure and Tourist Attractions • Perception of Region Reputation • Government Incentives	• Study for hotel operators in five countries in Eastern Central Europe. • 86 global hotel chains originating from 13 countries were questioned in 2001.	• Questionnaire Survey for leading chains, framed around an eclectic paradigm • Multivariate Analysis
Endo (2006)	• Historical, Cultural and Geographical Distance • Level of Economic Development • Cost-Based Factors (Taxation and Labour Costs) • Political and/or Economic Risks • Industry Privatisation and FDI Regulation • Investment Incentives • Socioeconomic Environment • Infrastructures Quality	• FDI data from selected developed countries are examined for the period of 1985–2002	• The author analyses the pattern and the scale of FDI in tourism using available data from selected countries. • The findings are derived from the interpretation of statistical data.
UNCTAD (2007)	• Tourism Demand from Developed Countries • Economic Growth • Market Size • FDI incentives • FDI related Regulation • Geographical and Cultural Proximity	• Selected Developed and Developing Countries • Period: 1985–2004	• Questionnaire Survey sent to the world's leading hotel groups to identify the host-country determinants of FDI in the hotel industry
Snyman and Saayman (2009)	• Health and Safety (crime, HIV/AIDS, malaria) • Political Stability • Cost Factors and Skills • Infrastructure (roads, airports) • Market Size (international tourism demand, GDP) • Tourism-Specific Amenities and Assets (e.g. beaches, cultural sites and natural environment)	• Estate agents in South Africa that are specialized in dealing with foreign direct investors. • Period: October 2006 to April 2007.	• Questionnaire Survey with a list of 42 host-country characteristics that may affect FDI in tourism industry • Factor Analysis was performed, and five key factors were identified
Steiner (2010)	• Business Regulations and Host-Market Growth with a highest influence in Tourism FDI than Violent Political Unrest	• Egypt (2003–2006) • Qualitative Expert Interviews with Leading Industry Managers	• The study combines the analysis of quantitative and qualitative data. • The findings are derived from the interpretation of statistical data and from qualitative fieldwork.
Guillet et al. (2011)	• Government Policies • Presence of Local Entrepreneurs • Mega Events • Market Potential	• Secondary information resources to identify multinational firms with new hotel expansion plans for China • Period: 2006–2008	• Data collected using keyword research. • Qualitative Research with Theory-Generating Approaches was used to analyse the data.
Zhang et al. (2012)	• Market Size and Demand measured by total inbound tourists and average inbound tourist spending • Actual FDI • Business Environment measured by GDP per capita • Policy and Mega-Events	• Time-series data for 30 Chinese provinces between 1990 and 2009. • The annual data were collected from secondary data.	• Panel Data • Regression Analysis
Assaf et al. (2015)	• Most Important Factors: – Welcomeness – Infrastructure – Socioeconomic Factors (crime rate and corruption) • Other Factors: – Opportunities for Tourism – Quality of Human Resources – Political Stability – Restrictions and Regulations – Cultural and Development Proximity – Price Advantage	• Data on both international rooms per capita and degree of internationalization were collected from Smith Travel Research and a sample of 123 international host destinations was obtained. • Period: 2007–2011	• Random Effects Panel Data Model
Kristjánsdóttir (2016)	• Economic and Market Size • Taxes • Skilled Labour • Cultural Distance	• FDI inflows in the hospitality industry into the OECD countries with special emphasize on Nordic countries.	• Panel Data • Regression Analysis • OLS estimations

(*continued on next page*)

Table 1 (*continued*)

Author(s)	Location factors for FDI	Sample data	Methodology
Falk (2016)	• Market Size • Common Language • Business Regulations • Tax Rates • Minimum Wages	• Period: 2000–2012 • Database of 2420 FDI projects carried out by 50 parent countries in 104 host countries from 2005 to 2011.	• FDI Gravity Model • Panel Data • Regression Analysis with Fixed Effects
Li et al. (2017)	• Investment Environment • Outbound Tourism Scale to Host Country • Tourism Economy Scale • Trade Level • Innovation Capability	• China's outward foreign direct investment in tourism involving 21 host countries for 10 years (2004–2013)	• Panel Data • Negative Binomial Regression

to study the trade or economic flows between countries and assumes that bilateral flows between any two countries are positively affected by their income (mass) and inversely proportional to the distance between them (e.g. Morley et al., 2014: 1). Developed during the sixties, with the pioneering studies of Tinberg (1962) and Linneman (1966), the gravity models were criticised due to the lack of theoretical background for the gravity equations (in this respect see Fratianni, Marchionne, & Oh, 2011, Morley et al., 2014). For this reason, "*the gravity models were neglected in the tourism literature during the eighties and the nineties. An illustration of this abandonment can be found in the fact that surveys on tourism demand do not explicitly cite gravity models*" (Morley et al., 2014: 2). However, recent studies explore the validity of the gravity model to explain tourism flows, and the empirical evidence supports the applicability and robustness of traditional gravity factors to the flow of trade and FDI flows and stocks in general (Blonigen & Piger, 2014; Keum, 2010).

The basic gravity model can be expressed in the following logarithmic form:

$$Ln\ F_{IJ} = \beta + \alpha LnGDP_I + \lambda LnGDP_J + \xi LnDist_{IJ} + \varepsilon_{IJ} \quad (1)$$

where $\boldsymbol{F_{IJ}}$ is the international flow between country *I* and *J*; ***GDP*** denotes the gross domestic product in real terms of each country; ***Dist*** refers to the distance between country *I* and *J*; $\boldsymbol{\varepsilon_{IJ}}$ is a normal error term and $\boldsymbol{\beta}$, $\boldsymbol{\alpha}$, $\boldsymbol{\lambda}$ and $\boldsymbol{\xi}$ are parameters to be estimated. The ***GDP*** captures the market dimension and given that large countries have a greater potential than small countries for investing abroad, a positive effect is expected for this variable. In turn, ***Dist*** (which is a proxy for transaction, transportation or, more generally, information costs) is an important determinant of FDI flows. It is expected that FDI activity decreases with geographical distance between pairs of countries. However, geographic distance also stands for information and transaction costs and cultural distance. Among other authors, Ramón Rodríguez (2002) and Ivanov and Ivanova (2016) refer that hotel chain managers have a higher propensity to invest in countries whose cultural profile is closer to the cultural profile of their home country, because they will be more familiar with the cultural environment for doing business there than in other countries.

Finally, in line with a number of studies using gravity models, the Kogut and Singh's (1988) cultural distance index[3] and two dummies - common border and common language, are included in the analysis. These variables are introduced to catch cultural factors and information and transaction costs that significantly contribute to FDI activity linkages between countries, for instances through network externalities (e.g. Falk, 2016; Ivanov & Ivanova, 2016; Kristjánsdóttir, 2016).

3.2. Additional variables

We also test the impact of taxation in tourism FDI activity adding to our baseline model three different tax rates: (*i*) statutory corporate income tax (*STAT*); (*ii*) bilateral effective average tax rates on corporate income (*beatrs*) and (*iii*) bilateral effective marginal tax rate on corporate income (*bemtrs*). The majority of the studies use the statutory corporate income tax as a measure of the corporate tax burden on FDI (deMooij & Ederveen, 2003: 677).[4] From a conceptual and empirical point of view *beatrs* or *bemtrs* should be used, because effective tax rates reflect tax incentives correctly when compared to statutory taxes and are better candidates to measure the impact of taxation on FDI activity (Devereux & Griffith, 2002, 2003; Devereux, Griffith, & Klemm, 2002).

Some other empirical studies have raised the question of incorporating agglomeration economies jointly with taxes into the analysis of FDI flows or stocks. Wheeler and Mody (1992) show that agglomeration economies are an important determinant for US multinationals' investment-location decisions. They use three different measures of agglomeration economies – degree of industrialization, infrastructure quality and existing stock of FDI – and they find that "*agglomeration-related factors seem to clearly dominate the decision where to invest*" (Wheeler & Mody, 1992: 71). They also show that infrastructure quality is an especially important factor in developing countries. Bénassy-Quéré et al. (2005) in their study about investment-location decisions between 11 OECD countries find that their measure of agglomeration – market potential, together with taxes is an important determinant of bilateral FDI flows. Finally, Hansson and Olofsdotter (2013) study the impact of tax differentials and agglomeration economies on FDI. The authors use four agglomerations variables – market potential, host-country stock of FDI, country's population density and expenditure on research and development (R&D) – and find that "*the impact of taxes is sensitive to the estimation method and the inclusion of agglomeration economies and there is some evidence of agglomeration mitigating the negative effects of taxes on FDI flows*" (Hansson & Olofsdotter, 2013: 2654).

Moreover, Bénassy-Quéré et al. (2005) and Falk (2016), among other authors, refer that low labour costs in the host country have traditionally been an important factor in the decision to invest in other country. Falk (2016) argues that labour cost differentials between a pair of countries play an important role in hotel FDI, particularly for cost-saving vertical FDI. On the other hand, Kristjánsdóttir (2016: 395) in her research on FDI in the hospitality industry in Iceland and Norway, in comparison to the Nordics and a range of other OECD countries, includes a measure for skilled labour abundance in the country. The empirical results show that skilled labour is a key factor to attract FDI into the hospitality sector.

Finally, as stated by Bénassy-Quéré et al. (2005) and Hansson and Olofsdotter (2013), countries have the possibility of compensating the

[3] For further details about cultural distance measures, including Kogut and Singh's (1988) cultural distance index, and its impact on the tourism industry, see for example Ng, Lee, and Soutar (2007). The authors refer that Kogut and Singh's (1988) cultural distance index is the most popular way to measure cultural distance in which three quarters of the studies used this approach to measure the cultural distance (see Ng et al., 2007: 1500).

[4] For more details about the definition and construction of the three tax rates see DeMooij and Ederveen (2003), page 677.

high taxation by the provision of public goods. We use the government investment expenditure (in % of GDP) to measure the impact of public investment on FDI. We expect a positive effect on FDI, as this proxy is likely to be closer to the building of public goods (Bénassy-Quéré et al., 2005: 587).

Bilateral Investment Treaties (BITs) are not included in the gravity model for two reasons: (*i*) France has bilateral agreements with all 19 countries included in the sample[5] and (*ii*) the lack of political tensions between France and the 19 countries studied.[6]

We follow previous studies on FDI and we employ a gravity framework (see, e.g. Bénassy-Quéré et al., 2005, Hansson & Olofsdotter, 2013) where inward FDI stock for the French hotel and restaurant industry is determined by standard gravity variables as well as taxes, labour costs and skills, agglomeration economies, country-pair-specific effects and a time dummy (Egger & Pfaffermayr, 2003). Since there was a global financial crisis with devastating effects on investment flows in the analyzed time period - from 2000 to 2017, we include in the model a dummy variable that takes the value of 1 for the years of the financial crisis – from 2007 to 2010. The same procedure was adopted by Falk (2016). The model applied is a generalized panel gravity model, with the following log-linear specification as our baseline estimation:

$$Ln\ FDI\ stock_{ijt} = \beta_1 LnGDP_{it} + \beta_2 LnGDP_{jt} + \beta_3 LnDist_{ijt} + \beta_4 X_{ijt} + \beta_5 Z_{ij} + \beta_6 W_{jt} + \gamma_t + \alpha_{ij} + \varepsilon_{ijt} \quad (2)$$

where $\boldsymbol{lnFDIstock_{ijt}}$, is the log of the stock of hotel and restaurant FDI from home country *i* to host country *j* in year *t*; $\boldsymbol{lnGDP_{it}}$ and $\boldsymbol{lnGDP_{jt}}$ are the log of the investing and host country's GDP, respectively. $\boldsymbol{lnDist_{ijt}}$ is the log of the distance between country *i* and *j*. $\boldsymbol{X_{ijt}}$ are location factors which vary between country-pairs and over time (taxes, skilled labour, labour costs, market potential variables); $\boldsymbol{Z_{ij}}$ are location factors which vary over country-pairs only (common border and language dummies and Sogut and Singh's 1988 cultural distance index); $\boldsymbol{W_{jt}}$ are location factors which vary over time and over host countries (government expenditure); γ_t are time dummies; $\boldsymbol{\alpha_{ij}}$ are country-pair-specific effects and $\boldsymbol{\varepsilon_{ijt}}$ is the remainder error term. Given the presence of within-cluster effects (the null hypothesis of no within-cluster correlation of Breusch-Pagan LM test and Wooldridge test has been rejected in Table 4), a cluster-robust variance matrix is estimated, that is robust to both heteroskedasticity and to within-cluster correlation (e.g. Feld & Heckemeyer, 2011; Wooldridge, 2002). Table 2 presents the variables used in the estimation.

4. Data

To study the key determinants of French inward FDI in the hospitality industry, we collect data on bilateral FDI stock between France and other 19 countries from 2000 to 2017. The countries included in the sample are: Belgium, Brazil, Canada, China, Denmark, Germany, India, Ireland, Italy, Japan, Luxembourg, Netherlands, Russia, Spain, Sweden, Switzerland, Turkey, the UK, the USA and the host country, France. These countries are the only countries included in the sample, because they are the only ones for which data on FDI stocks in the hospitality industry is available. In 2017, the 19 countries analyzed in this study accounted for 93% of the total FDI in the French hospitality industry. French inward FDI stock activity in millions of EUR from the Central Bank of France is used, and the OECD industry classification of "Hotels and Restaurants" is applied as a proxy of FDI in tourism (an identical proxy was used by Endo, 2006: 600). We use inflow FDI stock data instead of flow data, because the first one reflects better the long-term investment incentives of the firms (see, e.g., Endo, 2006: 605, in this regard). The total of French FDI stock in Hotels and Restaurants industry in 2017 was 7512 million of EUR. European countries accounted for 50% of the total value followed by the US with 16%. In Europe, the UK with 16% of total FDI stock in Hotels and Restaurants industry in 2017 is the main investor country.

The GDP in purchasing parity standards was obtained from the World Bank. Data on distance and dummies for countries with a common language and border are drawn from Mayer and Zignago (2006). Distance is measured in kilometres between the principal cities of countries weighted by population size. In addition to the geographical distance, the importance of cultural distance is taken into account. The cultural distance is calculated according to Kogut and Singh's (1988) formula that is based on Hofstede's five cultural dimensions: power distance, masculinity, individualism, uncertainty tolerance and long-term orientation.

Data for corporate tax differentials are calculated as simple differences between the tax rates in the host country (France) and the investing country. Three tax variables are used in the study: (*i*) statutory tax rates, (*ii*) average effective tax rates and (*iii*) marginal effective tax rates. All of them are taken from the Oxford University Centre for Business Taxation. We also test the effects of agglomeration variables on FDI decisions. We consider two proxies of agglomeration economies in our study. The first measure is the differential between host-country market potential and the investor. The variable is defined as the ratio of GDP of the host country to its average internal distance. The second measure is the differential between total FDI stock in the host-country and the investor country. As stated by Hansson and Olofsdotter (2013: 2655) "*is expected that countries with a larger stock of FDI will have an advantage in attracting new investment*". Data for total FDI stock are provided by the World Bank.

Moreover, two measures related to labour costs and skills are included. Data about labour costs are taken from the OECD. Next, relative unit labour costs are computed as the difference in the (natural logarithm of) unit labour costs in the host country against the investor country. The abundance of skilled labour variable is obtained from the World Bank.

Finally, to explore the possible compensation of high taxation by the supply of public goods, we include in the analysis, the difference in government investment expenditures (% of GDP) in the host country relatively to the investor country that are collected from the OECD. Descriptive statistics are presented in Table 3.

Table 3 shows that the average value of French bilateral inward FDI stock in "Hotels and Restaurant" industry is 230.5 million euros. The table also shows that about 40% of bilateral inward FDI stocks come from neighbouring countries. One-fifth of bilateral inward FDI stocks had its origin in countries that have French as their official language. Statistics related to taxes and labour costs show that, on average, in France the costs related to these two variables are higher than those of the investing countries. Finally, with regard to the variable skilled labour abundance, which is measured by the measure "school enrolment, tertiary (% gross)", France has on average, a higher percentage of skilled workers compared to investor countries.

5. Empirical results

The empirical results are reported in Table 4. The statistical software EVIEWS 10 was used in the estimation. The results are based on 269 observations (data of 73 observations are missing) for the period 2000–2017. Six specifications are presented. The statutory tax rate on corporate income simple differences between the tax rates in France and the investing country as a proxy of tax rates is used along with the

[5] Details about Bilateral Investment Treaties (BITs) can be found here: https://investmentpolicy.unctad.org/international-investment-agreements. In the case of EU countries, the existence of bilateral agreements has not been verified, since the guarantees in the BITs are guaranteed by the EU treaties.

[6] According to Desbordes and Vicard (2009) BITs have a greater effect when implemented between countries with political tensions while they have no significant effect between friendly countries.

Table 2
Description of variables.

Variable	Definition	Source	Expected Sign
Dependent variable			
Inward FDI stock	French bilateral inward FDI stocks, in "Hotels and Restaurant" industry, million euro.	Central Bank of France (www.banque-france.fr/economie-et-statistiques/base-de-donnees/investissements-directs.html).	
Explanatory variables			
GDP	Gross domestic product at market prices, millions of PPS (Purchasing Power Standards)	World Bank	+
Distance	Bilateral distance in kilometres between the largest cities in country *i* and country *j*, weighted by population size.	CEPII (www.cepii.fr).	−
Common Language	Dummy that takes the value of one when countries use the same language (in this case French).	CEPII (www.cepii.fr).	+
Common Border	Dummy that takes the value of one when countries have a common border.	CEPII (www.cepii.fr).	+
Cultural Distance	Kogut and Singh's (1988) cultural distance index calculated from secondary data, using the five Hofstede' cultural dimensions.	Hofstede Centre. (http://geert-hofstede.com/national-culture.html). (Own calculations)	+
Statutory Tax Rates	Statutory tax rate on corporate income simple differences between the tax rates in the host country and the investing country.	Oxford University Centre for Business Taxation (www.sbs.ox.ac.uk/faculty-research/tax/publications/data). (Own calculations)	−
Effective Average Tax Rate (*beatrs)*	Net present value (NPV) of tax payments as share of NPV of total pre-tax income simple differences between the tax rates in the host country and the investing country. See Devereux and Griffith (2003).		−
Effective Marginal Tax Rate (*bemtrs*)	The proportional difference between the pre-tax and post-tax required rates of returns simple differences between the tax rates in the host country and the investing country. See Devereux et al. (2002).		−
Market Potential	For country i: $\sum_{k \neq i} GDP_k / Distance_{ik}$, million euro. We use the difference between host country and investor country.	World Bank, CEPII (own calculations)	+
Total FDI Stock	Total stock of FDI, million euro. We use the difference in the (natural logarithm of) total stock FDI in the host against the investor.	World Bank	+
Unit Labour Costs	Relative unit labour costs are computed as the difference in the (natural logarithm of) unit labour costs in the host against the investor.	OECD, (own calculations)	−/+
Skilled Labour	Skilled labour abundance in the investing country, relative to the host. The variable skilled labour is presented by the measure "School enrollment, tertiary (% gross)".	World Bank	+
Government Investment	Government investment expenditures as a share of GDP. We use the difference of government investment in the host against the investor.	OECD	+

Table 3
Descriptive statistics.

Variable	Mean	Standard deviation	Minimum	Maximum
Dependent variable				
Inward FDI stock	230.5	608.8	11.0	3619.0
Explanatory variables				
GDP	557,325	492,456	142,143	998,765
Distance	2596	3037	307	9712
Common Language	0.202	0.403	0	1
Common Border	0.399	0.491	0	1
Cultural Distance	8.188	4.898	1.460	17.738
Statutory Tax Rates	0.066	0.078	−0.066	0.248
Effective Average Tax Rate (*beatrs)*	0.027	0.064	−0.067	0.215
Effective Marginal Tax Rate (*bemtrs*)	0.007	0.061	−0.128	0.134
Market Potential	1302	1510	639	6810
Total FDI Stock	669,433	973,453	−358,143	734,325
Unit Labour Costs	3391	12,188	−17,690	36,617
Skilled Labour	3.713	18.667	−37.229	47.082
Government Investment	23.042	5.156	15.289	47.583

dummies common language and common border and cultural distance index in the first specification. In the specifications (3) and (4) we use bilateral effective average tax rate simple differences and in (5) and (6) the bilateral effective marginal tax rate simple differences, as proxies of tax rates. We exclude the dummies common language and common border, in the specifications (2), (4) and (6) given the strong correlation of both variables with the Kogut and Singh's (1988) cultural distance index.

The results show that differences between France and the nineteen investor countries in terms of taxes, labour costs, abundance of skilled labour, supply of public goods and total FDI stock play a significant role in understanding the foreign location decisions. Then, we explain in detail each one of these determinants of French bilateral inward FDI stocks, in "Hotels and Restaurant" industry, starting with the variables related to corporate taxes and labour cost.

The three measures of tax rates (*STAT_TAX_differential; BEATRS_differential and BEMTRS_differential*) used in the estimations show a negative and statistically significant impact on FDI stock as expected. Identical results were obtained for labour cost differential (*Ln_UN_LAB_differential*). These results are not surprising given that, as shown in the descriptive statistics analysis, France is less competitive in terms of costs than its investors, with a consequent negative impact on the ability of FDI attraction. The importance of cost factors in FDI attraction is highlighted among other authors by Falk (2016: 229). The author refers that "*cost-based considerations such as wages and taxes are important for FDI activity in the hotel sector*". As explained by Barros (2005), given the increased competitiveness in the tourism sector, costs control is fundamental to maximize production efficiency and consequently to increase the return on investments.

This lower competitiveness in terms of costs presented by France is offset by the provision of public goods. We find a positive and statistically significant effect for the measure of government investment expenditures (*GOV_EXP_differential*). This result is in line with the literature on tax competition that underlines the possible compensation of high taxation by the provision of public goods (e.g. Bénassy-Quéré et al., 2005: 587). Kinda (2010) highlights the importance of a good infrastructure to receive high flows of tourists which consequently contributes to the increase of the return of the investments in the tourism sector.

Bénassy-Quéré et al. (2005) argue that the analysis of the impact of

Table 4
Determinants of French Inward Stock FDI in hotels and restaurant industry.

Dependent Variable: French Bilateral Inward FDI stocks (in logs)												
	(1)		(2)		(3)		(4)		(5)		(6)	
Intercept	−1.863***	(−6.803)	−1.853***	(−6.108)	−1.996***	(−6.428)	−1.893***	(−5.891)	−1.943***	(−6.943)	−1.844***	(−5.804)
$LnGDP_{FRANCE}$	6.045***	(6.386)	6.200***	(5.896)	6.561***	(5.777)	6.359***	(5.676)	6.255***	(6.518)	6.096***	(5.573)
$LnGDP_{INVESTOR}$	1.051***	(4.966)	0.802***	(3.475)	1.108***	(5.208)	0.809***	(3.450)	1.269***	(5.755)	0.966***	(3.921)
LnDIST	−1.542***	(−6.386)	−1.464***	(−5.338)	−1.968***	(−6.952)	−1.747***	(−5.594)	−2.071***	(−6.749)	−1.877***	(−5.442)
COM_LANG	2.689***	(5.422)	–	–	2.698***	(5.495)	–	–	2.807***	(5.651)	–	–
COM_BORD	1.397***	(3.542)	–	–	1.813***	(4.909)	–	–	1.673***	(4.489)	–	–
CULT_DIST	0.015	(0.366)	0.059**	(2.100)	0.030	(0.711)	0.087**	(2.129)	0.015	(0.348)	0.062**	(2.099)
STAT_TAX_differential	−4.298***	(−2.929)	−5.330***	(−3.460)	–	–	–	–	–	–	–	–
BEATRS_differential	–	–	–	–	−8.727***	(−3.406)	−7.913***	(−2.700)	–	–	–	–
BEMTRS_differential	–	–	–	–	–	–	–	–	−8.577***	(−3.125)	−7.867**	(−2.543)
M_POT_differential	−0.098	(−0.629)	−0.236	(−1.379)	−0.205	(−1.278)	−0.297*	(−1.659)	−0.315*	(−1.804)	−0.413**	(−2.089)
LnFDI_Stock_differential	0.262***	(2.916)	0.254***	(2.717)	0.265***	(2.977)	0.293***	(3.084)	0.266***	(2.963)	0.279***	(2.936)
LnUN_LAB_differential	−0.326*	(−1.747)	−0.319**	(−2.108)	−0.417**	(−2.241)	−0.201*	(−1.700)	−0.380**	(−2.043)	−0.267*	(−1.748)
SK_LAB_differential	0.024***	(2.898)	0.038***	(4.416)	0.023***	(2.817)	0.033***	(3.894)	0.026***	(3.106)	0.037***	(4.164)
GOV_EXP_differential	0.224***	(6.657)	0.176***	(5.255)	0.214***	(6.461)	0.176***	(5.175)	0.230***	(6.826)	0.185***	(5.400)
TIME_DUM	−0.547**	(−2.052)	−0.342*	(−1.802)	−0.593**	(−2.237)	−0.391*	(−1.725)	−0.584**	(−2.189)	−0.367*	(−1.789)
Number Observations	269		269		269		269		269		269	
Adjusted R^2	0.728		0.662		0.734		0.651		0.731		0.649	
Hausman test	29.347	p = [0.001]	35.336	p = [0.000]	29.638	p = [0.001]	32.546	p = [0.000]	31.746	p = [0.000]	31.470	p = [0.000]
F test	32.593	p = [0.000]	28.210	p = [0.000]	33.474	p = [0.000]	26.959	p = [0.000]	32.939	p = [0.000]	26.740	p = [0.000]
Breusch-Pagan LM test	873.22	p = [0.000]	832.11	p = [0.000]	882.55	p = [0.000]	847.13	p = [0.000]	893.89	p = [0.000]	823.35	p = [0.000]
Wooldridge test	152.22	p = [0.000]	165.33	p = [0.000]	170.01	p = [0.000]	181.02	p = [0.000]	199.02	p = [0.000]	176.33	p = [0.000]

Note: *t*-statistics are presented in brackets. ***, ** and * denote statistical significance at 1%, 5% and 10%, respectively. *p* refers to *p*-values. Cluster-robust standard errors and covariance. Hausman test assumes in the null hypothesis that preferred model is Random Effects against the alternative hypothesis of Fixed Effects. The Breuch-Pagan LM test and the Wooldridge-type test assume a *null* of no unobserved study-specific effects.

Table 5
Determinants of French Inward Stock FDI in hotels and restaurant industry – Two-stage least squares.

Dependent Variable: French Bilateral Inward FDI stocks (in logs)												
	(1)		(2)		(3)		(4)		(5)		(6)	
Intercept	−5.427*	(−1.960)	−1.740***	(−2.805)	−5.342**	(−2.175)	−3.749	(−1.447)	−5.265**	(−2.360)	−5.279**	(−2.224)
$LnGDP_{FRANCE}$	0.986***	(2.706)	2.412**	(2.571)	1.553**	(2.097)	1.074**	(2.178)	1.520***	(1.980)	1.644**	(2.014)
$LnGDP_{INVESTOR}$	0.616***	(3.530)	0.440**	(2.512)	0.624***	(3.512)	0.404**	(2.233)	0.631***	(3.295)	0.403**	(2.049)
LnDIST	−1.024**	(−2.386)	−1.017***	(−3.077)	−1.003***	(−3.013)	−1.339***	(−3.289)	−2.008***	(−3.049)	−2.177***	(−3.123)
COM_LANG	1.692***	(4.300)	–	–	1.693***	(4.264)	–	–	1.687***	(4.308)	–	–
COM_BORD	0.873**	(2.210)	–	–	0.926***	(2.805)	–	–	0.913***	(2.879)	–	–
CULT_DIST	0.055	(0.976)	0.120***	(3.684)	0.030	(0.711)	0.087***	(3.129)	0.016	(1.200)	0.149***	(5.269)
STAT_TAX_differential	−3.673***	(−2.825)	−4.060***	(−3.161)	–	–	–	–	–	–	–	–
BEATRS_differential	–	–	–	–	−4.675***	(−3.157)	−4.078***	(−3.336)	–	–	–	–
BEMTRS_differential	–	–	–	–	–	–	–	–	−4.252***	(−3.157)	−4.623***	(−3.367)
M_POT_differential	−0.024*	(−1.732)	−0.140	(−1.005)	−0.230	(−1.579)	−0.272*	(−1.860)	−0.227*	(−1.715)	−0.226**	(−2.142)
LnFDI_Stock_differential	0.186**	(2.180)	0.223***	(3.139)	0.288***	(3.229)	0.293***	(3.084)	0.290***	(3.261)	0.262***	(3.361)
LnUN_LAB_differential	−0.839***	(−7.484)	−0.974***	(−11.686)	−0.836**	(−6.789)	−0.200*	(−9.898)	−0.380**	(−2.043)	−0.993***	(−11.464)
SK_LAB_differential	0.015**	(2.045)	0.034***	(4.401)	0.016**	(2.349)	0.011**	(1.999)	0.015**	(2.204)	0.019**	(2.388)
GOV_EXP_differential	0.204***	(3.657)	0.125**	(2.355)	0.349***	(3.001)	0.209***	(2.975)	0.236***	(3.137)	0.200***	(3.100)
TIME_DUM	−0.376**	(−2.099)	−0.319*	(−1.842)	−0.289*	(−1.823)	−0.265**	(−2.325)	−0.289**	(−2.004)	−0.276*	(−1.699)
Number Observations	269		269		269		269		269		269	
Adjusted R^2	0.741		0.717		0.738		0.701		0.738		0.703	

Note: *t*-statistics are presented in brackets. ***, ** and * denote statistical significance at 1%, 5% and 10%, respectively. *p* refers to *p*-values. Cluster-robust standard errors and covariance.

labour costs on the inward FDI stocks should take into account the differences between countries in terms of skilled labour abundance. Following Kristjánsdóttir (2016) we include a proxy of skilled labour abundance in the analysis. Such as Kristjánsdóttir (2016) we find a positive and statistically significant coefficient for the variable *SK_LAB_differential*. Kristjánsdóttir (2016: 400) explains that in the case of Iceland and Norway, foreign investors are not bothered with the level of taxes but rather with the presence of skilled labour. In this way, France's lower competitiveness in terms of costs is offset by the investment in public goods and in the qualification of the workforce.

There are other variables that mitigate the negative impact caused by corporate taxes - the agglomeration variables. Two agglomeration variables are used in the estimation – market potential (*M_POT_differential*) and total stock of FDI (*LnFDI_Stock_differential*). The results show a positive and statistically significant relationship for total stock of FDI and no statistically significant relationship for market potential variable. According to the literature it would be expected that countries with a larger market potential and total stock of FDI would have an advantage in attracting new investment (e.g. Hansson & Olofsdotter, 2013). This statement does not appear valid in the case of market potential. According to Hansson and Olofsdotter (2013: 2659) "*market potential variable captures access to foreign markets*" and as in this study, we also conclude that this is not the main motivation for FDI attraction, since most investors are EU countries.

The results also show that France is particularly successful in attracting FDI in the hospitality industry from French-speaking countries (*COM_LANG*) with a common border (*COM_BORD*) and cultural proximity (*CULT_DIST*) to France. The literature reveals that in the case of Kogut and Singh's (1988) cultural distance index, it is frequent that this variable is not statistically significant when estimated together with the variables common border and common language due to the strong correlation existing with these two variables. This situation is verified in the present study. Cultural proximity variable is not statistically significant in the specifications (1), (3) and (5). In this case, the model must be estimated without the presence of the other two dummies (common border and common language) to correctly gauge the true impact of Kogut and Singh's (1988) cultural distance index on inward FDI stocks. Specifications (2), (4) and (6) show that when the two dummies are not included in the estimation, the cultural distance measure shows a positive and statistically significant coefficient, as expected. This result seems to support the idea that foreign investors have a greater propensity to invest in countries whose cultural profile is closer to the cultural profile of their home country. Similar results were found by Ramón Rodríguez (2002) and Ivanov and Ivanova (2016). Sharing a common language and border and the existence of cultural proximity enhance the social relations between parties, and hence facilitate economic exchanges and reduces the uncertainty associated with the investment.

Looking at the gravity factors, the results show that bilateral inward FDI stocks between France and investor countries are positively affected by their income ($LnGDP_{FRANCE}$ and $LnGDP_{INVESTOR}$) and are inversely proportional to the distance (*LnDIST*) between them. Falk (2016) argues that the positive signal exhibited by host country GDP variable indicates that market seeking considerations are relevant for hotel FDI. With a larger market, there is a higher probability that Transnational Corporations will be able to recover the costs of their FDI. We also include the French country size as another market-related variable and as expected we find a positive and statistically significant signal. The geographical distance, which is a proxy for transaction, transportation, or more generally, information costs, shows a significant and negative signal as expected.

Finally, we use a time dummy that takes the value of one for the years 2007 to 2010 (*TIME_DUM*), to study the impact of the financial crisis on bilateral inward FDI stock. The coefficients of the time dummy present a statistically significant and negative signal. Given that in these years of widespread financial crisis, investors' confidence levels

experienced a strong shock, it is normal that a decrease in the foreign investment levels has been registered.

When a gravity model is used to explain economic flows (or stocks) at the sub-sector level (as in the present case), it can lead to underestimation/overestimation of the impact. In order to isolate the impact of the independent variables on total FDI and sector specific FDI, we estimate the model by two-stage least squares with fixed effects. The results are presented in Table 5. The results obtained are in general identical to the ones previously presented and discussed.

6. Conclusion

The aim of our study is to investigate the determinants of French inward FDI stock in the hospitality industry. The majority of previous studies have sought to explain the basis for total net inflows of FDI regardless of the sector or industry. This phenomenon is largely explained by the lack of a comprehensive international FDI statistics in tourism and by the fact that international statistics on tourism are incomplete and definitions vary. Consequently, studies on the determinants of FDI in the tourism sector are almost non-existent. This paper fills this gap in the literature by testing the determinants of inward FDI stock in the French hospitality industry. A panel gravity model is applied to bilateral inward FDI stock between France and nineteen investor countries in Hotels and Restaurant industry over 2000–2017.

Our empirical results indicate that bilateral inward FDI stocks between France and investor countries are significantly and positively affected by their income and are inversely proportional to the distance between them. A key finding of the study is that France is particularly successful in attracting FDI in the hospitality industry from French-speaking countries with a common border and cultural proximity to France. The literature shows that cultural and historical ties provide incentive structures for economic exchanges in two ways. Cultural and historical ties reduce the uncertainty in ongoing and future economic exchanges.

Furthermore, taxes and labour costs have a considerable negative impact on bilateral inward FDI activity. This result shows that cost-based considerations such as labour costs and taxes are important determinant factors of FDI activity. The results also showed that abundance of skilled labour is statistically significant. Considering the increased competitiveness in the tourism and hospitality sector, the maximization of economic efficiency in hotel performance throughout the nations becomes central. Product and costs are the traditional policy variables of management that should be monitored to maximize production efficiency and consequently to increase the return on investments.

The total FDI stock and market potential differential, two measures of agglomeration economies, reveal different results. The first one presents a positive and significant signal while the second measure does not seem to affect FDI stock. Other factors such as the supply of public goods and the financial crisis are also relevant for the hospitality FDI activity. As explained before, well-developed infrastructures are essential to attract foreign capital and promote economic growth. A good provision of infrastructure reduces transaction costs by allowing investors to connect easily with their suppliers and customers. By improving market access and thus increasing the real size of the available market, good infrastructure is particularly important for foreign firms, attracted in general by large markets.

Overall, we find that the most significant determinants of FDI in the hospitality industry are virtually the same as those obtained for total FDI stock. These results have two important implications for tourism policy makers. First, given that FDI activity showed to be sensitive to cost factors such as labour costs and taxes, the control of these costs is crucial for countries to remain competitive. Second, the results show the possible mitigation of adverse effects of high taxation by the provision of public goods. This may be an alternative solution for countries like France, which has a high tax burden, to remain competitive, given that the country affects part of its high taxes to public infrastructure.

While this paper is a step toward a better understanding of FDI stock determinants, there are several limitations to our analysis. First, it focuses solely on one country – France, so we should not draw generalized conclusions to all countries. It will be important in the future to extend this study to more countries, as soon as there is a compilation of standardized FDI statistics on tourism. Second, this study was conducted for the world's leading destination, which is characterized by the availability and quality of hard and soft infrastructures. A good infrastructure endowment gives the investor a guarantee of quality and access to the destination and consequently a higher return on investment. It would be interesting to analyse whether these effects are found in developing countries. Third, and related to the previous points, we use FDI in hotels and restaurants as a proxy of FDI in tourism. This solution is adopted by Endo (2006) and Falk (2016), among others. However, it excludes other activities related to tourism such as transportation, tour operators, tour guides, travel agents, supply of souvenirs and marketing, and financial services for tourists, which may lead to some biases of the results obtained. However, the alternative solution would be the lack of studies on FDI in the tourism sector. Finally, given that non-equity participation is the major common mode of foreign entry into the tourism industry, instead of equity modes (in which FDI is included), again our results could suffer some type of bias.

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