# Summary

The air passenger tax has had a decidedly negative effect on the number of Dutch passengers departing from airports in the Netherlands; specifically, from Amsterdam Airport Schiphol. Passengers have instead opted to primarily use Düsseldorf, Weeze and Brussels airports. The air passenger tax served to reinforce two developments that were already occurring: passengers, especially those from the Netherlands' eastern and southern regions, increasingly depart from foreign airports, and passengers increasingly use low-cost airlines, such as Ryanair and easyJet. The expectation is that not all Dutch passengers who use foreign airports will 'return' to Dutch airports, although this could change owing to the recent implementation of a 'ticket tax' in Germany, as well as by measures taken by Amsterdam Airport Schiphol to help lower costs.

# History of the air passenger tax

The Dutch Cabinet implemented the air passenger tax on 1 July 2008, as one of the instruments for 'greening' the tax system. Prior to implementation it was estimated that this new tax would result in the number of passengers using Amsterdam Airport Schiphol to drop by 8 to 10%. This was deemed acceptable at that time, as the aviation sector was expected to enjoy continued growth. When the air passenger tax was implemented, the number of passengers using Amsterdam Airport Schiphol did in fact decrease, and this decrease in passenger volumes rapidly intensified as a result of the global economic crisis. The confluence of these two events prompted the aviation and tourism sectors to intensify their protests against the air passenger tax. The Dutch Cabinet, as part of its 'Economic Crisis and Recovery Plan', responded by initially setting the air passenger tax at zero (0.00 euro) as of 1 July 2009, and subsequently abolished the tax conditionally on 1 January 2010.

#### **Reason for this research**

After the air passenger tax was set at zero, passenger volumes at Amsterdam Airport Schiphol did not immediately return to pre-tax levels. This was partly due to consequences stemming from the economic crisis. The question however is whether the air passenger tax led to more permanent frequent use of foreign airports. This report analyses the consequences of implementing and abolishing the air passenger tax. The report focuses on two key issues: the effects the air passenger tax has had on demand for air travel from Dutch airports; and the extent to which passengers have opted to use foreign airports and if this also contains a structural component. Further, the report outlines the context in which these developments have occurred, while also identifying the key mechanisms that explained these developments. Finally the report examines the possibilities for influencing passengers' airport choices as a means of benefiting Dutch airports. Additionally, the possible effects of Germany's new air passenger tax, which came into effect on 1 January 2011, are also discussed.

## Airport choice behavioural patterns

Many factors play a role in why passengers choose to use a particular airport. On average the three most important factors are: time spent on pre-flight transport, frequency of flights, and ticket prices. In addition, the costs associated with pre-flight transport (including parking fees), the type of flights (direct or indirect), and flight duration, also play a role. The importance of each of these factors varies per person and per journey. Choice models can help estimate what the medium-term effects of a structural air passenger tax will be. The Dutch air passenger tax however was only in force for a period of one year, and thus its impact was perhaps less than estimated beforehand.

Less rational factors also play a role in how people choose an airport, including habitual behaviour, unfamiliarity with possible alternatives, risk aversion behaviour, and failure to access all available information regarding alternatives.

In addition to people's airport choice behavioural patterns, the various airline companies' strategic actions are also important. The airline may cancel flights out of fear of low-occupancy rates and thus influence the available supply of flights.

### Declining passenger volumes at Dutch airports

Immediately following the implementation of the air passenger tax in July 2008, the number of passengers departing from Amsterdam Airport Schiphol decreased, while the number of transfer passengers (to whom the passenger tax did not apply) continued to increase. Despite this clear indication of the air passenger tax's impact, the decline in passenger volumes from 1 July 2008 to 1 July 2009 cannot be wholly attributed to the air passenger tax. The economic crisis was also an important factor. Moreover, the many developments occurring within the airline industry itself also played a role. Amsterdam Airport Schiphol was already experiencing a trend among passengers - especially those from the Netherlands' eastern and southern regions – to increasingly use airports in Germany and Belgium. A second trend that came into play was the rise of low-cost airlines, of which Ryanair is the largest. Ryanair primarily operates from

regional airports, such as Charleroi in Belgium and Weeze in Germany. If we examine the situation among regional airports in the Netherlands, we see that the air passenger tax had a minimal impact on the supply of flights offered at Groningen and Rotterdam airports, owing to their geographical locations. At Eindhoven airport the passenger tax did hamper growth. Maastricht Aachen Airport, situated close to the Belgium and German borders, lost a substantial part of its supply of flights.

## Conservative estimate of impact of air passenger tax

It is difficult to determine the effects of the air passenger tax, because the tax largely coincided with the global economic crisis and, moreover, was influenced by various other trends and developments. A conservative estimate of the air passenger tax's effects during that period is that the tax accounted for nearly two million fewer passengers from Amsterdam Airport Schiphol. In the period immediately following the Dutch government's move to set the air passenger tax at zero, passenger volumes for the remainder of the 2009 summer season were down by close to one million passengers.

The Netherlands Institute for Transport Policy Analysis (KIM) conducted an airport choice survey among 3,000 people. One-fifth of those surveyed said that they were unaware of an air passenger tax. Fourteen per cent however confirmed that the tax had influenced their travel behaviour, with half of them saying they had cancelled a proposed flight or chosen to travel by car or train, and the other half confirming that they had opted to use a foreign airport, with Düsseldorf, Weeze and Brussels airports being the most popular choices.

These findings are in line with information garnered from foreign airports and information derived from reservation systems that track the number of Dutch passengers departing from foreign airports. The number of Dutch passengers using Düsseldorf airport has increased every year since 2001, and the increase in 2008 was greater than in previous years. Brussels airport experienced a similar trend. At Germany's Weeze airport passenger volumes tripled in two years time and the number of Dutch passengers rose approximately fifty per cent during the period in which the Dutch air passenger tax was in force. KiM estimates the extra number of Dutch passengers flying from foreign airports at 1 million passengers during this period, compared to a development without tax.

## **Publicity important**

Various representatives of airline companies, airports and other organizations active in the aviation and tourism sectors have noted that the huge amount of publicity given to the implementation of the air passenger tax was an important reason for Dutch passengers opting to use foreign airports.

## Many passengers will not immediately nor automatically return

It is difficult to statistically determine if Dutch passengers will or will not 'return' to Dutch airports. Abolishment of the air passenger tax is too recent for an accurate determination to be made. Moreover, the picture is obscured by the many developments occurring both within and outside the aviation sector. Nevertheless, it does appear likely that despite abolishing the air passenger tax. Dutch passengers will still more often continue to use foreign airports than was previously the case. A trend among Dutch people to use foreign airports already existed prior to implementation of the air passenger tax, and following implementation of the tax other passengers also discovered the supply of flights available at foreign airports. If these passengers had good experiences using foreign airports, they will continue to use foreign airports. The supply of flights particularly increased at the German airports, Weeze and Düsseldorf, and these airports remain more attractive compared to the situation prior to the air passenger tax changing choice patterns. Consequently, the air passenger tax served to accelerate the trend-driven developments that were already occurring. Dutch passengers can however be encouraged to 'return' to the Netherlands' airports through improved supplies of flights, lower costs, and improved accessibility to Dutch airports. Targeted publicity can serve to better inform this target group about the (improved) offers available at Dutch airports.

#### German passenger tax offers opportunities for Dutch airports

As of 1 January 2011, an air passenger tax is in effect in Germany. This German tax is expected to have a similar impact as the Dutch tax, although there are also some clear differences. Research reveals that Dutch airports can expect more Dutch passengers to once again depart from airports in the Netherlands, but that not many German passengers will start using Dutch airports. The reasons for this are the distances between Germany's major population centres and airports in the Netherlands; smaller price differentials; and, with regard to regional airports, unfamiliarity with Dutch airports. Maastricht Aachen Airport however is a possible exception, as this airport is situated close to the German border. Starting on 1 April 2011, Germanwings plan to operate twice daily flights from Berlin to Maastricht Aachen Airport. Various parties have anticipated the introduction of the air passenger tax in Germany. German media devoted great attention to the proposed measure. Consequently, starting in October 2010, some companies already began accounting for this tax in their flights scheduled for January 2011, and this served to heighten awareness of possible alternatives available in foreign countries. Since October 2010, Transavia's advertisements on German travel websites expressly state that their flights from Dutch airports are without 'Luftverkehrsteuer' ('air passenger tax' in German).