Chapter 8
Migration and Tourist Flows

Masood Gheasi, Peter Nijkamp, and Piet Rietveld

8.1 Introduction

Both immigration and tourism have increased significantly in recent decades. International migration in the world has increased from 154 million per year in 1990 to 175 million in 2000 (United Nation 2002). A common perception is that most migrants are moving from poor countries to rich countries, but in reality half of the migrations take place within the developing countries. One cause of this growth is the globalization process that enhanced mobility and improved accessibility to different places (Poot et al. 2008). In comparison, the growth in tourism was even stronger with 700 million worldwide tourist trips in 2000 as compared to 25 million in 1950 (Fischer 2007). The globalization process and the related tourism together spread further the information regarding economic prospects and tend to encourage people to move to places where they can find better economic opportunities. For example: prosperous places like London and Paris attract vast numbers of tourists, while some of these tourists become subsequently temporary or permanent migrants in the host country. So, tourism encourages migration. Conversely, migrants travel back to their home countries for short visits and their friends and relatives visit them in the host country. Therefore, migration boosts tourism. Thus, migration and tourism tend to become mutually interacting geographic phenomena whose importance is rapidly growing. Migration-related tourism seems to become an important segment of global tourism.

The visiting friends and relatives (VFR) market needs to be understood from a wider perspective of immigration and consumer trends. This can help us to figure out the size and importance of this subject and also forms the reason for further applied research. This can be illustrated by some UK figures. In the UK both the emigration of UK residents to abroad and the immigration of other countries'

M. Gheasi (✉) • P. Nijkamp • P. Rietveld
Department of Spatial Economics, VU University Amsterdam, De Boelelaan 1105, 1081 HV Amsterdam, The Netherlands
e-mail: mgheasi@feweb.vu.nl; p.nijkamp@vu.nl; prietveld@feweb.vu.nl

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Table 8.1 Inflow, outflow and balance of migration in the UK

Year	Inflow (000)	Outflow (000)	Balance (000)
2001	479	306	+173
2002	513	358	+154
2003	508	361	+147
2004	586	342	+244
2005	563	359	+204
2006	591	400	+191

Source: ONS: International migration

Table 8.2 The UK related VFR visits, duration and expenditure

Year	Total VFR visits (000)	Total nights (000)	Total expenditure (million £)
Inflows			
2001	5,898	65,183	2,273
2002	6,398	70,806	2,514
2003	6,978	76,439	2,643
2004	7,861	86,717	3,026
2005	8,687	94,393	3,218
2006	9,406	102,169	3,562
Outflows			
2001	7,727	115,566	2,512
2002	7,870	121,947	2,741
2003	8,527	124,747	2,910
2004	9,799	146,297	3,413
2005	10,648	161,049	3,748
2006	11,963	175,923	4,286

Source: Author's calculation based on ONS data

residents to the UK had an upward trend from 2001 to 2006. Table 8.1 shows the inflow, outflow and balance of immigration from 2001 to 2006.

The percentage of foreign residence in the UK as a percentage of total population increased from 4.0 in 2000 to 6.5 in 2007 (ONS: Population Trends 2007), given the UK a net gain of 2.5% in just over 7 years. As there is a very close relationship between immigration and VFR tourism, inbound and outbound VFR tourism has increased significantly during the same period in the UK. Table 8.2 demonstrates the inflows and outflows of VFR visits.

The UK Office for National Statistics (ONS) in its series of 'Travel Trends' publications indicated that the number of VFR visits accounted 19% of all visits to the UK in 1996, but in 2006 VFR visits accounted 29% of all visits to the UK (Travel Trends 2006).

The UK is one of few countries with a rather rich data system on tourism and migration. This chapter studies the relationship between migration and VFR inbound and outbound tourism to and from the UK. Furthermore, it tries to answer the question whether demographic characteristics have an influence on VFR tourism to and from the UK. It is not easy to analyze this question, because the stock of the UK residents overseas is expected to increase the outbound tourism, while

at the same time people who originated in the UK and who live in the countries being studied tend to return to their country of origin for short visits. This has also an impact on the flow of visitors to the UK. A panel from 2001 to 2006 with a cross section of 24 countries is used for the inbound flows and 18 countries are used for the outbound flows to study whether an increase in the number of immigrants from a particular country increases the number of VFR visits from that source to the UK and vice versa.

This chapter is organized as follows: Sect. 8.2 offers some definitions and a literature review on various studies that explore the relationship between migration and tourism and in particular visiting friends and relatives (VFR). Section 8.3 describes next the methodology and data used. In Sect. 8.4, we present the results and their policy implications, and, last but not least, Sect. 8.5 presents the conclusions.

8.2 Literature Review

Migration and tourism have been studied independently of one another up to the second half of the twentieth century (Bell and Ward 2000). This lack of attention to the interrelationships between migration and tourism may be due to the lack of appropriate data and the absence of a solid theoretical framework. The interrelationships between immigration and tourism are complicated and intertwined. The difficulty comes from the core of these two subjects since there is no unambiguous definition for both migration and tourism (Hall and Williams 2000). Migration is defined spatially "as movement across the boundary of an areal unit" (Boyle et al. 1998:34), and "it is generally agreed that there will be some permanence to a move described as migration" (Boyle et al. 1998:35). This definition, however, describes some characteristics of migration, but it does not provide a clear-cut definition, since it does neither cover internal migration which happens inside the areal unit nor temporary migration.[1] Meanwhile, the World Tourism Organization defines tourism as "all travel away from home which involves a stay of at least one night but not more than one year".

The above statement represents a lack of a resilient and transferable definition of tourism and migration. The absence of an operational definition may be due to the complicated and intertwined behavioral natures of both tourism and migration. However, the recent literature which studies the relationship between migration and tourism suggests a new conceptual nexus which exists between these two subjects in both theoretical and empirical studies (Boyne et al. 2002). Hall and Williams (2000) divide tourism – related migration into different migration flows:

- Production-led migration: this is also called labor migration which is generated by the tourist service.

[1]For more discussion on the definition of migration and tourism we refer to Hall and Williams (2000).

- Consumption-led migration: this includes second-home owners, seasonal migration, and permanent migration.

Based on the above two categories of migration flows, Hall and Williams (2000) present five categories of interrelationships between tourism and migration: tourism and labor migration, tourism and return migration, tourism and entrepreneurial migration, tourism and retirement, and second-home owners. Some of these five categories of tourism and migration presented by Hall and Williams (2000) have been studied more extensively; there are plenty of publications, for example, on retirement migration (Murphy 1981; Hall 1990; King et al. 1998, 2000; Rodriguez 2001; Haug et al. 2007; Oliver 2007), on second-home owners (Haldrup 2002; Hall and Muller 2004; Williams et al. 2004; Dijst et al. 2005), on tourism and labor migration (Lundmark 2006), and related to immigration and international tourism on the import demand for consumer goods (Fischer 2007).

The above conceptualization explores mainly tourism related to migration; this subject is predominantly present in VFR tourism. Boyne et al. (2002) identify this domain as migration-related tourism. This kind of tourism is a result of geographical expansion of family and friends' networks (capital relationship). The internationalization of different forms of migration induces families and friends to maintain contact with each other. The result is a growing body of research on VFR tourism. There is a host of literature on travels with the purpose of VFR (Dwyer et al. 1993; King 1994; Cohen and Harris 1998; Morrison et al. 1995; Poel et al. 2004). Some studies like McCann et al. (2009) investigated both theoretically and empirically the psychological cost of being away from friends and relatives. They indicated theoretically that the optimized travel frequency is inversely related to distance and transportation cost, and positively related to psychological cost. Dwyer et al. (1993) found that a 10% increase in migration in Australia will lead to an increase in the arrival of VFR tourists of 5.5%. They also suggested that immigration does not have an impact on other types of tourism. Seetaram (2008) found that the effect of immigration on tourism demand in Australia is relatively higher than that of growth in trade flows and population growth.

The interrelationship between migration and VFR tourism in the UK is an underdeveloped area in the field of tourism economics. A small number of studies has looked into some aspects of VFR tourism; for instance, Hay (1996) on domestic VFR tourism. Seaton and Palmer (1997) empirically illustrated a number of features for domestic VFR tourism in the UK and they also noted from the 5 years of the UK Tourism Survey that the VFR was heavily biased toward young, single people or, if older, couples with children under the age of 15 years. Cohen and Harris (1998) studied mainly VFR trips domestically. Their aim was to show the people's choice in selecting the mode of transportation between private and public modes. The Civil Aviation Authority (CAA) of the UK (2009) very recently studied the international VFR tourism. The CAA study finds that there is not a strong relationship between UK GDP and VFR trips; however, it shows that there is a link between UK GDP and migration.

Our study is different from the above-mentioned VFR studies in the UK, in particular, from the recent CAA study. Firstly, we have taken into account general VFR inbound and outbound flows without any particular indication of the mode of transportation, while this is not the case in the CAA study. Secondly, our study aims to reveal the relationship between migration and VFR tourism from both a migration and tourism perspective. This study aims to answer also the question whether migration has an impact on the duration of VFR visits, total VFR visits and total number of visits.

8.3 Data and Methodology

8.3.1 Introductory Remarks

A gravity model of trade will be used in estimating the relationship between immigration and international tourism to and from the UK. Tourism is essentially a form of international trade. The gravity model of international trade was developed by Tinbergen (1962) and Poyhonen (1963). This model takes into account that the amount of trade between two countries assumed to be increasing in their sizes (measured by their national incomes) and decreases in cost of transportation between them (measured by distance).

The present study covers inbound and outbound VFR tourism between the UK and various countries,[2] for which detailed and consistent annual data on VFR visits, stock of immigrants, population and GDP per capita are available for the period of 2001–2006. Consequently, we have in our database 6 time periods and 24 cross-sectional units for inbound. However, for the outbound tourism from the UK due to lack of data on the stock of UK immigrants the number of cross-section decreases to 18 cross-sectional units.

We will use a regression analysis to analyze the relationship VFR-migration. The models are estimated for VFR visits, duration of VFR trips and total number of visits. Annual data on VFR visits, VFR duration and total number of visits stem from the UK Office for National Statistics (ONS). International Passenger Survey (IPS) defines a visit as "those entering or leaving the United Kingdom more than once in the same period are counted on each visit. The count of visits relate to UK residents returning to this country and to overseas residents leaving it" (Travel Trends: Appendix C, 2001:195). This survey refers to number of visit not the number of visitors and they excluded people migrating (to or from the UK) or travelling as crew of aircraft, ships or trains from analyses. Table 8.3 shows the description of variables used in this empirical study.

The data have been collected from the series of Travel and Trends publications. This publication contains the main findings from the International Passenger Surveys (IPS) which collects information from the passengers to and from the UK. There are

[2]Most of these countries are OECD countries.

Table 8.3 Dependent and independent variables in the study

Dependent variables	
VFRv	Total number of friends and relatives visits (in thousands per year) to and from the UK
VFRd	The duration of visiting friends and relatives in thousands of nights per year
Tvisits	The total number of visits (in thousands per year) by nationality to and from the UK
Independent variables	
Migrant stock	The number of migrants (in thousands) from various countries living in the UK and the number of the UK residents living in these countries. The expected sign for this variable is > 0
Population	The total population (in thousands) of countries (base year $= 2000$). The expected sign for this variable is > 0
GDP/capita	Gross domestic product per capita in 1,000US$ (base year $= 2000$). The expected sign for this variable is > 0
Dis	Distance is measured in kilometers, between the UK capital and the capital of home country. The expected sign for this variable is < 0, but for duration per visit the expected sign is > 0
λ_t	Time dummy (2001–2006). 2001 is the base year for inbound and outbound models
Γ_i	Cross-section dummy for each country. Sweden is the reference country for inbound and outbound models

also specific data on the nationality of visitors who visited the UK. Besides, our study contains also data from other reliable sources, such as the Organization for Economic Co-operation and Development (OECD) database on the stock of immigrants and the World Bank database for GDP per capita, on total population of observed countries. Data on number of visitors to the UK were readily available from ONS. Finally, the stock of immigrants rather than immigrant flows is used in this empirical study, as it is plausible that the effect of immigration on VFR tourism is more prominent for those who immigrated before (stock of immigrants) than for the flow of immigrants.

8.3.2 Regression Model Specification

This study uses an OLS regression model (with and without dummy variables) with the variables as indicated in Table 8.3. These variables are used to estimate the effect of immigrant's links to VFR tourism. Gujarati (2003) indicates that the use of a panel methodology has advantages, as it uses more informative data and it accounts for unmeasured time-invariant determinants. Our balanced pooled panel (a pooling of times series and cross-sectional data) is estimated for 24 countries for inbound flows and 18 countries for outbound flows over 6 years from 2001 to 2006. The regression estimation is applied to gravity for tourism to and from the UK.

We have first formulated an OLS regression equation without time and country-specific dummies, because dummy (fixed-effect) variables preclude the use of

variables that do not vary over time (e.g., distance). Secondly, we used a dummy variable technique to test jointly time and cross-sectional effects. The equation for the OLS regression is the following:

$$\log(Y_{it}) = \beta_0 + \beta_1 \log(stock_{it}) + \beta_2 \log(pop_{it}) + \beta_3 \log\left(GDP/capita\right)_{it} + \beta_4 \log(dis_i) + \mu_{it} \quad (8.1)$$

where i refers to the origin country in the inbound flows and to the UK itself in the outbound flows. Y_{it} may have different meanings (as indicated in Table 8.3); $stock_{\mathrm{it}}$ is the immigration variable measured by the stock of immigrants from country i at time t, while (GDP/capita) it and pop_{it} are GDP per capita and population of country i at time t. In these ((GDP/capita) it and pop_{it}) variables i[3] refers to the origin country in inbound flows and to the destination country in outbound flows. Dis_i is the distance in thousands of kilometers between the UK and the relevant countries.

Next we take advantage of the panel data and estimate the model with fixed effects for country and time effects. The distance variable is omitted from the model for the reason indicated above. The regression equation including time effect and cross-section effect can be written as:

$$\log(Y_{it}) = \lambda_0 + \lambda_t + \Gamma_i + \beta_1 \log(stock_{it}) + \beta_2 \log(pop_{it}) + \beta_3 \log\left(GDP/capita\right)_{it} + \mu_{it} \quad (8.2)$$

where λ_t is a time-dummy and Γ_i is a cross-section-dummy. They are used to capture the time-effect and cross-section effect; all other variables are previously defined. The model is next regressed by using different dependent variables (see Table 8.3), while each model has immigration as an explanatory variable along with other explanatory variables that economic theory suggests as driving forces.

8.4 Model Results and Discussion

8.4.1 Results for VFR Visits

Our regression analysis uses two regression models. These refer to (8.1) and (8.2) respectively. The regression results[4] for the VFR visits show that the models explain 69 and 95% of the variation in the dependent variable for the inbound flows, respectively. These results are slightly higher for the outbound flows with

[3]We do not use the UK population and GDP/capita in the outbound flows, because these variables remain constant across countries in our panel data (pooling of times series and cross-sectional). Therefore it is not possible to measure their coefficients in the fixed effect.

[4]See Appendix 1 for inbound and Appendix 2 for outbound flows for the second equation results.

Table 8.4 Regression results for VFR visits

	Inbound		Outbound	
	Regression result			
Variables	Coefficient	T-statistic	Coefficient	T-statistic
Constant	−0.928	−0.96	1.943	1.43
Pop	0.221	4.19*	0.133	1.72***
Migrant stock	0.688	13.33*	0.459	8.43*
GDP/capita	0.320	6.17*	0.292	3.51*
Distance	−0.258	−6.79*	−0.370	−6.81*
	R-square: 0.69		R-square: 0.73	
	Obs. 131		Obs. 99	
	W-test Prob > F = 0.558		W-test Prob > F = 0.271	
	Regression result with time and country effects			
Constant	4.248	0.96	2.791	1.42
Pop	0.011	0.10	0.098	0.83
Migrant stock	0.368	2.88**	0.370	3.28*
GDP/capita	−0.161	−0.38	0.005	0.05
Time effect	Yes		Yes	
Country effect	Yes		Yes	
	R-square: 0.95		R-square: 0.98	
	Obs. 131		Obs. 99	
	W-test Prob > F = 0.638		W-test Prob > F = 0.498	

*Significant at 1%
**Significant at 5%
***Significant at 10%

73 and 98% respectively. In addition, our chapter uses the Wooldridge test to see whether there is serial correlation in the regression. The Wooldridge test shown at the bottom of each regression model is higher than the test level $\alpha = 0.05$ for each model, and therefore the results reject the presence of serial correlation. Table 8.4 represents a summary of the empirical results for the inbound and outbound VFR visits.

The estimated coefficients have the expected signs in the first equation. The stock of immigrant is positively related to VFR visits and is highly significant at 1% in the first equation for both inbound and outbound flows. This indicates that as the stock of immigrants increases at 1%, the UK experiences a 0.69% increase in VFR tourist flows while the outbound flows of VFR from the UK increases at 0.46%, respectively. Meanwhile, the migrant stock is also significant at 5 and 1% and positively related to the dependent variable in the lower part of Table 8.4[5] for both inbound and outbound flow of tourists, respectively. This confirms the robustness of our result in the link between migration and VFR flows.[6]

[5]Adding dummy variables decreased degree of freedom and captured all other effects in the second equation. Therefore, GDP/capita and population are statistically insignificant in both directions.

[6]The low outcomes for this elasticity in the second estimation means that part of the effect of migrant stock is already incorporated in the country dummy coefficients.

Population is also significant at a 1 and 10% level in the first equation inbound and outbound VFR flows, respectively. It is positively related to the dependent variable. GDP per capita is significant at 1% level in the first equation for both inbound and outbound VFR flows. It indicates that with 1% increase in GDP/capita of original country, the UK receives 0.32% increase in VFR visits. The result for outbound VFR flows indicates that as GDP/capita of destination countries increases by 1% the UK residents' VFR visits increases by 0.29%. This result confirms the previous empirical findings that income is an important determinant of tourism. Meanwhile, the CAA (2009) report also finds that GDP/capita is significant and positively related to inbound and outbound VFR visits.

The geographical distance between the UK and respective countries, reduces both inbound and outbound VFR flows. Distance is significant at a 1% level in the first equation in both directions of VFR visits. The regression indicates that an increase in distance by 1% will decrease the inbound VFR visits by 0.26% and outbound VFR visits by 0.37%, respectively. The higher value of the distance parameter for the outbound VFR visits suggests that the UK residents tend to travel shorter distances than their counterparts.

8.4.2 Results for the Duration of VFR

The regression results[7] for the duration of VFR visits show that 65 and 92% of the variation in the dependent variable for the inbound is explained by our regression estimates. These results are higher for the outbound flows with 75 and 95% respectively. The Wooldridge test shown at the bottom of each regression model is higher than the test level $\alpha = 0.05$ for each model, and therefore we may reject the hypothesis of serial correlation.

The estimated coefficients have the expected signs in the first equation. Distance is positively related to the dependent variable as it was expected in both inbound and outbound duration of VFR visits. However, this variable is not significant for the outbound duration of VFR visits. The explanation is that the total duration of VFR trips is the product of the total number of VFR trips and the duration per trip; when distances are longer, the duration of the trips is also longer, and this compensates for the smaller number of trips. Moreover, in the inbound duration of VFR visit we can see from the cross-section coefficient that countries like Australia, Canada and USA which have long distance with the UK have high coefficients and they are statistically significant at 1%. Table 8.5 offers a summary of models for inbound and outbound flows related to VFR duration.

The regression result for the stock of migrants is significant at a 1% level in both inbound and outbound duration of VFR visits in the first equation, respectively. The results indicate that a 1% increase in the stock of migration increases the inbound duration of VFR by 0.80% and outbound VFR duration by 0.44%, respectively.

[7]See Appendix 1 for inbound and Appendix 2 for outbound flows for the second equation results.

Table 8.5 Regression results for duration of VFR visits

	Inbound		Outbound	
	Regression result			
Variables	Coefficient	T-statistic	Coefficient	T-statistic
Constant	−0.241	−0.19	0.519	0.36
Pop	0.207	3.82*	0.215	2.90**
Migrant stock	0.795	13.30*	0.435	7.87*
GDP/capita	0.166	2.48***	0.317	3.44*
Distance	0.124	2.91*	0.017	0.32
	R-square: 0.65		R-square: 0.75	
	Obs. 131		Obs. 99	
	W-test Prob > F = 0.723		W-test Prob > F = 0.084	
	Regression result with time and country effects			
Constant	6.336	1.08	1.938	0.51
Pop	−0.069	−0.44	0.258	1.13
Migrant stock	0.429	2.33***	0.261	1.19
GDP/capita	−0.201	−0.33	0.207	1.09
Time effect	Yes		Yes	
Country effect	Yes		Yes	
	R-square: 0.92		R-square : 0.95	
	Obs. 131		Obs. 99	
	W-test Prob > F = 0.470		W-test Prob > F = 0.109	

*Significant at 1%
**Significant at 5%
***Significant at 10%

Meanwhile, there is a positive relationship between population and GDP/capita with the duration of visits. They are both positively related to the dependent variable and they are significant. This shows that increase in population and GDP/capita tends to positively affect the duration of VFR visits.

8.4.3 Results for Total Number of Visits

Table 8.6 presents results[8] for the total number of visits, entering and leaving the UK, thus including VFR as one of the components. The share of VFR in the total number of inbound flows from 2001 to 2006 is 27.9% and for outbound flows it is 14.9%. The regression shows that 70 and 92% of the variation in the dependent variable for the inbound flows is explained by our models and for the outbound flows it is 39 and 98%, respectively. The Wooldridge test is higher than the (0.05) significance level for all models, and therefore we may again reject the serial correlation.

[8]See Appendix 1 for inbound and Appendix 2 for outbound flows for the second equation results.

Table 8.6 Regression results for total number of visits

	Inbound		Outbound	
	Regression result			
Variables	Coefficient	T-statistic	Coefficient	T-statistic
Constant	−2.546	−2.31***	5.981	2.66**
Pop	0.294	5.76*	0.093	0.73
Migrant stock	0.658	11.77*	0.460	4.62*
GDP/capita	0.534	8.90*	0.192	1.35
Distance	−0.254	−6.74*	−0.799	−5.17*
	R-square: 0.70		R-square: 0.39	
	Obs. 136		Obs. 99	
	W-test Prob > F = 0.305		W-test Prob > F = 0.060	
	Regression result with time and country effects			
Constant	7.975	1.39	5.906	4.59*
Pop	−0.023	−0.16	−0.013	−0.17
Migrant stock	0.300	2.08***	0.069	0.93
GDP/capita	−0.362	−0.65	−0.041	−0.64
Time effect	Yes		Yes	
Country effect	Yes		Yes	
	R-square: 0.92		R-square: 0.98	
	Obs. 136		Obs. 99	
	W-test Prob > F = 0.324		W-test Prob > F = 0.162	

*Significant at 1%
**Significant at 5%
***Significant at 10%

All variables in the first equation appear to have the expected signs for the parameters in both directions of flows. The stock of migrants is significant at a 1% level in the first equation in inbound and outbound flow of visits, respectively. These results means that if the stocks of migrants rise by 1%, short-term inflows will increase by 0.66% and outflow increases by 0.46%, respectively. The stock of migrants in the second equation in inbound flows became smaller. This is similar to the case in Table 8.4 we find that part of the effect of migrant stock may be incorporated in the country dummy coefficients. This result confirms that immigration is a crucial determinant of short visits in both inbound and outbound trips. Meanwhile, the population has a positive sign and is also significant at a 1% in the inbound flows, indicating that ceteris paribus higher values for this variable imply a higher probability of short term visits from original countries to the UK.

The estimated coefficient for the distance is significant at a 1% and this indicates that a 1% increase in distance decreases the inbound short term visits by 0.25%. The impact of distance for the outbound of short-term visits is higher compared to the inbound visits. The coefficient indicates that a 1% increase in distance decreases the outflow of short-term visits by 0.64%. Meanwhile GDP per capita is significant in the first equation in inbound. This means that an increase in

GDP per capita of origin countries, ceteris paribus increases the inbound flows of short visits.

The cross-section effect shows that the UK residents tend not to travel a lot to Scandinavian countries, because the coefficient of Finland and Denmark has negative sign and Norway is statistically not significant.

The comparison between the regression result from VFR visits and the total number of visits shows that the migrant stock is significant and positively related to the dependent variables. In addition, the distance is also significant and negatively related to the dependent variables.

8.5 Conclusion

In this chapter we have analyzed the relationship between VFR visits and migration by using panel data from the UK. The aim of this chapter was to answer the question whether immigration has an impact on the increase of VFR tourism (inbound and outbound) to and from the UK. The regression supports the hypothesis that there is a strong relationship between stock of migrants and VFR tourism. Our results confirm the findings from previous studies (Dwyer et al. 1993; Seetaram 2008; CAA 2009) which have also shown that there is a clear relationship between migration and VFR tourism. The empirical result from the present chapter shows that as the stock of immigrants increase from a certain country ceteris paribus the number of VFR visits from that particular country rises. The regression also points out that GDP per capita, which determines the ability to travel, has a positive impact on VFR visits. Next, the distance is, as expected, negatively related to VFR visits and the total number of visits and positively related to the duration of VFR visits.

This chapter has presented part of the broad relationship between migration and tourism. There are many other interesting topics such as those presented by Williams and Hall (2002) that need further research. One of the primary challenges in studying empirically the relationship between tourism and migration is the lack of an extensive consistent database on these two subjects. Very few studies have focused empirically on the link between migration and international tourism. This prompts significant challenges in empirical studies. Another big challenge is of course building a database. There are unfortunately, only a few countries which traditionally focus on producing data on foreign residents. This refers to a person born abroad and who retained the nationality of their country of origin, but it should also address the second and the third generations born in the host country, like European Union members. Some other countries like Australia, Canada and the US, focus on producing data on foreign-born population which refers to the first-generation migrants, and may consist of both foreign and national citizens. This difference in collection of data can produce different numbers and certainly has consequences for empirical results.

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Appendix 1: Complete Report of (8.2) for Inbound Flows[9]

	VFR visit	Duration of VFR	Total visit
Constant	4.248 (0.96)	6.834 (1.08)	7.975 (1.39)
Pop	0.011 (0.10)	−0.069 (−0.44)	−0.023 (−0.16)
Migrant stock	0.368 (2.88)**	0.429 (2.33)***	0.300 (2.08)***
GDP/capita	−0.161 (−0.38)	−0.201 (−0.33)	−0.362 (−0.65)
Dum02	−0.115 (−1.12)	−0.204 (−1.37)	−0.083 (−0.63)
Dum03	0.170 (1.09)	0.122 (0.55)	0.252 (1.27)
Dum04	0.260 (1.29)	0.237 (0.82)	0.398 (1.55)
Dum05	0.335 (1.47)	0.282 (0.86)	0.529 (1.81)***
Dum06	0.425 (1.71)***	0.373 (1.04)	0.607 (1.89)***
Australia	−0.161 (−0.38)	2.618 (7.84)*	0.784 (2.56)***
Belgium	1.274 (5.49)*	1.181 (3.37)*	1.350 (4.43)*
Canada	1.195 (4.91)*	2.751 (6.81)*	1.042 (2.84)**
China	−0.559 (−0.39)	1.544 (0.74)	−1.364 (−0.74)
Denmark	0.958 (2.98)*	1.355 (2.93)*	1.044 (2.70)**
Finland	0.109 (0.23)	0.757 (1.12)	0.253 (0.46)
France	2.141 (8.60)*	2.432 (6.78)*	2.221 (6.73)*
Germany	2.002 (6.66)*	2.526 (5.84)*	2.155 (5.41)*
Greece	0.450 (1.16)	1.280 (2.29)***	−0.067 (−0.13)
India	0.152 (0.09)	2.143 (0.83)	−0.731 (−0.32)
Ireland	2.305 (8.47)*	2.293 (5.85)*	2.316 (6.84)*
Italy	0.886 (3.04)*	1.551 (3.70)*	1.248 (3.24)*
Japan	−0.057 (−0.11)	1.028 (1.34)	0.659 (0.99)
Luxembourg	−1.362 (−0.80)	−1.369 (−0.56)	−3.712 (−1.66)***
Netherlands	1.689 (7.91)*	1.859 (6.05)*	1.804 (6.53)*
New Zealand	−0.149 (−0.50)	1.701 (3.94)*	−0.603 (−1.53)
Pakistan	0.418 (0.24)	2.658 (1.06)	−1.191 (−0.53)
Poland	0.831 (1.10)	1.768 (1.62)	−0.124 (−0.13)
Portugal	−0.668 (−1.68)***	0.133 (0.23)	−0.821 (−1.59)
South Africa	−0.054 (−0.06)	1.571 (1.14)	−0.296 (−0.24)
Spain	1.392 (4.30)*	2.210 (4.74)*	0.905 (2.14)***
Turkey	−0.320 (−0.38)	1.223 (1.00)	0.931 (0.84)
USA	2.174 (5.10)*	3.137 (5.11)*	2.423 (4.29)*
R2	0.95	0.92	0.93
Obs	131	131	136

T-statistics are in parentheses
*Significant at 1%
**Significant at 5%
***Significant at 10%

[9]Sweden is the base country and 2001 is the base year in inbound flows.

Appendix 2: Complete Report of (8.2) for Outbound Flows[10]

	VFR visit	Duration of VFR	Total visit
Constant	2.791 (1.42)	1.938 (0.51)	5.906 (4.59)*
Pop	0.098 (0.83)	0.258 (1.13)	−0.013 (−0.17)
Migrant stock	0.370 (3.28)*	0.261 (1.19)	0.069 (0.93)
GDP/capita	0.005 (0.05)	0.207 (1.09)	−0.042 (−0.64)
Dum02	−0.054 (−0.93)	−0.135 (−1.20)	0.028 (0.74)
Dum03	0.023 (0.37)	−0.249 (−2.02)***	0.075 (1.79)***
Dum04	0.068 (0.93)	−0.255 (−1.81)***	0.118 (2.46)***
Dum05	0.126 (1.79)***	−0.160 (−1.18)	0.160 (3.50)*
Dum06	0.207 (2.56)***	−0.047 (−0.30)	0.191 (3.62)*
Australia	−0.942 (−1.91)***	0.761 (0.80)	0.268 (0.83)
Belgium	0.237 (2.07)***	−0.279 (−1.26)	1.723 (23.04)*
Czch Rep	−0.022 (−0.07)	0.396 (0.60)	0.973 (4.39)*
Denmark	−0.179 (−1.68)***	−0.327 (−1.59)	−0.124 (−1.78)***
Finland	−0.701 (−3.21)*	−0.501 (−1.19)	−0.677 (−4.74)*
Germany	0.646 (1.98)***	0.385 (0.61)	1.821 (8.53)*
Greece	0.227 (1.56)	0.898 (3.21)*	2.253 (23.81)*
Hungary	0.134 (0.39)	0.290 (0.43)	0.049 (0.21)
Italy	0.797 (3.62)*	0.656 (1.54)	2.164 (15.06)*
Japan	−1.416 (−4.76)*	−0.546 (−0.95)	−1.276 (−6.56)*
Luxembourg	−1.736 (−5.47)*	−1.693 (−2.76)**	−1.388 (−6.69)*
Netherlands	0.598 (3.71)*	0.227 (0.73)	1.833 (17.42)*
Norway	−0.446 (−3.44)*	−0.386 (−1.54)	0.041 (0.48)
Portugal	0.027 (0.23)	0.508 (2.22)***	1.739 (22.48)*
Spain	0.778 (2.40)***	1.060 (1.69)***	3.639 (17.18)*
Switzerland	0.140 (1.22)	−0.051 (−0.23)	1.102 (14.64)*
USA	−0.015 (−0.03)	0.462 (0.42)	2.343 (6.25)*
R2	0.98	0.95	0.99
Obs	99	99	99

T-statistics are in parentheses
*Significant at 1%
**Significant at 5%
***Significant at 10%

[10]Sweden is the base country and 2001 is the base year in outbound flows.

References

Bell M, Ward G (2000) Comparing temporary mobility with permanent migration. J Tourism Geogr 2:87–107
Boyle OJ, Halfacree KH, Robinson V (1998) Exploring contemporary migration. Pearson Education Limited, Harlow
Boyne S, Carswell F, Hall D (2002) Reconceptualising VFR tourism: friends, relatives and migration in a domestic context. In: Hall CM, Williams AM (eds) Tourism and migration: new relationship between production and consumption. Kluwer Academic, Dordrecht, pp 241–256
Civil Aviation Authority (2009) International relations: the growth in air travel to visit friends or relatives. The Stationery Office, London. http://www.caa.co.uk/docs/33/CAP787.pdf
Cohen AJ, Harris NG (1998) Mode choice for VFR journeys. J Transp Geogr 6:43–51
Dijst M, Lanzendorf M, Barendregt A, Smit L (2005) Second homes in Germany and the Netherlands: ownership and travel impact explained. Tijdschr Econ Soc Geogr 96:139–152
Dwyer LI, Burnley I, Murphy P, Forsyth P (1993) The impact of migration on tourism flows to and from Australia. Centre for Economic Policy Discussion Paper No.282, Australian National University, Canberra
Fischer C (2007) The influence of immigration and international tourism on the import demand for consumer goods – theoretical model. In: Matias A, Nijkamp P, Neto P (eds) Advances in modern tourism research: economic perspectives. Physika, Heidelberg, pp 37–49
Gujarati ND (2003) Basic econometrics, 4th edn. McGraw-Hill, New York
Haldrup M (2002) Laid-back mobilities: second-home holidays in time and space. Tourism Geogr 6:434–454
Hall CM (1990) From cottage to condominiums: tourism, recreation and regional development in northern New South Wales. In: Walmsely DJ (ed) Change and adjustment in northern New South Wales. University of New England, Armidale, pp 85–99
Hall CM, Muller DK (2004) Introduction: second homes, curse or blessing? Revisited. In: Hall CM, Muller DK (eds) Tourism, mobility and second home: between elite landscape and common ground. Channel View Publications, Clevedon, pp 3–14
Hall CM, Williams AM (2000) Tourism and migration: a new relationship between production and consumption. Tourism Geogr 2:5–27
Haug B, Dann GMS, Mehemtoglu M (2007) Little Norway in Spain from tourism to migration. Ann Tourism Res 34:202–222
Hay B (1996) An insight into the European experience: a case study on domestic VFR tourism within the UK. In: Yaman HR (ed) VFR tourism: issues and implications. Victoria University of Technology, Melbourne, pp 51–65
King B (1994) What is ethnic tourism? An Australian perspective. Tourism Manage 15:173–176
King R, Warnes AM, Williams AM (1998) International retirement migration in Europe. Int J Popul Geogr 4:91–112
King R, Warnes AM, Williams AM (2000) Sunset lives: British retirement migration to the Mediterranean. Berg International Publishers, Oxford
Lundmark L (2006) Mobility, migration and seasonal tourism employment: evidence from Swedish mountain municipalities. Scand J Hospit Tourism 6:197–213
McCann P, Poot J, Sanderson L (2009) Migration, relationship capital and international travel: theory and evidence. J Econ Geogr 10:361–387
Morrison AM, Hsieh S, O'Leary JT (1995) Segmenting the visiting friends and relatives market by holiday activity participation. J Tourism Stud 6:48–63
Murphy PA (1981) Patterns of coastal retirement migration. In: Howe A (ed) Towards an older Australia: reading in social gerontology. University of Queensland, Queensland, pp 301–314
Office for National Statistics (ONS) (2001–2006) Travel trends. HMSO, London
Office for National Statistics (ONS) (2007) Population trends. HMSO, London
Oliver C (2007) Retirement migration: paradoxes of ageing. Routledge, New York

Poel P, Masurel E, Nijkamp P (2004) The importance of friends and relations in tourist behavior: a case study of heterogeneity in Surinam. In: Giaoutzi M, Nijkamp P (eds) Tourism and regional development: new pathways. Ashgate, Aldershot, pp 219–238

Poot J, Waldorf B, van Wissen L (eds) (2008) Migration and human capital. Edward Elgar, Cheltenham

Poyhonen P (1963) A tentative model for the volume of trade between countries. Weltwirtsch Arch 90:93–99

Rodriguez V (2001) Tourism as a recruiting post for retirement migration. J Tourism Geogr 3:52–63

Seaton AV, Palmer C (1997) Understanding VFR tourism behaviour: the first five years of the United Kingdom tourism survey. Tourism Manage 18:345–355

Seetaram N (2008) Immigration and tourism demand: evidence from Australia. Unpublished paper presented at the CAUTHE 2008 conference, Sydney, Feb 2008

Tinbergen J (1962) Shaping the world economy: suggestions for an international economic policy. The Twentieth Century Fund, New York

United Nations (2002) International migration report. Department of Economic and Social Affairs ST/ESA/SER.A/220, New York

Williams AM, Hall CM (2002) Tourism and migration: new relationship between production and consumption. Kluwer, Dordrecht

Williams AM, King R, Warnes T (2004) British second homes in southern Europe: shifting nodes in the scapes and flows of migration and tourism. In: Hall CM, Muller DK (eds) Tourism, mobility and second homes. Between elite landscape and common ground. Channel View Publications, Clevedon, pp 97–112