



Ministry of Infrastructure and the
Environment

Determinants of propensity to fly and airport choice

Study based on KiM airport choice survey

KiM | Netherlands Institute for Transport Policy Analysis



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Summary

Flying has become a routine way of travelling, according to surveys KiM has conducted in the Netherlands, Belgium, and the German regions bordering the Netherlands. Only 8% of the survey respondents stated that they had never flown, and only 5% said they never will fly. The primary reasons given for not flying were fear of flying and cost. Young people fly more frequently than older people, but the propensity to fly only decreases considerably for those aged 75 and above. Women fly as frequently as men, except when it involves business-related travel. People with the highest education levels (and incomes) are the most frequent fliers.

The vast majority of people in the Netherlands have flown from Amsterdam-Schiphol (94%), followed by Eindhoven (28%) and Rotterdam The Hague Airport (25%), and three foreign airports: Düsseldorf (17%), Brussels (16%) and Weeze (12%). These foreign airports were primarily used by residents of South and East Netherlands, which indicates that travel distance is a key factor in airport choice. Of the respondents in Belgium, 22% have used Schiphol as a departure airport. Eindhoven Airport and Maastricht Aachen Airport were used by residents of the neighbouring Belgian/Flemish provinces. Germans however rarely fly from airports situated in the Netherlands or Belgium; moreover, Germans only occasionally used Amsterdam-Schiphol. And only residents of the Aachen region use Maastricht Aachen Airport as a departure airport.

The surveys revealed that airport choice is related to price, the flights offered, and the travel distance to the airport. This corresponds with the findings in the literature; however, the KiM surveys revealed two factors that were not previously cited in the literature: the effect of borders and the effect of language differences. Both the Dutch and Belgians use airports situated in neighbouring countries, although less frequently than could be expected based solely on proximity. The border serves as the greatest deterrent to groups with the lowest education levels. In Belgium, language differences were also found to affect airport choice.

1

Introduction

Welcome to the world of Peter Stuyvesant! In this advertising campaign¹ from the 1970s and 80s, images of beautiful women and fast airplanes summon a sense of adventure. And you too could join the world of the 'happy few' by smoking Peter Stuyvesant cigarettes. Cigarette advertising campaigns are of course no longer permitted. But is flying still so adventurous? Do we Dutch now fly just as easily from our own regional airports or from airports in Belgium or Germany? This background document focuses on our propensity to fly and the factors that determine airport choice.

Background

Government policy states that *“air travel must be accessible to every Dutch person: both for the international business community and for the Dutch business traveller, as well as for international tourists and Dutch holidaymakers”* (V&W/VRM, 2009: 53). That the Netherlands remains internationally accessible by air is a prerequisite for an innovative, competitive and entrepreneurial economy.

This governing principle demands that space be available for developing Dutch airports. In addition to Amsterdam-Schiphol, the airports that fall under the national government's authority and have a function in optimising international accessibility are: Groningen Airport Eelde, Maastricht Aachen Airport, Rotterdam The Hague Airport, Lelystad, Twente, and Eindhoven Airport, which has a dual military/civilian use. One objective of the aviation policy memorandum (IenM, 2009) is to increase collaboration between Dutch airports (specifically Amsterdam-Schiphol and the other airports of national importance). The government wants to achieve this by having the airports evolve together into a system of collaborating airports that will maintain and strengthen the quality of the international network.

Research questions

To achieve this objective, insights are needed into the roles that regional airports play in the supply and demand market, and thereby of the behaviour of airline flight consumers. Much is known about the behaviour of the airline consumers who use Amsterdam-Schiphol. Each year the Amsterdam-Schiphol survey questions 100,000 travellers; however, more information and insights are required about the behaviour of consumers with regard to regional airports, particularly those situated in border regions. We also know very little about the use of airports in foreign countries. What effects do (country) borders have? To what extent do the so-called *catchment areas* – the areas from where passengers use ground transport to travel to and from airports – extend into a neighbouring country? And do language differences play a role in this? We also do not know if some people have never flown and will never fly, and, if this is the case, what segment of the population this pertains to. Moreover, a further gap in our available knowledge pertains to the extent to which the availability of flight connections influences demand.

To answer these knowledge questions, the KiM Netherlands Institute for Transport Policy Analysis conducted surveys in the Netherlands and neighbouring countries. Our analyses were supported by passenger travel statistical information from Statistics Netherlands (SN) and the results of the Amsterdam-Schiphol survey.

¹ <https://www.youtube.com/watch?v=mWODcWX4d1E>

Objective

The research objective was to gain insights into the propensity to fly of Dutch people and our neighbours just across the border, and the factors that play a role in determining this. With the insights gained, KiM strives to assist the national government in achieving its objective of fostering closer collaboration between Dutch airports.

Composition of the background document

This paper commences with a description of the conducted research (Chapter 2). In this chapter we describe the sample size and various general characteristics of the composed file.

In Chapter 3 we present the survey results as they pertain to the propensity to fly of Dutch people and our neighbours just across the border. From this we draw various conclusions about the differences between countries and the reasons that people gave to not (want to) fly.

Chapter 4 focuses on airport choice, as well the travellers' assessment criteria. We analyse the reasons why the survey respondents chose a particular airport for their most recent flight, with special attention devoted to the affect that the border had on their choice of airport, given that many people find it important that the airport is situated in their own country.

2

Research Approach

In order to answer the research questions posed in this study, KiM conducted a survey in the Netherlands and neighbouring countries in 2013. This research largely adhered to the same set of questions featured in the survey that KiM conducted in 2010 as part of research into the effects of the airline passenger tax (Gordijn & Kolkman, 2011).

The survey consisted of questions about:

- the propensity to fly, including reasons for deciding not to fly;
- the airports that the respondents consider for a flight, the airports that they have ever used, and the airports they have used most frequently;
- the reason for flying, the mode of transport for travelling to the airport, and the other airports they considered, pertaining to their most recent flight;
- the factors that determined their airport choice, including, as a specific factor, the importance they attached to an airport being located in their own country;
- general characteristics of the respondents, including gender, age, domestic situation, education level and car ownership rates.

The surveys were conducted in 2013 by means of internet panels in Belgium, the Netherlands, and the German federal states of North Rhine-Westphalia (NRW) and Lower Saxony (LS), which border the Netherlands.

Number of respondents

Table 2.1 shows the number of respondents per country who completed the survey and how many of them could answer the questions about airport choice. In 2013, the respondents who had never flown previously were also asked if they would ever fly in future. Of those who stated (decisively) that they would never fly, no other questions were asked of them pertaining to airport choice factors.

Table 2.1 Number of respondents in the KiM survey about airport choice.
Source: KiM-survey 2013.

	Netherlands	Belgium	North Rhine -Westphalia	Lower Saxony	Total
Number of respondents	2,039	1,555	1,048	500	5,142
Number of respondents asked about their airport choices	1,981	1,477	951	474	4,883

Representativeness

The I&O-Research agency used internet panels to conduct the survey. Internet use in the Netherlands among the age group up to 65 years is rather common. People older than 65 use the internet less frequently, although internet use among this group is rising sharply (SN, 2013). In 2012 – the most recent year for which European Union (EU) figures are available – some 74% of Dutch people aged 65 to 75 years old stated that they had used the internet, a figure which is nearly double that of the EU average. In this, the Netherlands, together with Luxemburg, Sweden and Denmark, is a leader in the use of the internet by senior citizens. In other West-European countries, such as Germany, Belgium and France, far fewer senior citizens have ever used the internet.

The composition of the survey file was compared with population figures, according to gender and age. The samples moreover were also compared to each other according to domestic situation and education level.

The Dutch I&O research panel was seemingly the most ‘mature’ panel, as the panels in other countries appeared to be still under development. In Belgium, the 65+ age group was largely absent from the data, and university graduates were overrepresented. In Germany, the older demographic was also rather underrepresented. Moreover, the German panel contained more single people, the Flemish panel more young people living at home with their parents, and the Dutch panel more couples without children. While this does not necessarily impact all the parameters associated with airport choices, it does matter for propensity to fly, for example, which is related to age and education level.

Because propensity to fly is likely to be also correlated to internet use, the survey’s findings will show an overestimation of the propensity to fly, particularly among the older age groups. In interpreting the differences in the survey results among the various countries, the identified differences in representation are taken into account.

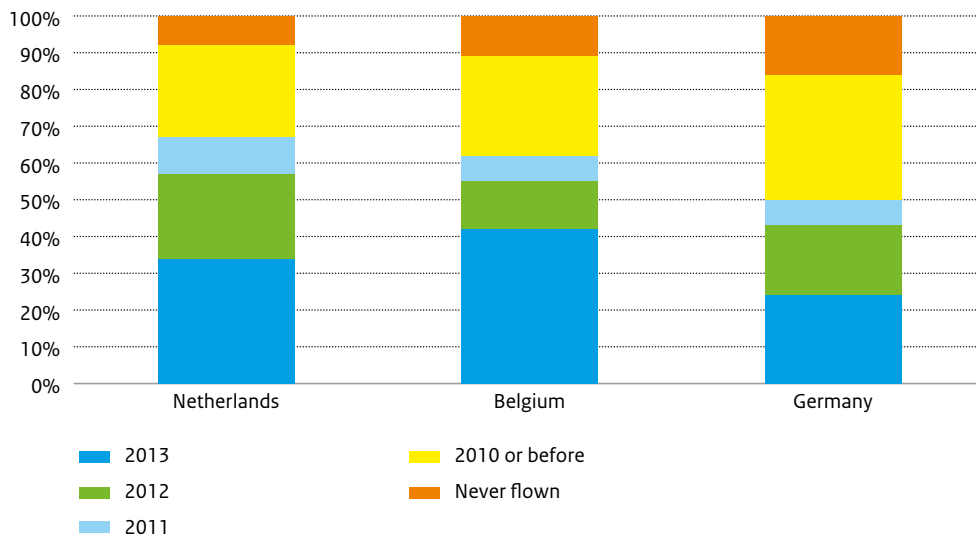
3

Propensity to fly

In the Netherlands, 8% of the respondents has never flown. In Germany², the figure is double that, while in Belgium the figure is somewhere between the two.

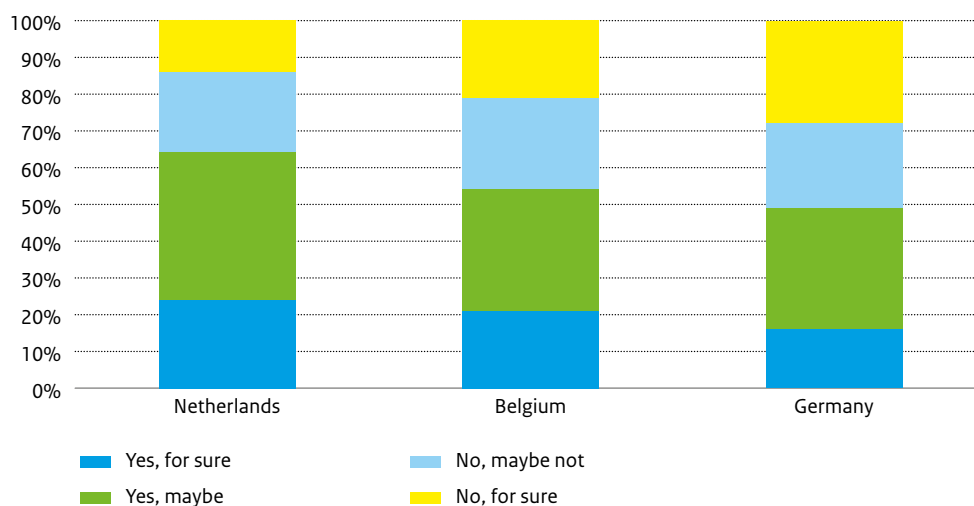
Approximately half of the people who have never flown believe that they will fly at some point in future. The average percentage of those who believe they will never fly is 5%; however, in the Netherlands, that percentage is significantly lower (3%), while in the German state of North Rhine-Westphalia it is markedly higher (9%). In the Netherlands, flying has become a routine way of travelling, or at least among internet users.

Figure 3.1 The year in which people flew for the last time. Source: Source: KiM-survey (2013).



² Germany, in this context, is understood to mean only the federal states of North Rhine-Westphalia and Lower Saxony

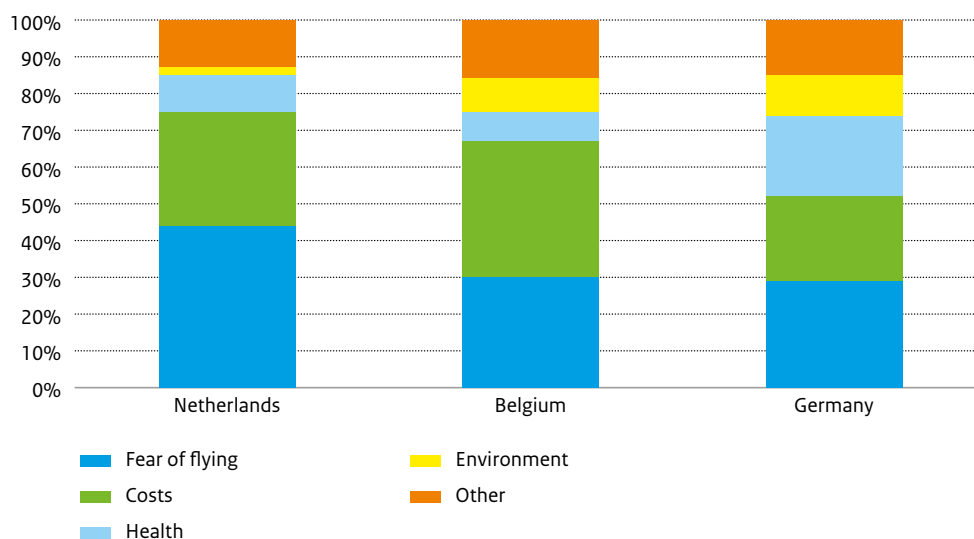
Figure 3.2 Have never flown. But in the future?
 Source: KiM-survey (2013).



Reasons for not flying

Fear of flying was the most cited reason for not flying, while the second most common reason was the cost of flying. In the German panel, health problems were also relatively often cited as a reason for not flying, particularly among senior citizens.

Figure 3.3 Reasons for not flying.
 Source: KiM-survey (2013).

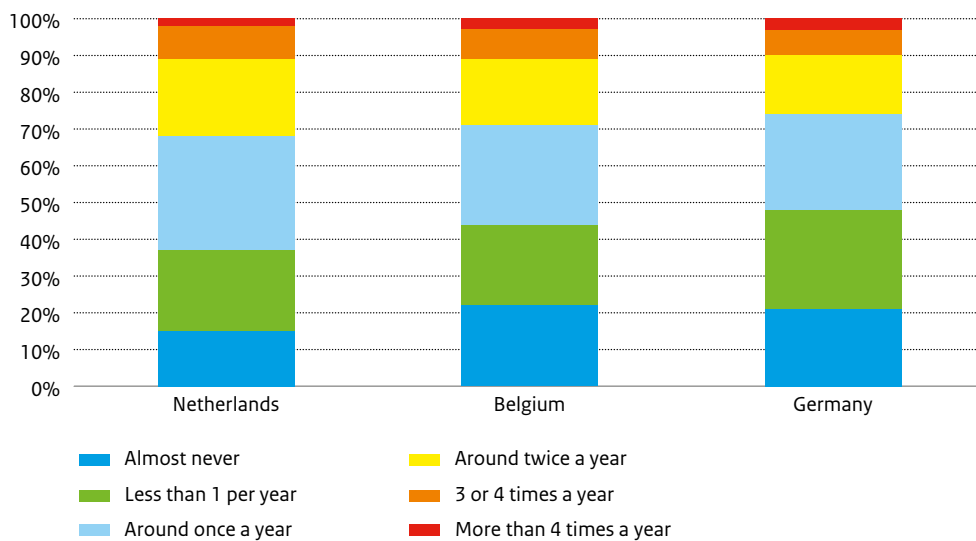


Number of flight per year

The majority of respondents stated that they fly approximately once per year. If, from the given answers, a weighted number is to be determined³, then we can state that Dutch people fly 1.24 times per year, Belgians 1.17 times per year, and Germans (from the neighbouring federal states) 1.1 times per year. This once again reveals that Dutch people fly more frequently, and Germans less frequently, than the average.

Figure 3.4 Number of flights per year.

Source: KiM-survey (2013).



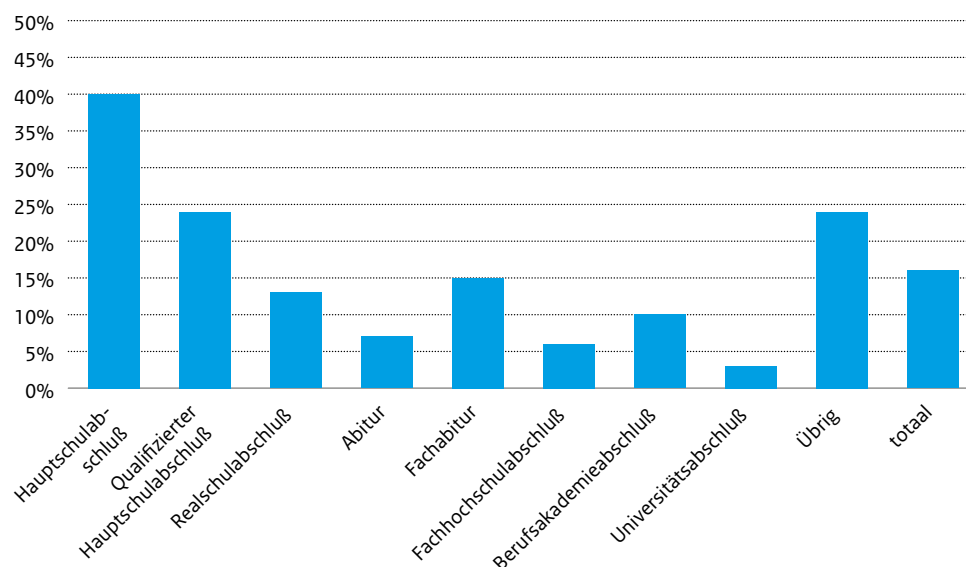
By means of cross-tabulation analysis and variance analysis, we conducted an initial research of the personal and environmental characteristics associated with propensity to fly. The following characteristics appeared to be significantly influential:

- **Education.** The greatest difference was found according to education levels. Education levels strongly correlate with income/prosperity levels. In the literature, Morphet (2012) for example, found that propensity to fly differs sharply according to income levels.

³ Weighting factors: virtually never = 0; less than once per year = 0.5; once per year = 1; twice per year = 2; three or four times = 3; more than four time per year = 6.

Figure 3.5 Number of respondents in North Rhine-Westphalia who have never flown, according to education levels.

Source: KiM-survey (2013), NRW-panel.



- *Region.* Distinct regional differences exist. Respondents from the Netherlands who reside far from major airports fly less frequently. The variance analysis showed a strongly significant correlation as measured on the COROP-level.⁴

Table 3.1 Variance analysis results for the relationship between distance to a major airport and propensity to fly.

Source: KiM-survey (2013), Netherlands panel.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30882,352	1	30882,352	9,642	,004c
	Residual	121716,166	38	3203,057		
	Total	152598,518	39			

a. Dependent Variable: Percentage respondent met minder dan 1 vlucht per jaar

b. Weighted Least Squares Regression - Weighted by Aantal respondenten

c. Predictors: (Constant), Afstand tot dichtstbijzijnd groot vliegveld (Schiphol, Brussel, Düsseldorf)

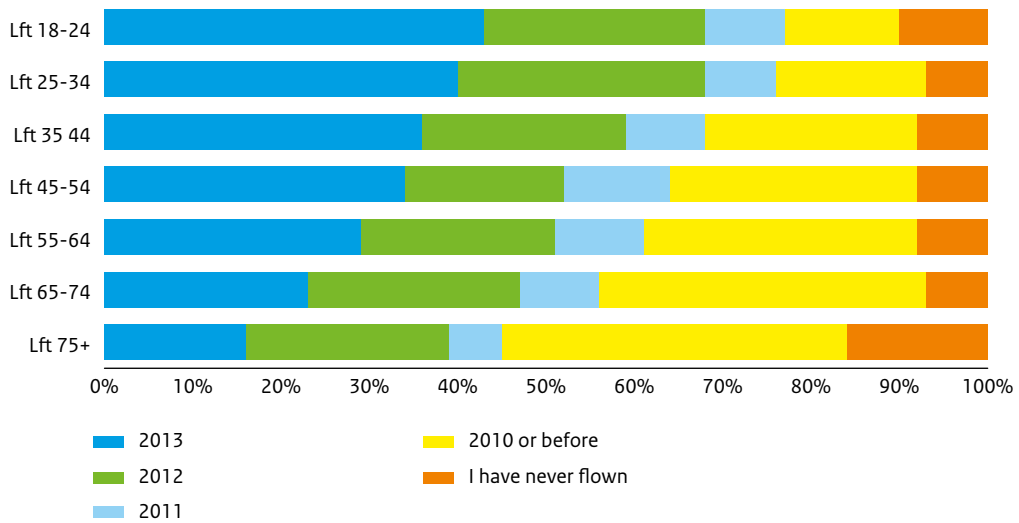
There are also distinct differences between the crowded, highly urbanised regions and the more rural regions. The relationship between propensity to fly and population density is significant in itself. Moreover, there is a strong correlation between population density and distance to a major airport. This means that population density in combination with distance to a major airport, is not significant.

⁴ A COROP region is a regional area within the Netherlands, used for analytical purposes by, among others, Statistics Netherlands. The Dutch abbreviation stands for Coördinatiecommissie Regionaal Onderzoeksprogramma (literally, the Coordination Commission Regional Research Programme)

- Age. Young respondents had flown most recently, although a certain percentage of them had not (yet) flown.

Figure 3.6 Year in which you flew for the last time, according to age groups.

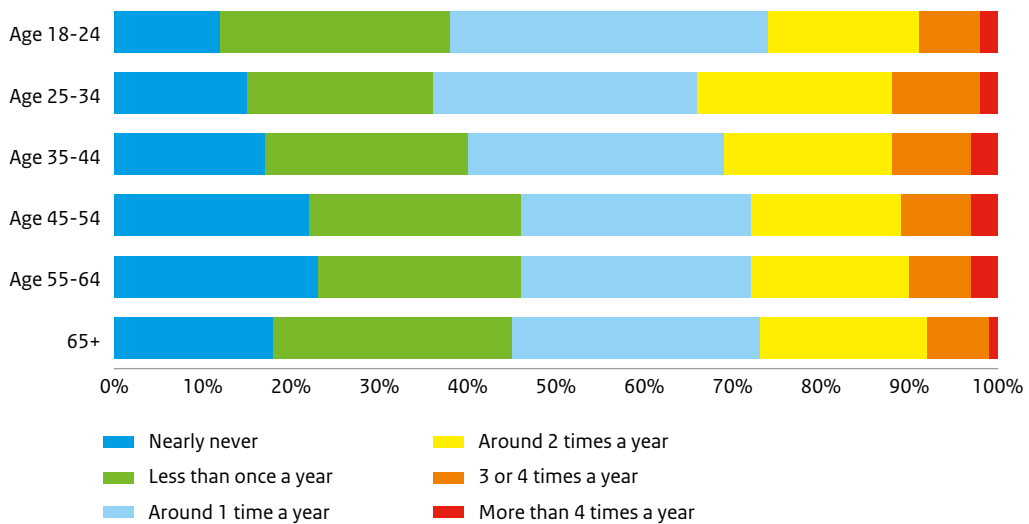
Source: KiM-survey (2013), Netherlands panel.



The differences in frequency of flying are similar: frequency decreases after the 25-34 age group.

Figure 3.7 Average number of flights per year, according to age groups.

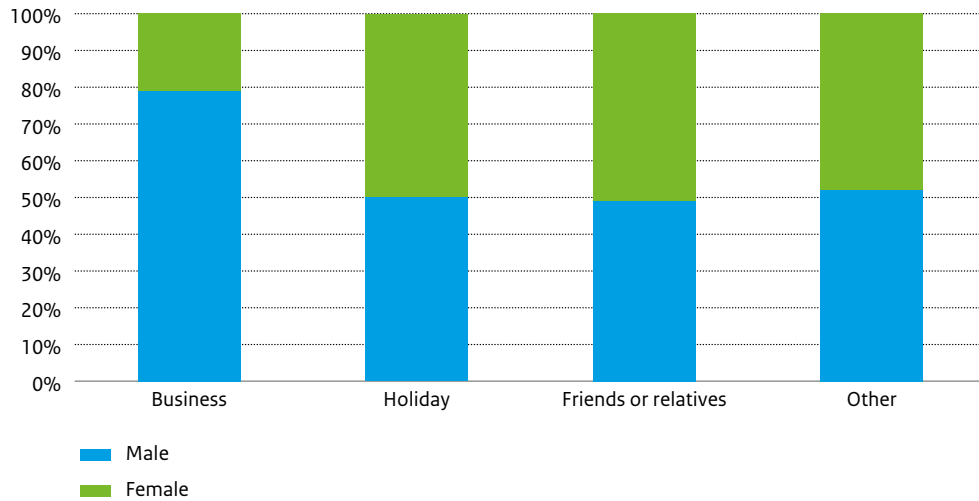
Source: KiM-survey (2013), all panels.



- *Male/Female*. Women fly less frequently for business reasons than men; however, the ratios are approximately the same for the other stated reasons for flying.

Figure 3.8 Number of respondents, according to gender and reasons for flying.

Source: KiM-survey, all panels.



The initial exploratory analysis revealed the various personal and environmental characteristics that influence the propensity to fly: education, region, age, and, to a lesser degree, gender.

The information derived from the panels lends itself to further research in follow-up studies.

4

Airport Choice

Airports used

For residents of the Netherlands, Amsterdam-Schiphol was the dominant airport in terms of use by the respondents. Virtually everyone had departed from Amsterdam-Schiphol at some point. The use of other airports is primarily determined by where a particular residential area is situated in relation to the airport. Consequently, primarily residents of East-Netherlands fly from airports in Düsseldorf and Weeze, whereas Brussels is a popular airport for residents of South-Netherlands. Hence, there is a strong distance effect.

Table 4.1 Airports from which residents of the Netherlands have most frequently, most recently, or ever departed from.
Source: KiM-survey (2013).

Residents of the Netherlands	% Most Frequently	% Most Recently	% Ever
Schiphol-Amsterdam	80	72	94
Eindhoven Airport	5	7	28
Rotterdam-The Hague Airport	3	6	25
Düsseldorf	3	4	17
Brussels-Zaventem	2	3	16
Weeze-Niederrhein	2	3	12
Maastricht-Aachen Airport	1	1	9
Groningen Airport (Eelde)	1	1	7
Frankfurt	0	0	6
Charleroi/Brussels South	1	1	6
Cologne-Bonn	0	0	3
Dortmund	0	0	2
Twente Airport (Enschede)	0	0	2
Münster-Osnabrück	0	0	2
Liege	0	0	2
Bremen	0	0	2
Hamburg	0	0	2
Antwerp	0	0	2
Lelystad	0	0	1
Ostend-Bruges	0	0	1
Other	1	1	3
Total	100	100	241

The figure 2.41 in Table 4.1 indicates that the average Dutch respondent has used 2.41 airports as their departure points.

In Belgium, the national airport, Brussels-Zaventem, is used most frequently (see Table 4.2), with virtually everyone having flown from this airport. Charleroi, a regional airport, has a much more important role than the regional airports in the Netherlands, with nearly half of all Belgian respondents having used this airport at one time.

This is likely related to the type of the airline companies present there: low-cost carriers, of which Ryanair is by far the most important. The regional airport Charleroi is a key competitor of the national airports for intra-European travel. Notably, third and fourth places are held by the mega-hubs Amsterdam-Schiphol and Paris-Charles de Gaulle, which is due to the fact that the flights offered at Brussels-Zaventem airport do not include some of the intercontinental destinations offered at Amsterdam-Schiphol and Paris-Charles de Gaulle.

The regional airports of Oostende-Bruges and Liege play a role that is comparable to Groningen and Maastricht in the Netherlands. Liege is an important air-freight airport, as this is where TNT - the global parcel delivery company - is situated.

Table 4.2 Airports that residents of Belgium have most frequently, most recently, or ever departed from.
Source: KiM-survey (2013).

Residents of Belgium	%Most Frequently	%Most Recently	%Ever
Brussels-Zaventem	71	63	89
Charleroi / Brussels South	16	19	42
Schiphol - Amsterdam	2	4	22
Paris Charles de Gaulle	1	1	16
Liege	2	3	11
Ostend-Bruges	1	2	9

Düsseldorf is the most frequently used airport in North Rhine-Westphalia, with Köln-Bonn a strong second (see Table 4.3). Amsterdam ranks fifth as an airport that people have ever departed from, although for very few people this was the most recently used airport. Of the Dutch regional airports, only Maastricht-Aachen Airport was occasionally used by residents of the Aachen region.

Table 4.3 Airports that residents of NRW have most frequently, most recently, or ever departed from.
Source: KiM-survey (2013).

Residents of NRW	%Most Frequently	%Most Recently	%Ever
Düsseldorf	51	45	79
Cologne-Bonn	22	22	51
Frankfurt	5	7	36
Dortmund Airport	6	7	22
Other	5	7	13
Amsterdam-Schiphol	0	0	12

In Lower Saxony, Hannover is the most important airport, followed by Hamburg (see Table 4.4). Bremen in all probability is the third airport. The relatively high rankings of the more distant airports of Frankfurt and Dusseldorf (and even Berlin and Amsterdam) seemingly indicates that residents of Lower Saxony are unable to fly directly to some destinations from airports in their own region. A small percentage of travelers therefore use airports situated relatively far away.

Table 4.4 Airports that residents of Lower Saxony have most frequently, most recently, or ever departed from.
Source: KiM-survey (2013).

Residents of Lower Saxony	%Most Frequently	%Most Recently	%Ever
Hannover	43	37	67
Hamburg	15	15	43
Frankfurt	7	6	32
Düsseldorf	6	8	31
Other	19	21	25
Berlin	1	3	17
Amsterdam-Schiphol	0	1	9

Use of foreign airports

The extent to which the respondents have ever departed from a foreign airport is relatively high in Belgium and the Netherlands, at 41% and 40%, respectively.

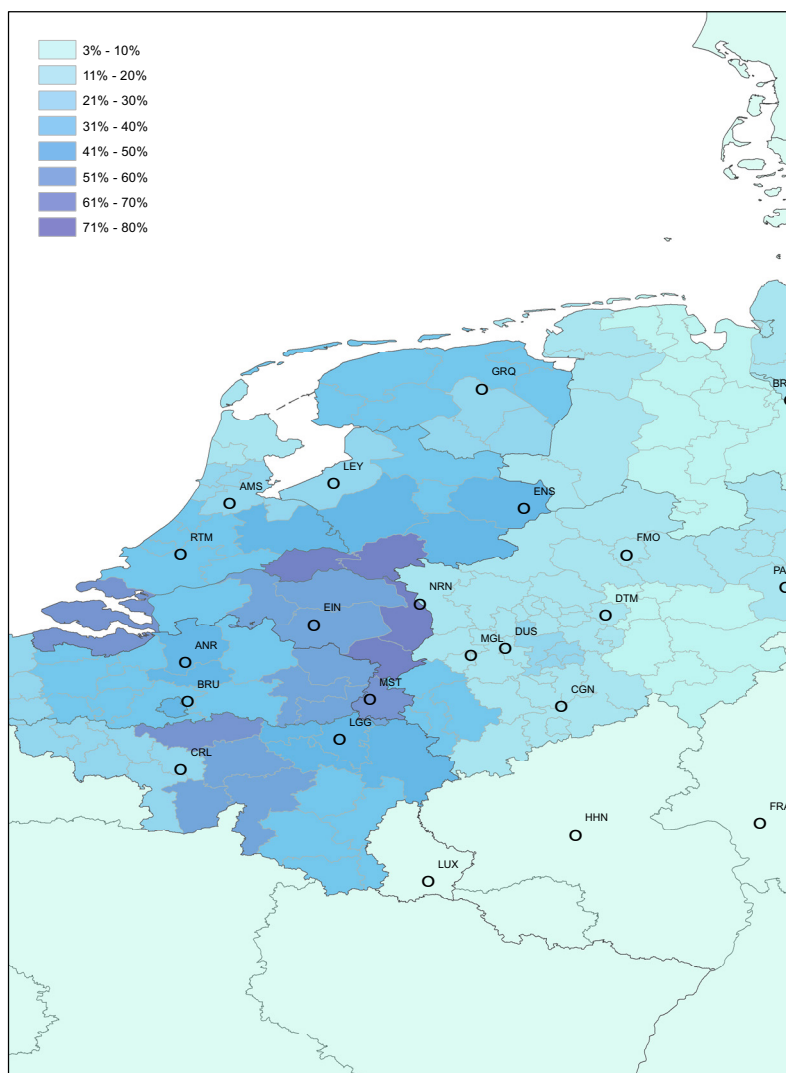
Table 4.5 Number of respondents that have ever departed from a foreign airport.
Source: KiM-survey (2013).

Use of foreign airports?	Belgium	Netherlands	North Rhine-Westphalia	Lower Saxony	Total 2013
% Ever	41	40	15	11	33

The number of respondents in the Netherlands who have ever departed from a foreign airport is shown to be highest in Zeeland, Limburg and Arnhem/Nijmegen-Betuwe. In Belgium, it is primarily the residents of the French-speaking province of Waals-Brabant, south of Brussels, who have most frequently flown from a foreign airport (Paris-Charles de Gaulle). Residents of the Flemish-Belgian provinces, which are in the vicinity of airports situated in the Netherlands, frequently depart from a Dutch airport. See also Figure 4.1

The residents of Lower Saxony and North Rhine-Westphalia use Dutch or Belgian airports much less frequently, opting instead to fly from airports situated in other German states.

Figure 4.1 Percentage respondents that have ever departed from a foreign airport.
 Source: KiM-survey (2013).



Choice factors

The respondents indicated that all 14 factors featured in the survey were important in their choice of an airport, although one or more factors could be deemed more important than another. We examined which factors were decisive for the respondents who had indicated that they had seriously considered using another airport their most recent flight. They indicated that in their choice of airports, price and supply (flight schedules and availability) were the dominant factors, together with the airport's accessibility (distance/travel time). This moreover accords with the findings in the literature (Burghouwt & Zuidberg, 2010; Hess, et al, 2006 and 2007).

Spatial scope of airports

The supply factors *price* and *flight schedule/availability of flight connections* emerged as key factors. This was followed by *accessibility of airports* as an important factor in the choice of airport.

Figure 4.1 denotes the number of respondents per region who had ever departed from a foreign airport. This percentage is significantly higher in the border regions than in the regions situated further from the border. The distance effect also clearly emerges here.

Figure 4.2 Decisive factors for choosing an airport.
Source: KiM-survey (2013).

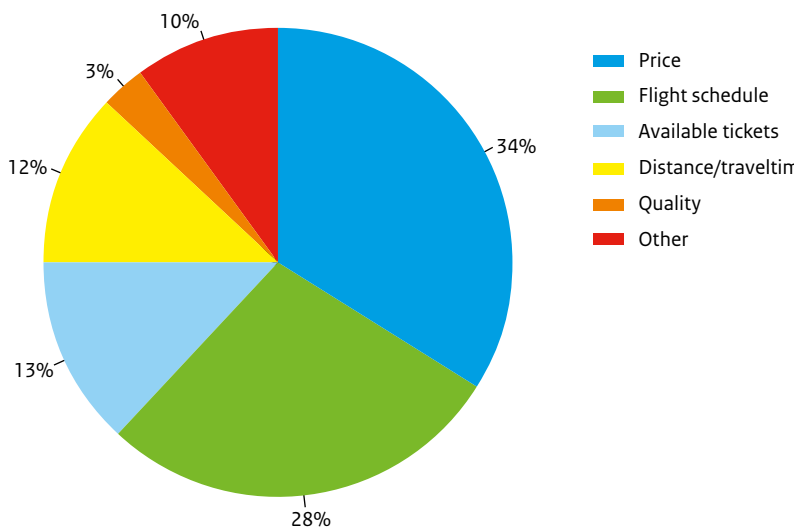


Figure 4.3 Number of respondents who have ever flown from Amsterdam-Schiphol
Source: KiM-survey (2013).

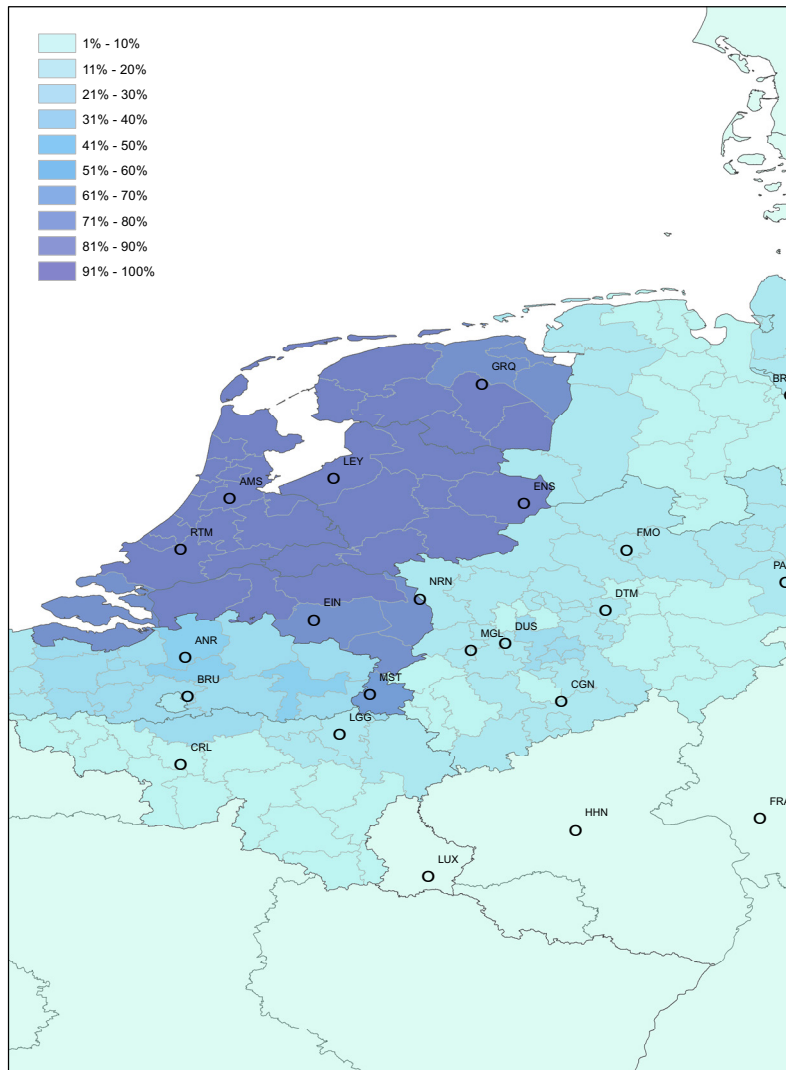
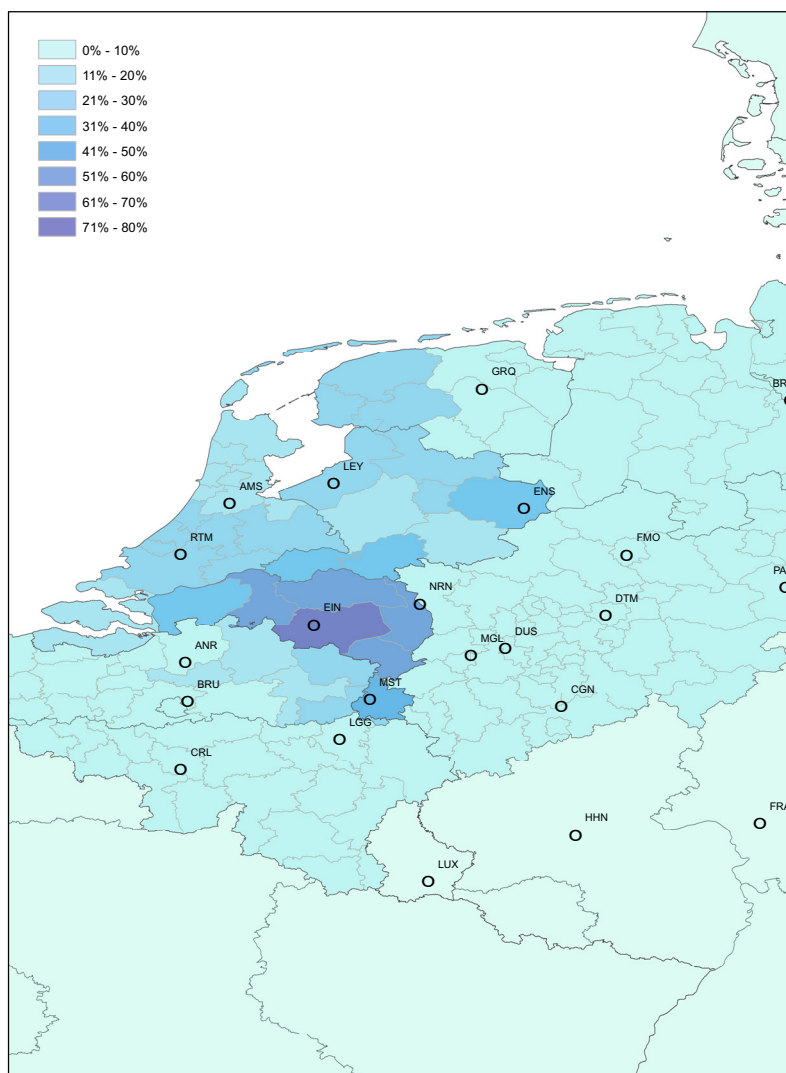


Figure 4.4 Number of respondents who have ever flown from Eindhoven Airport.
 Source: KiM-survey (2013).



The spatial scope of airports differs sharply, which we have illustrated by comparing the spatial scope of Amsterdam-Schiphol with that of Eindhoven Airport (Figures 4.3 and 4.4). Amsterdam-Schiphol offers (intercontinental) destinations that many regional airports do not. For these destinations, consumers must therefore travel to an airport situated further away. Conversely, many regional airports offer flights to popular destinations, such as London, Barcelona, Antalya, Porto, Nice and Rome. In such cases, the consumer has shown to choose a nearby airport.

As previously stated, Dutch travellers also use foreign airports, with Dusseldorf and Brussels the most frequently used. Figures 4.5 and 4.6 show the regions from which the respondents who most frequently used these airports come from. Here, too, there is a clearly discernible distance effect. Dusseldorf airport's spatial scope encompasses the eastern Dutch provinces, and Brussels' airport the southern Dutch provinces.

Figure 4.5 Number of respondents that have flown from Dusseldorf.
Source: KiM-survey (2013).

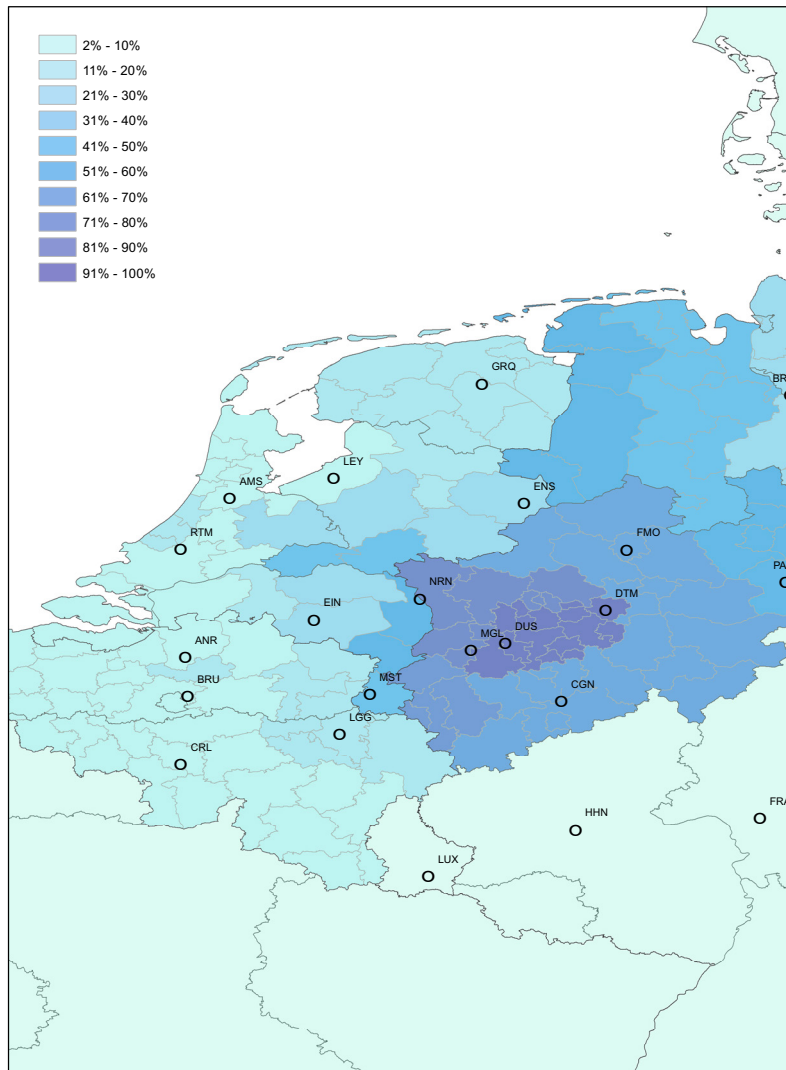
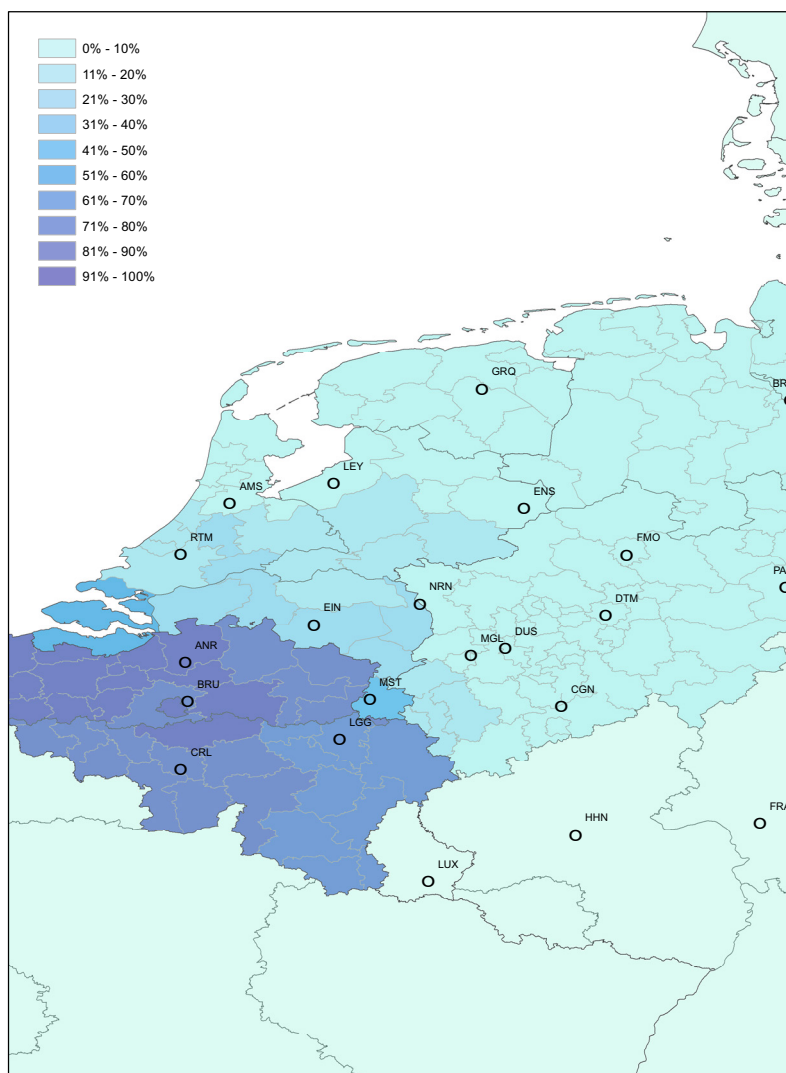


Figure 4.6 Number of respondents that have flown from Brussels.
 Source: KiM-survey (2013).

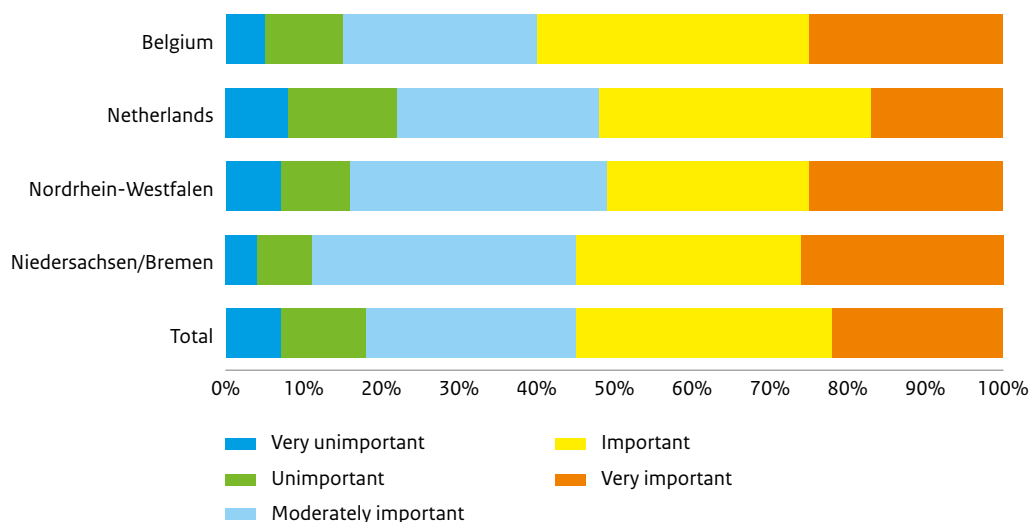


Border effects

Figures 4.5 and 4.6 not only reveal the distance effect but also an explicit border effect. The national borders are clearly discernible in these Figures. National borders therefore seem to have an inhibiting effect on the use of airports. Little or no attention has been given to this effect in the international literature, which is perhaps due to the fact that the case studies therein were conducted for situations in which borders played no role, such as for San Francisco, which is featured in numerous case studies (for example in Hess et al., 2007 and 2008 or Pels et al, 2000). Cross-border airports also played no role in the case studies conducted in the United Kingdom (CAA, 2011) Germany (Gelhausen, 2008) and France (DTA, 2003). Given the obvious importance of cross-border airports for regions in the Netherlands (and Belgium), we have hereby analysed the border effect in closer detail.

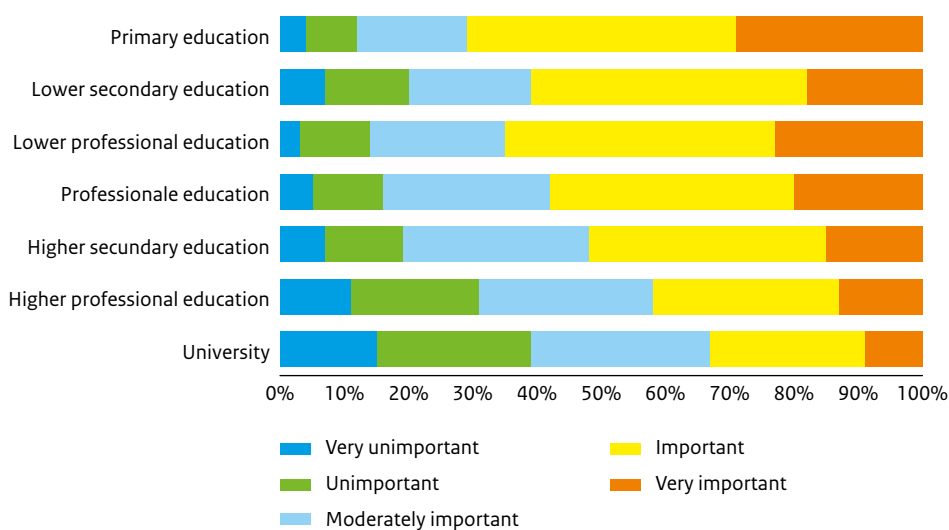
The survey's respondents were asked directly about the importance of an airport being situated in their own country. Between 50 and 60% of the respondents, in all countries studied, indicated that they found this to be important or very important (Figure 4.7).

Figure 4.7 Importance of an airport being situated in your own country.
Source: KiM-survey (2013).



There are significant differences in the importance that respondents ascribe to an airport being situated in their own country. Women find this to be slightly more important than men, and senior citizens find it somewhat more important than young people, although the greatest difference is according to education level (Figure 4.8).

Figure 4.8 Importance of an airport being situated in your own country, according to education level.
Source: KiM-survey (2013).



A second major difference is regional/spatial in nature. The further away a person lives from the border, the more important it is for them that the airport be situated in their own country. Conversely, the respondents residing in regions situated close to the border, such as Twente and Limburg, find it less important for the airport to be situated in their own country.

It is probable that the preference of the first category of respondents (residing in regions further from the border) is determined by a combination of their desire to avoid travelling long distances to an airport and their unfamiliarity with a foreign airport. It was only later that we discovered the correlation with distance. The survey also did not ask for the any background to the answer. Future research must provide more clarity about this aspect.

There are thus two distinct factors that compel respondents to prefer using an airport in their own country: education level and location relative to the foreign country. A follow-up question would therefore be why these people attach so much importance to an airport being situated in their own country? The reasons can, for example, pertain to:

- a) language differences, whereby language proficiency is associated with education level;
- b) the sale of package holidays in their own (linguistic) region, whereby a national airport is automatically involved;
- c) unfamiliarity, which is also related to residing far from their own country's border;
- d) fear of the unknown, which can be associated with age;
- e) habitual behaviour: if a person does something once, doing it a second time becomes easier;
- f) the marketing campaigns of travel agencies, airports, and airline companies, which are more intensive in border regions for flights departing from neighbouring countries;
- g) the automatic location and language-based link that Google makes to the advertisements of local travel agencies, airports and airline companies;
- h) agreements that companies have with national airline companies.

Support for these hypotheses can partly be derived from the KiM-survey (see Figure 4.8, for example), and also partly from research, such as for point 'e' above (Steverink, 2013, for example). In part, the explanation must be discovered, verified and supplemented through further research.

Language effects

The survey in Belgium creates the possibility of researching whether language has a separate effect, in addition to the effects of borders and distance. There is a sufficient language mix in two (Brussels and Halle-Vilvoorde) of Belgium's 15 *arrondissements*/regions to research this effect.

In these regions virtually everyone has flown from the national airport, Brussels-Zaventem. For the other airports, the only major difference is between Amsterdam-Schiphol and Paris-Charles de Gaulle (CDG). The survey asked the respondents if they had ever flown from these two airports. Table 4.6 presents the results for the respondents from Brussels and Halle/Vilvoorde.

Table 4.6 Number of respondents that have ever flown from Amsterdam-Schiphol or Paris-CDG, according to residential region and language group.

Source: KiM-survey (2013).

Residential Region Brussels	Schiphol	CDG	N
NL-speakers	20%	16%	25
FR-speakers	15%	34%	162

Residential Region Halle/Vilvoorde	Schiphol	CDG	N
NL-speakers	22%	13%	63
FR-speakers	17%	26%	23

The survey results clearly reveal a strong language effect: French-speakers (FR) from the same region flew twice as often from Paris as Dutch-speakers, rendering this a statistically significant effect. The Dutch-speakers (NL) moreover were shown to fly one-third more often from Amsterdam-Schiphol than the French-speakers from the same region. However, given the relatively small sample size, this effect is statistically insignificant. Language differences are thereby likely to be a key component of the border effect.

The border effect has meanwhile been added to the short-and medium-term prognosis model that SEO has developed for KiM. Based on information derived from the KiM survey, SEO estimates that a need to cross the border results in a halving of the propensity to fly or 100 kilometres of extra travel time. The ‘costs’ associated with crossing the border, as calculated in a generalised cost function that included travel time and travel costs, amounts to an extra 38.00 euros (Boonekamp et al., 2014: 26). This is an initial estimate of the general effects of border and language. As the experience with the Dutch air passenger tax (KiM 2011) has shown, acclimatization and publicity are important factors for removing the border effects.

Additional (repeat) research can track and further explain this effect.

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