



# University of HUDDERSFIELD

## University of Huddersfield Repository

Ismaila, D and Warnock-Smith, David

The demographic characteristics of international air travelers in developing countries: the case of Nigeria

### Original Citation

Ismaila, D and Warnock-Smith, David (2012) The demographic characteristics of international air travelers in developing countries: the case of Nigeria. In: 1st International Aviation Management Conference, 18-20 November 2012, Dubai, UAE. (Unpublished)

This version is available at <http://eprints.hud.ac.uk/id/eprint/16168/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: [E.mailbox@hud.ac.uk](mailto:E.mailbox@hud.ac.uk).

<http://eprints.hud.ac.uk/>

# **The demographic characteristics of international air travelers in developing countries: the case of Nigeria**

By

Danjuma Ismaila (PhD researcher) and Dr David Warnock-Smith,  
Dept of Transport, logistics and Tourism,  
University of Huddersfield, HD1 3DH, UK  
Telephone:+441484471854, Mobile +447407224561  
Email: U0976229@hud.ac.uk

## **Abstract**

There has been significant and consistent growth in international air transport markets in developing countries according to IATA. As a result many international carriers are penetrating the market despite the challenges such as entry regulation. However, there is need to appreciate the nature of demand of such travelers in order for airlines and policy makers to meet their needs.

This paper analyzed and determined the unique features of international travelers in Nigeria using a conventional survey research approach.

The results indicated some significant deviation from other developed country travelers and suggest the need for alternative airline and policy approaches.

*Key words: Demand, Passenger, airlines*

## **1.0 INTRODUCTION**

Demographic profiling is essentially an exercise in making generalizations about a group of people. It is aggregate and probabilistic information on characteristics of a population such as passengers which cover age, nationality, and employment status. Both the trend and distribution of values within a demographic variable of interest have wide applications to air transport for policy making and airline marketing and product planning.

However, the importance of marketing in air transport cannot be overemphasized, Doganis (1985) described marketing as a linchpin of the aviation industry that match the controllable supply of the air services with the uncontrollable demand profitably. A mismatch of market can lead a catastrophic outcome such as the production of the Concorde air craft.

Furthermore, Kotler (1990) added that effective marketing planning starts with identification of market segments that can be served profitably. This requires specific market research of current and prospective passengers. The objectives of this study include understanding the demographic profile of each segment that exists in the market

with a view to determining their needs, and to be able to forecast demand in each segment.

Many studies have been carried out by various stakeholders in developed countries where demographic profiles of the international passengers were established. However, Nigerians international air passenger demographics are relatively unknown.

## **2.0 LITERATURE REVIEW:**

Doganis (2008) identified four folds of different market segments namely; business, leisure, visiting friends & relatives (VFR) and others. Understanding the size and the characteristic of each market segment on each route is significant for forecasting demand and service planning. Airlines that neglect to appreciate their market segments are likely to plunge into difficulties when matching supply with demand.

The elasticity of demand of each market segment is significantly different, which means each segment reacts differently to price and frequency variation. Business travelers are generally inelastic while leisure travelers are typically highly elastic (Vasign et al, 2008).

The pattern of air travel in the early days of commercial international flight was dominated by Business travelers, with few leisure passengers. However, due to the expansion of passengers as a result of steady increases in personnel income and decreases in the real cost of air fares, the ratio of business to leisure passengers declined. In 1985, the European market had at most 20% of the market made up of business passengers while in the USA business passengers accounted for around 25% (Blake 1989 cited in Doganis 1985).

Business Monitor (1989), discovered that out of 21 million UK resident that travel abroad by air, only 15.3% were business trips while 72.5% were holiday passengers and 10.4% were for visiting friends and relatives.

Globally, the ratio between business, holiday, VFR and others trips vary according to region personal disposal income. Accordingly, high income countries have more leisure travelers than business travelers, whereas low income countries such as African, have more business trip (Doganis, 2008).

## **3.0 METHODOLOGY**

The data presented were summarized from a survey of a sample of 600 international passengers conducted in 2011 at Lagos and Abuja International Airports in Nigeria.

These two airports accounts for about 90% of Nigeria’s international traffic totaling over three million passengers in 2010 (NCAA 2010). The two days survey was carried out in the month of May and November, so as to understand the pattern based on the period of the year. A random sample from a pool of checked in passengers that cut across all routes was selected.

#### 4.0 RESULTS & FINDINGS

The results of the survey shows the demographic characteristics and pattern of travelers covering passengers nationality, country of residence, age group, occupation, income level, journey profile, route travelled, airlines, journey purpose, frequency of trips and rationale, for choosing airline.

##### 4.1 Journey Purpose, Nationality, and country of residence

From the total of 600 questionnaires, only 560 passengers responded to the nationality enquiries where 359 of them representing 63.2% of the total were Nigerian. Seventy five (75) were from other West Africa countries that were in transit for intercontinental traffic. This was because Lagos international airport with a good level of connectivity acts as a hub for West African travelers. This was facilitated by the provision that West African nationals do not require a visa to enter Nigeria by ECOWAS charter.

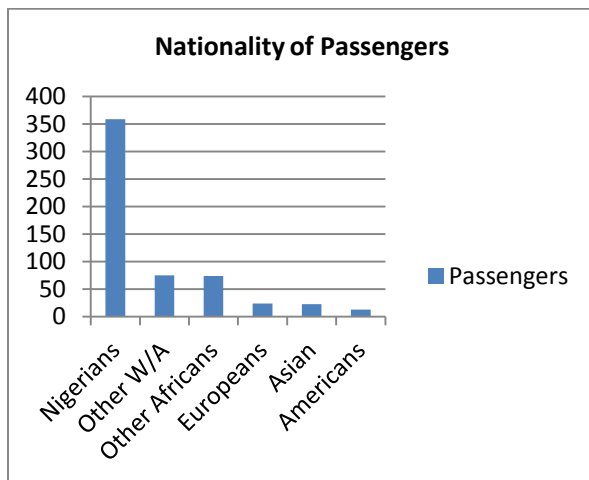


Figure 4.1 Source: Field Survey (2011)

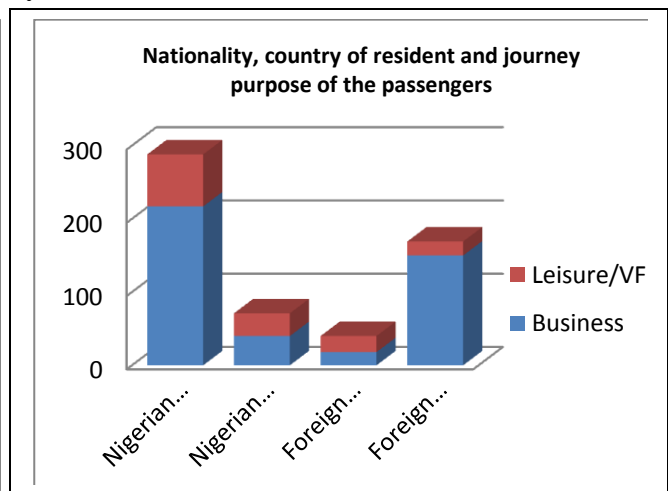


Fig 4.2 Source: Field survey (2011)

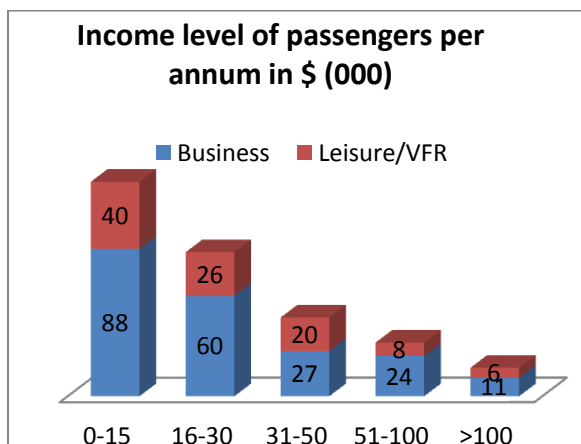
Furthermore, passengers from other African national total about 13.69% of the sample (70 passengers). Most of them were on business missions to Nigeria or other West African countries. Among the passengers were 24 European nationals (4.69%) most of

them being on business missions to Nigeria. Also the availability of Multinational Corporation involved in oil and gas exploration may have provided basis for such nationals' frequency of visit to Nigeria.

About 342 of passengers representing 74.83% were business travelers. Most of them on official assignment, or business trip, or pursuing education/training or for religion pilgrimage, while only 115 passengers (25.17%) were for visiting friend/relations or on leisure, with the majority of them Nigerian in Diaspora on visiting friend/relations. This shows that the international passengers in Nigeria were dominated by business travelers, which means that they are price inelastic

### 4.3 Income Level

Passenger income is a very significant factor in determining the demand of air transport (Vasign, et al, 2008).



**Figure 4.3 Source: Field survey (2011)**

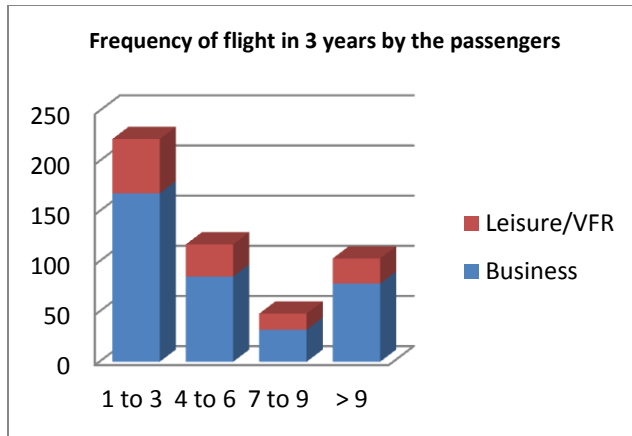
This shows that substantial proportion of the passengers (70%) earn below \$31,000 per annum as income while only about 4.2% were higher income passengers earning above \$100,000 per annum.

### 4.4 Frequency of trips by passengers

The average responses of various categories of respondents on the number of international flight made in the last 3 years is summarized and presented in figure 6.24 below.

Stat Value	Leisure	Business	All Passengers
Mean	32.18	31.48	31.72
Median	21.77	20.25	20.71
Mode	11.11	11.37	11.29
Range	100.00	100.00	100.00
Variance	1247.58	1213.15	1224.36
StdDev	0.0353	0.0348	0.0350

**Table 4.1 source: Field survey (2011)**



**Figure 4.4 Source: Field survey (2011)**

Stat Value	Leisure	Business
<b>Mean</b>	5.1	4.9
<b>Median</b>	4.89	4.47
<b>Mode</b>	3.13	3
<b>Range</b>	9	9
<b>Variance</b>	15.96	10.33
<b>Std Dev</b>	3.99	3.21

Source: Authors computation 2012

**Table 4.2 Source: Field survey (2011)**

From the table above it therefore means that leisure travelers slightly travel more than the business travelers, but the combined means was 5 trips per 3 years. This was supported by the value of standard deviation of 3.19 which was less than the mean value.

#### **4.5 Rationale for Choosing a carrier**

The decision to chose a carrier by passenger was based on individual priority (in terms of time and cost) as well the quality of airline services offered. However, the study sought the three top priorities of the passengers from the identified seven common rationales needed by travellers namely: Air Fare; Schedule (Airport, timing, frequency, and punctuality); Conveniences (reservation, capacity, seat availability); Safety reputation; frequent flyer program; Promotion/advertisements; Comfort (aircraft type, meals, entertainment).

The three rationales selected were ranked on three Likert Scale decisions where first priority was given 3 points, the second priority was given 2 points and the third priority was scored 1 point.

The study aggregated the score for each rationale and ranked them based total score as shown in table 4.3 below.

<i>Rationale</i>	<i>Score by Passengers</i>	<i>Position</i>
<b>Air fare</b>	392	1st
<b>Convenience</b>	282	2nd
<b>Schedules</b>	246	3rd
<b>Safety</b>	188	4th
<b>Comfort</b>	115	5th
<b>FFP</b>	107	6th
<b>Promo&amp; Adverts</b>	57	7th

**Table 4.3 Source: Field survey (2011)**

Air fare was rated top with a total score of 392, this was followed by flight convenience (reservation, capacity, and available seat) with 282 score, while scheduled (airport, timing and frequency) came third with 246 score. The fourth position with 188 score was safety followed by comfort with 115 average score. Also frequent flyer programmer (FFP) of various airline occupy sixth position with 107 score, and lastly, promotion and advertisement occupied the least rational with 57 score.

The result came as expected based on the information in the market such as ratio of business to leisure travellers, the level of income, destination and profession of the passengers, as well as airline competition. One interpretation of high priority for air fare is that, it is the common need of all passengers. For instance business travellers will go for best deal of price if there are alternative airline schedule for his trip, that means is the second criteria for business travellers. While, the leisure travellers' priority is the best deal to his destination from the available airline.

Also, high score for convenience and schedule was justified because it is a very sensitive demand for business travellers' that dominated the market. But the average score for safety may not be surprised because the airlines safety of recent are homogenous and standardized as such travellers regard all the airline in terms of safety with the little difference.

However, low score for the promotion and comfort regarded as some of the need of leisure travellers' was due to the proportion of the leisure travellers' in the passengers.

Promotion and Advertisements could only entice any passengers in the market if the airline could offer unique incentives like fare different from others. Therefore, possible interpretation is that there were possibilities that airlines in the market at the time have

not offer any adequate incentives to customers, or even if there were incentives the message has not reach the potential customers.

The score for FFP in the market may be connected with reasonable number of frequent travellers in the market, which the study discovered the passengers in the market had an average of 5 trips in three years which was enough to qualify them for any airline FFP.

## **5.0 Conclusion**

The result shows the pattern of travelers in developing countries differ significantly from developed economies. In developing country like Nigeria, business travelers seem to dominate passenger traffic while in developed countries leisure travelers dominate passenger traffic. The majority of travelers are also Nigerian which indicates that the economy is not attracting enough foreign tourists. Understanding the purpose of passengers' trips is significant information that airlines require for planning purpose and market segmentation.

## **6.0 References**

- Bowen, J.(2010) The Economic geography of Air transport. New York: Routledge.
- Vasigh, B., Fleming, K. And Tacker, T.(2008) Introduction to air transport economics. London: Ashgate.
- Doganis, R.(2008) Flying off course: Airline Economics and Marketing. 4<sup>th</sup> ed. London: Routledge.
- Doganis, R.(1985) Flying off course: 2nd ed. London: Routledge
- APTA Report: A profile of public Transportation passenger Demographic and travel characteristics. Washington: American Public Transportation Association, May 2007. [www.apta.com](http://www.apta.com)
- CAA, PAX survey Report, 2010. [www.caa.co.uk/docs/81](http://www.caa.co.uk/docs/81)