



# Foreign direct investment in the hospitality industry in Iceland and Norway, in comparison to the Nordics and a range of other OECD countries

Helga Kristjánsdóttir

**To cite this article:** Helga Kristjánsdóttir (2016) Foreign direct investment in the hospitality industry in Iceland and Norway, in comparison to the Nordics and a range of other OECD countries, *Scandinavian Journal of Hospitality and Tourism*, 16:4, 395-403, DOI: [10.1080/15022250.2015.1108864](https://doi.org/10.1080/15022250.2015.1108864)

**To link to this article:** <http://dx.doi.org/10.1080/15022250.2015.1108864>



Published online: 19 Nov 2015.



Submit your article to this journal [↗](#)



Article views: 111



View related articles [↗](#)



View Crossmark data [↗](#)

## Foreign direct investment in the hospitality industry in Iceland and Norway, in comparison to the Nordics and a range of other OECD countries

Helga Kristjánsdóttir

Faculty of Business and Economics, University of Iceland, Reykjavik, Iceland

### ABSTRACT

International hospitality investment is a key indicator of tourism's growing importance, and the question is what drives the investment. This research compares Iceland and Norway to the Nordic countries, and a range of OECD countries. The research establishes through econometric modeling how foreign direct investment in the hospitality industry is driven by factors such as economic and market size of the headquarters home country, value added tax increase, and skilled labor of the headquarters home country, compared to that of the host country. Increased understanding on the determining factors of this growth from a range of available metrics will inform tourism management both from an entrepreneurial and public policy perspective. The paper concludes by outlining how and which factors should be monitored in order to guide investment in the hospitality industry of rapidly emerging destinations.

### ARTICLE HISTORY

Received 12 December 2014  
Accepted 27 September 2015

### KEYWORDS

Foreign direct investment;  
hospitality industry;  
economic geography;  
international economics

## Introduction

Vikings settlement in Iceland is the theme in some of the Icelander's sagas, with about two-thirds of them coming from Norway (Hallgrímsson et al., 2004). Ice Age traces are reflected in the glaciers, fjords, and mountains, in the two countries. Therefore, one might expect that both countries would potentially catch the eye of similar types of tourism investors. Also, being positioned in the North Atlantic, Iceland and Norway are on the edge of Europe, providing the opportunity to analyze them in a parallel economic geographical perspective (Krugman, 1991).

Vikings can somewhat be considered to be the original multinational businessmen, with their seafaring plundering ways. Today's investors may behave in a more civilized fashion, but the interest in international markets is no less intense. A firm becomes a multinational enterprise, by entering into an investment in another country. The investment is considered a foreign direct investment (FDI) if the investor has a 10% or more of voting stock in the foreign firm (World Bank, 2014).

What is of major concern in this research is to reveal some of the determining factors that drive FDI in the hospitality industry in these countries. What can be taken away from

the experience of these countries in the past decade which can be used to make a more informed decision about the future? How did these two countries fare relative to other OECD in attracting FDI to the hospitality industry during the period studied?

Viking countries of Iceland and Norway are of major interest in this research saga. The two economies are no strangers to difficult times, unfriendly weather, challenges in harvesting from land and sea, and fiercely independent residents. Both countries have similar stories of development in the twentieth century, becoming increasingly service oriented and open to tourism. In recent times, the service sector in the developed countries has accounted for more than two-thirds of their gross domestic product (GDP) (Jacob & Groizard, 2007), a trend that is reflected well in Norway and Iceland's economic developments (Skalpe, 2003).

The similarities continue, since both countries have European Free Trade Association (EFTA) membership, and similar level of value added tax (VAT) (Hotrec, 2014). Although the focus of the paper is these two specific countries, the comparative analysis is applied further on a larger sample of OECD countries to get a wider perspective.

The research goals are achieved by combining some of the features of the gravity model (Bergstrand, 1985) and the knowledge capital model (Carr, Markusen, & Maskus, 2001; Markusen, 2004). The issue of endowments is relevant here; how are the countries endowed with skilled labor to attract FDI into the hospitality sector? Both Norway and Iceland are rich in cultural endowments, and magnetic and inspiring natural landscapes. Both countries used to be highly dependent on agriculture and fishing, but have been increasingly migrating towards skilled labor economies. Both are European geographic outliers, but Iceland possibly suffers more from its location since it is so much further away from markets (Distance Calculator, 2012), thus providing potential for corner case analysis (Kristjánsson, 2010).

Tourism is in its essence basically international trade (Khadaroo & Seetanah, 2008). Therefore some of the modeling of international trade and investment applies well to tourism-related issues like the hospitality industry. The idea is to capture the effects of geography, labor involvement, and increasing returns to scale, along the lines of new trade theory and the new economic geography. Increasing returns to scale, indicating that as operations grow in scale less input is needed for each unit of output, is captured with nation size in population, and GDP along the lines of the Bergstrand's (1985) gravity model, and the geographical dimension is accounted for by Hofstede's (2001) cultural distance. It is becoming increasingly more common to incorporate and evaluate cultural distance in models when estimating FDI. For example, the Hofstede (2001) culture index is applied by Davies et al. (2008) when estimating FDI for different country samples, including the OECD countries. Furthermore, this investigation uses elements from the knowledge capital model introduced by Markusen, Venables, Eby-Konan, and Zhang (1996), by incorporating skilled labor (Carr et al., 2001), which often enhances technology transfer (Jacob & Groizard, 2007). Regarding the specific dataset used, Endo (2006) analyses flows and volumes of FDI in the tourism industry, and finds stock data preferable to flow data.

Hopefully this research helps answering questions concerning the hospitality industry development in an international setting. What makes people want to invest in the hospitality industry in a particular country? How can development in the hospitality industry be put forward in a global perspective? The approach here is to consider

important issues for the hospitality industry by analyzing determinants of investment in hotels and restaurants.

## Model specification

The model specification chosen for estimation is based on a combination of two models that have gained recognition within the field of international economics: the gravity model (Bergstrand, 1985) and the knowledge capital model (Carr et al., 2001). The theory of international trade, evolving in the past decades, involving Helpman (1984) and Helpman Krugman (1985), has incorporated focus on FDI in particular sectors. Determinants of FDI tend to vary between sectors.

The analysis includes variables that account for economic size, skilled labor, VAT, and culture distance (Bergstrand, 1985; Carr et al., 2001). All estimates are Ordinary Least Squares estimates.

It is becoming increasingly more common to incorporate and evaluate cultural distance in models when estimating FDI. This is, for example, reflected in the use of the Hofstede (2001) culture index, in a research by Davies et al. (2008) in their evaluation of FDI for different country samples, including the OECD countries.

In order to estimate the model on a log-linear format, the conventional way would be to take logarithms of the dependent and the explanatory variables in the model. However, in this case only the natural logarithm function is applied to the explanatory variables, but the inverse hyperbolic sine function to the dependent variable, FDI in the hospitality industry.

This is because it is highly valuable to account for not only positive FDI values. Due to low investment, and potentially payback of retained earnings to the parent country, inward FDI in the hospitality industry can occasionally run zero or negative. Because of this, the conventional logarithm functional form to an Inverse Hyperbolic Sine Functional ( $\sinh^{-1}$ ) form is extended, when treating the dependent variable FDI. The inverse hyperbolic sine functional form has been used in treatment the dependent variable in international trade (Kristjánsdóttir, 2012) and is presented as the following:  $\sinh^{-1}(x) = \ln(x + (1 + x^2)^{0.5})$ .

The model for estimation is presented in Equation (1):

$$\sinh^{-1}(FDI\_Hotel_{ij,t}) = \tau_0 + \tau_1 \ln(GDP_{i,t}) + \tau_2 \ln(POP_{i,t}) + \tau_3 SKILL\_diff_{ij,t} + \tau_4 VAT_j + \psi_{ij,t} \quad (1)$$

In Equation (1), FDI in the hospitality industry is a function of GDP, market size as presented by population, difference in skilled labor (Schooling), and value added tax. The notation  $ij$  is for the FDI from the source country  $i$  to the host country  $j$ . Moreover,  $t$  denotes the time period, year. The same notation holds for other variables.

The second equation, Equation (2), goes as follows:

$$\sinh^{-1}(FDI\_Hotel_{ij,t}) = \tau_0 + \tau_1 \ln(GDP_{i,t}) + \tau_2 \ln(POP_{i,t}) + \tau_3 SKILL\_diff_{ij,t} + \tau_4 VAT_j + \tau_5 Cultural\_Distance_j + \psi_{ij,t} \quad (2)$$

In Equation (2), cultural distance has been added to the explanatory variables.

## Data

The first sample applied includes the two countries of Iceland and Norway. The research then continues in a wider international setting by providing estimation for both a sample of other Nordic countries, and an OECD sample.

The primary focus is on the dependent variable, inward FDI in the hospitality industry. FDI can be in the form of Greenfield investment or brownfield investment, with brownfield investment accounting for M&As and joint ventures (Calderon, Norman and Servén, 2002; Deardorff, 2012; Lane & Milesi-Ferretti, 2003). FDI positions in millions of US dollars from the OECD (2012) are used, and the OECD industry classification of “Hotels and Restaurants” is applied. The set of data consists in total of OECD countries. More specifically, the basic sample includes Iceland and Norway, the Nordic sample includes Iceland, Norway, Finland and Denmark, and finally the OECD sample includes the following countries: Austria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Turkey, and the UK.

The dataset runs over 23 countries, from 2000 through 2012. Inward FDI stock is used (Davies, 2008; Endo, 2006). Inward FDI stock is the inward, or incoming investment, coming into the country from abroad. FDI is commonly used in economics, referring to 10% or more investment in a particular enterprise. Stock data are chosen, since the stock is believed to better reflect the long-term investment incentives of firms than alternative measures by Davies (2008).

The GDP is also included, as reported in current US\$ (World Bank, 2014). Population accounting for market size is obtained from the World Bank (2014). In order to account for how FDI is affected by VAT data is included, in percentage rates, obtained from Hotrec (2014).

Data on VAT in Norway and Iceland are reported in an identical way to the reporting of VAT in other countries in the sample. This ensures consistency in data reporting between countries. The reporting is in percentages (%), and obtained from a website providing hospitality-recording on VAT. The website source is Hotrec (2014). It is valuable to base the sample data on one particular source of data for VAT, to secure data consistency. These values do not change over time in the sample.

Moreover, a measure is included for skilled labor abundance in the country of the headquarters, relative to the host (Carr et al., 2001). The variable for skilled labor is presented by the measure “School enrollment, tertiary (% gross)”, “total is the total enrollment in tertiary education, regardless of age, expressed as a percentage of the total population of the five-year age group following on from secondary school leaving”. The skilled labor variable is obtained from the World Bank (2014).

VAT (Hotrec, 2014) is added to the conventional range of explanatory variables in the gravity and knowledge capital models. This is because some interesting research has been undertaken analyzing effects of VAT within the EU and the small open European economies of Denmark and Ireland (Hanly, 2012; Jensen & Wanhill, 2002), which proves useful a valuable comparison for this investigation on the effects of VAT, amongst other factors, on development in the hospitality industry.

Finally, cultural distance is accounted for in the modeling process, rather than geographical distance. Cultural distance is often reflected in historical ties, and in this case it can be relevant for Iceland and Norway, as well as the larger samples estimated. The

Hofstede (2001) index is suitable for this purpose, being composed of five cultural distances. Hofstede (1980) and Hofstede and Bond (1988) developed cultural indicators, applied here using the Hofstede (2001) index for most of the countries. Data for Iceland are not included in the conventional Hofstede index. However, Aðalsteinsson et al. (2011) obtained measures from applying the Hofstede index in Iceland by using the Hofstede questionnaire and data processing. The Hofstede measures obtained by Aðalsteinsson et al. (2011) are used for Iceland. Since the Hofstede measures obtained for the sample countries occasionally take values over 100, the values are rescaled so they take a maximum value of 100, and then sum up the five measures to create the overall Hofstede index applied in this research. For example, the Slovak Republic has a value of 104 for power distance, and a value of 110 for masculinity. As for uncertainty tolerance, then Portugal has a value of 104, and Greece 112. In long-term orientation, China has a value of 118.

The Hofstede is combined of the following five cultural measures: power distance, individualism, masculinity, uncertainty tolerance, and long-term orientation. First is the power distance, with a higher value implying top-down management in organizations. Second is individualism, with a high value, indicating that individualism is appreciated? Third is masculinity, which is high when the society appreciates values like competitiveness and accumulation of wealth. Fourth is uncertainty tolerance, and when it is high there is avoidance of uncertainty, with people appreciating rules and structured situation. Finally, fifth is long-term orientation, with a high value indicating willingness to wait for results.

## Results

The regression results present how FDI in the hospitality industry is impacted by several factors. Three estimates are provided. First, the estimates for Iceland and Norway, secondly the Nordic countries, and thirdly a group of OECD countries.

Table 1 shows results for Iceland and Norway, and the OECD countries for comparison.

The results indicate that the hospitality industry in Iceland and Norway is increasingly appealing as an investment opportunity to foreigners from larger economies, with

**Table 1.** FDI in the hospitality industry.

Regressors	(i)	(ii)
	OLS estimates Basic sample Iceland and Norway	OLS estimates OECD sample
$\ln(GDP_{i,t})$	2.049*** (4.92)	-.098 (-.39)
$\ln(POP_{i,t})$	-10.532*** (-2.91)	1.543*** (4.32)
$SKILL\_diff_{j,t}$	.039*** (3.17)	.042*** (3.61)
$VAT_j$	26.636*** (2.92)	.064*** (3.67)
Cons.	-102.453*** (-4.25)	-19.318*** (-12.32)
$R^2$ -sq	.951	.505
Obs.	33	193

Robust *t*-statistics reported in parentheses.

\*10% level.

\*\*5% level.

\*\*\*1% level.

investors from larger foreign countries finding the domestic industry as a more beneficial investment opportunity, the more wealthy country they come from. Also, foreign investors, from less-populated countries, are more willing to invest in the industry. Combined effects of wealth and population indicate that foreign investors from countries with high *income per capita* are more willing to invest.

It is useful to consider the population (POP) and gross domestic product (GDP) variables together, since they indicate the per capita GDP effects. The estimated signs indicate that the per capita GDP has positive effects on investment in Norway and Iceland, and the Nordic countries, however negative effects on investment in the OECD countries. More specifically, for Norway and Iceland, and the Nordic countries, the estimated results indicate  $+\ln(\text{GDP}_{i,t}) - \ln(\text{POP}_{i,t}) = +\ln(\text{GDP}_{i,t}/\text{POP}_{i,t})$  positive per capita GDP effects. However, for the OECD countries the results indicate the following signs:  $-\ln(\text{GDP}_{i,t}) + \ln(\text{POP}_{i,t}) = -\ln(\text{GDP}_{i,t}/\text{POP}_{i,t})$  negative per capita GDP effects. The relevance of incorporating per capita income in trade theory is discussed by Markusen (2013).

Foreign investors are sometimes also concerned with the level of tax; however the VAT in Iceland and Norway, facing business people in the industry, is not found to make foreign investors less eager in investing in the industry, indicating that foreign investors are not bothered with the VAT in these countries. Moreover, investors coming from more skilled countries tend to be more willing to invest in the industry.

Results for the OECD countries in column (ii) in Table 1 indicate that, like in the case of the Iceland and Norway, foreign investors from skilled countries are more willing to invest, and investors are not bothered by the level of the VAT. Different from Iceland and Norway, it holds that investors are willing to enter into the industry regardless of if they come from wealthy countries or not, and they tend to be more eager to invest if they come from more highly populated countries.

Furthermore, the results in Table 2 show estimates for the Nordic countries of Iceland, Norway, Denmark, Finland and Sweden. Findings indicate that these Nordic countries are

**Table 2.** OECD sample and cultural distance added to the estimation.

Regressors	(i)	(ii)	(iii)
	OLS estimates Basic sample Iceland and Norway	OLS estimates Nordic sample Nordic countries	OLS estimates OECD sample
$\ln(\text{GDP}_{i,t})$	2.049*** (4.92)	1.047*** (3.44)	−.515 (−1.64)
$\ln(\text{POP}_{i,t})$	−10.532*** (−2.91)	−.736 (−1.25)	2.563*** (5.53)
$\text{SKILL\_diff}_{j,t}$	.039*** (3.17)	.023** (1.99)	.015 (1.18)
$\text{VAT}_j$	26.636*** (2.92)	.002 (.10)	.084*** (4.31)
$\text{Cultural\_Distance}_j$		−.042*** (−3.21)	−.014*** (−4.82)
Cons	−102.453*** (−4.25)	−4.092 (−.53)	−20.157*** (−9.19)
$R^2$	.951	.836	.597
Obs.	33	73	158

Robust *t*-statistics reported in parentheses.

\*10% level.

\*\*5% level.

\*\*\*1% level.

similarly affected by the factors estimated before. Finally, foreign investors are found to be less willing to invest, the more distant they are culture-wise, when compared to the local country.

## Conclusions

This paper seeks to analyze the determinants of FDI in the hospitality industry. Two countries at the edge of Europe are chosen as base countries: Iceland and Norway. Both countries have experienced substantial growth and a single-generation shift in wealth, education, and life priorities. Also, important for this research, both countries can be expected to offer similar tourists attractions, and both are EFTA countries, with a similar VAT level facing the industry. On one hand, Iceland and Norway are studied, and on the other hand larger groups of countries are analyzed for comparison, and these are the Nordic countries, and a group of OECD countries.

Implications for the hospitality industry are that foreign investors, coming from abroad to seek for investment opportunities, are not bothered with the level of the VAT. Also, investment is less likely to come from investors living in countries culturally different from the country in question. Findings indicate that the more foreign investors differ from the local people, in terms of culture, the less eager these foreign investors are in making investment. Moreover, investors coming from countries with schooling in the field tend to be more willing to arrive and look for investment opportunities in the country.

The hospitality industry in Iceland and Norway is found to be increasingly appealing as an investment opportunity to foreigners from larger economies, with investors from larger economies viewing the industry as a more beneficial opportunity, the more wealthy the country of their residence. Also, foreign investors, from less-populated countries, are more willing to invest in the industry. Combined effects of wealth and population indicate that investors from countries with high *income per capita* are more willing to invest in the local industry.

Results for OECD countries indicate that, different from the case of Iceland and Norway, investors are willing to enter into the industry regardless of the wealth of their home country, and those coming from more highly populated countries tend to be more eager to invest. Estimates indicate that the per capita GDP has positive effects on investment in Norway and Iceland, and the Nordic countries, however negative effects on investment in the OECD countries.

Furthermore, when the Nordic countries of Iceland, Norway, Denmark, Finland, and Sweden are analyzed, findings indicate they are similarly impacted by the factors previously mentioned.

## Acknowledgements

I wish to thank for helpful comments by Elisa Contryman Stead and Vilborg Júlíusdóttir. Valuable comments were also provided by Pétur Örn Sigurðsson at the Central Bank of Iceland



## Disclosure statement

No potential conflict of interest was reported by the author(s)

## Notes on contributor

Dr. Helga Kristjánsson Ph.D. completed an MBA from Boston College USA in 1995, and MS in economics from the Katholieke Universiteit Leuven Belgium in 2000. She obtained Ph.D. in economics at the University of Iceland in 2004, involving research at CAM and EPRU at Copenhagen University in 2001–2003. Helga has worked as an economist for The Icelandic Tourism Research Centre, and prior to that as a stock broker and in management consultancy. Helga's teaching experience includes classes in international economics, statistics and energy economics at the undergraduate and graduate levels. Her research covers publication of several papers in peer international journals. Her peer publications are within the framework of International Economics, applying the New Trade Theory and the New Economic Geography to explain international flows of investments and exports, including explanation of tourist flows as indirect exports in national accounts.

## References

- Aðalsteinsson, G. D., Guðmundsdóttir, S., & Guðlaugsson, Þ. (2011). Íslensk þjóðmenning í ljósi menningarvidda Hofstede. *Stjórnmal og stjórnsýsla*, 2(7), 353–368.
- Bergstrand, J. H. (1985). The gravity equation in international trade: Some microeconomic foundations and empirical evidence. *The Review of Economics and Statistics*, 67, 474–481.
- Calderon, C. A., Norman, L., & Servén, L. (2002). *Greenfield FDI vs. mergers and acquisitions: Does the distinction matter?* Working Paper. Central Bank of Chile.
- Carr, D. L., Markusen, J. R., & Maskus, K. E. (2001). Estimating the knowledge-capital model of the multinational enterprise. *American Economic Review*, 91, 693–708.
- Davies, R. B. (2008). Hunting high and low for vertical FDI. *Review of International Economics*, 16(2), 250–267.
- Davies, R. B., Ionascu, D., & Kristjánsson, H. (2008). Estimating the impact of time-invariant variables on FDI with fixed effects. *Review of World Economics*, 144(3), 381–407.
- Deardorff, A. (2012). *Deardorff's glossary of international economics*. Retrieved September 10, 2012, from <http://www-personal.umich.edu/~alandear/glossary/>
- Distance Calculator. (2012). *How far is it*. Retrieved April 12, 2012, from <http://www.indo.com/distance>
- Endo, K. (2006). Foreign direct investment in tourism—flows and volumes. *Tourism Management*, 27, 600–614.
- Hallgrímsson, B., Donnabhain, B. O., Walters, G. B., Cooper, D. M. L., Guðbjartsson, D., & Stefansson, K. (2004). Composition of the founding population of Iceland: Biological distance and morphological variation in early historic Atlantic Europe. *American Journal of Physical Anthropology*, 124(3), 257–274.
- Hanly, P. A. (2012). Measuring the economic contribution of the international association conference market: An Irish case study. *Tourism Management*, 33(6), 1574–1582.
- Helpman, E. (1984). A simple theory of international trade with multinational corporations. *Journal of Political Economy*, 92(3), 451–471.
- Helpman, E., & Krugman, P. (1985). *Market structure and foreign trade*. Cambridge, MA: MIT Press.
- Hofstede, G. (1980). *Culture's consequences*. New York: Sage.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. New York: Sage.

- Hofstede, G., & Bond, M. H. (1988). The Confucius connection: From cultural roots to economic growth. *Organizational Dynamics*, 16(4), 5–21.
- Hotrec. (2014). VAT table - Rates as of 1 January 2012. Retrieved July 4, 2014, from [http://www.hotrec.eu/Documents/Document/20120626121635-D-1211-291-DM-VAT\\_table\\_as\\_of\\_January\\_2012.pdf](http://www.hotrec.eu/Documents/Document/20120626121635-D-1211-291-DM-VAT_table_as_of_January_2012.pdf)
- Jacob, M., & Groizard, J. L. (2007). Technology transfer and multinationals: The case of Balearic hotel chains' investments in two developing economies. *Tourism Management*, 28, 976–992.
- Jensen, T. C., & Wanhill, S. (2002). Tourism's taxing times: Value added tax in Europe and Denmark. *Tourism Management*, 23(1), 67–79.
- Khadaroo, J., & Seetanah, B. (2008). The role of transport infrastructure in international tourism development: A gravity model approach. *Tourism Management*, 29, 831–840.
- Kristjánsdóttir, H. (2010). Foreign direct investment: The knowledge-capital model and a small country case. *Scottish Journal of Political Economy*, 57(5), 591–614.
- Kristjánsdóttir, H. (2012). Exports from a remote developed region: Analyzed by an inverse hyperbolic sine transformation of the gravity model. *The World Economy*, 35(7), 953–966.
- Krugman, P. (1991). Increasing returns and economic geography. *Journal of Political Economy*, 99, 183–199.
- Lane, P., & Milesi-Ferretti, G. M. (2003). *International financial integration*. CEPR Working Paper DP3769.
- Markusen, J. R. (2004). *Multinational firms and the theory of international trade*. Cambridge, MA: MIT Press.
- Markusen, J. R. (2013). Putting per-capita income back into trade theory. *Journal of International Economics*, 90(2), 255–265.
- Markusen, J. R., Venables, A. J., Eby-Konan, D., & Zhang, K. H. (1996). *A unified treatment of horizontal direct investment, vertical direct investment, and the pattern of trade in goods and services*. Working Paper No. 5696. Cambridge, MA: National Bureau of Economic Research.
- OECD. (2012). *Data*. Retrieved August 10, 2012, from <http://oecd.org>
- Skalpe, O. (2003). Hotels and restaurants - are the risks rewarded? Evidence from Norway. *Tourism Management*, 24(6), 623–634.
- World Bank (2014). Retrieved September 25, 2012, from <http://data.worldbank.org>