



# UNDERSTANDING THE RELATIONSHIP BETWEEN AIR TRANSPORTATION AND TOURISM

## *Part 1: Global Trends and Policies*

Prepared for:



**Standing Committee for  
Economic and Commercial  
Cooperation of the Organization  
of Islamic Cooperation**

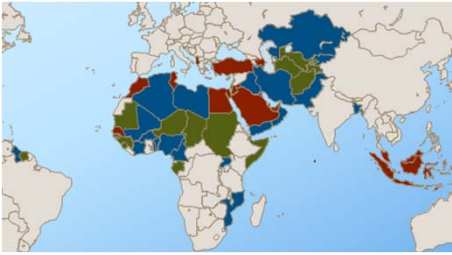
**11 September 2014, Ankara**

## Study Objectives

- To define the conceptual framework for the linkage between air transportation and tourism
- To investigate the latest global trends in air transportation that might affect the development of tourism
- To identify the current status of air transportation practices in the OIC Member States
- To determine the implementation barriers (political, legal, institutional, fiscal, and physical infrastructure) for enhancing better air transportation and especially the interaction between air transportation and tourism in the OIC Member States
- To propose recommendations for improving air linkages to foster tourism activities

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## SECTION 1

# GLOBAL AND REGIONAL TRENDS IN AVIATION



**Aviation has seen unprecedented change during the last 20 years, driven by emerging business models, new technology, and social change**

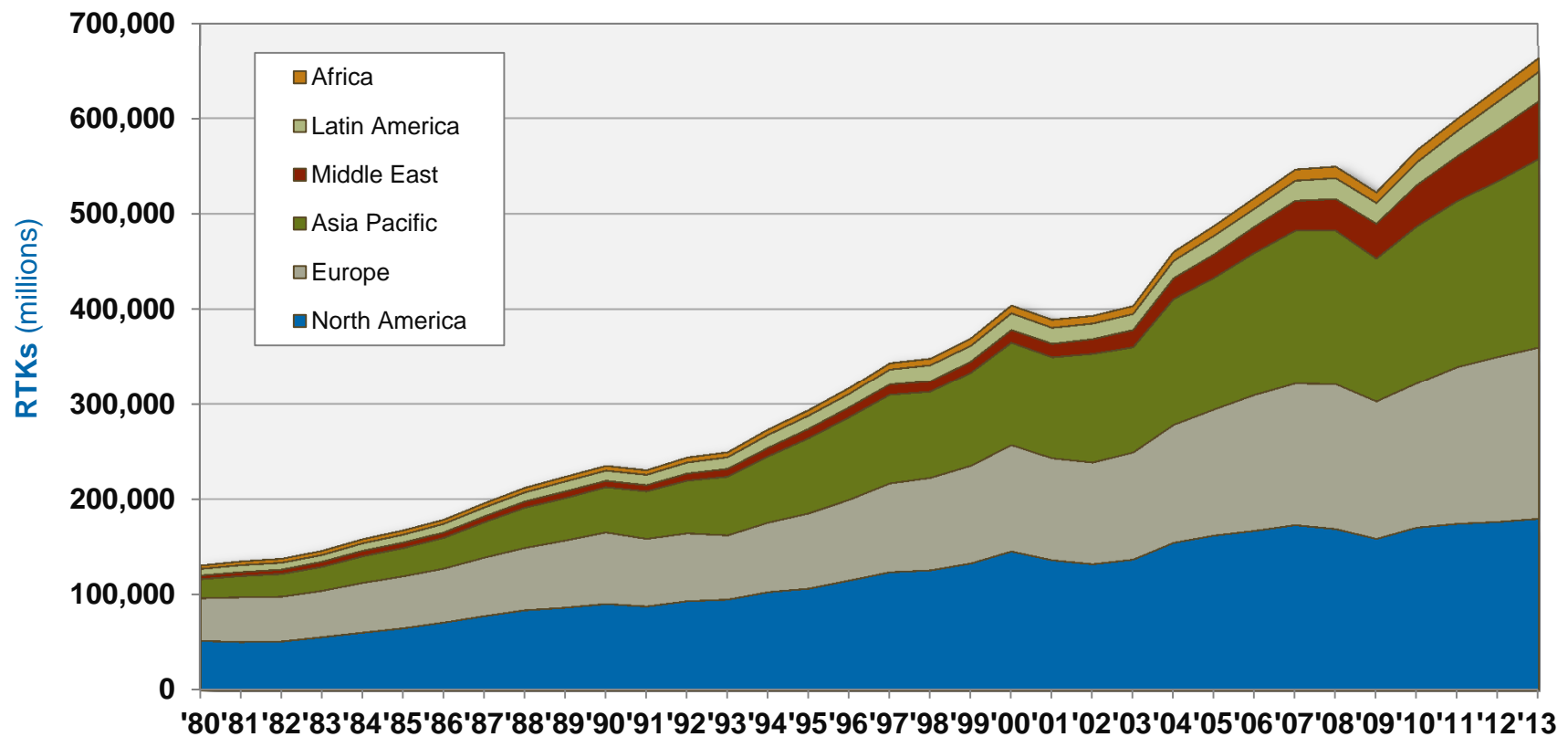
***Growth in aviation has been fuelled by the following major factors:***

- **Expansion of the global economy**
- **Growth of the tourism industry**
- **Technological advancement, which makes aircraft and flying**
  - Longer distances
  - More cost efficient



**Due to its speed and affordability, air travel has become the preferred choice for long distance personal travel**

*Evolution of World Traffic (RPKs) 1980-2013*

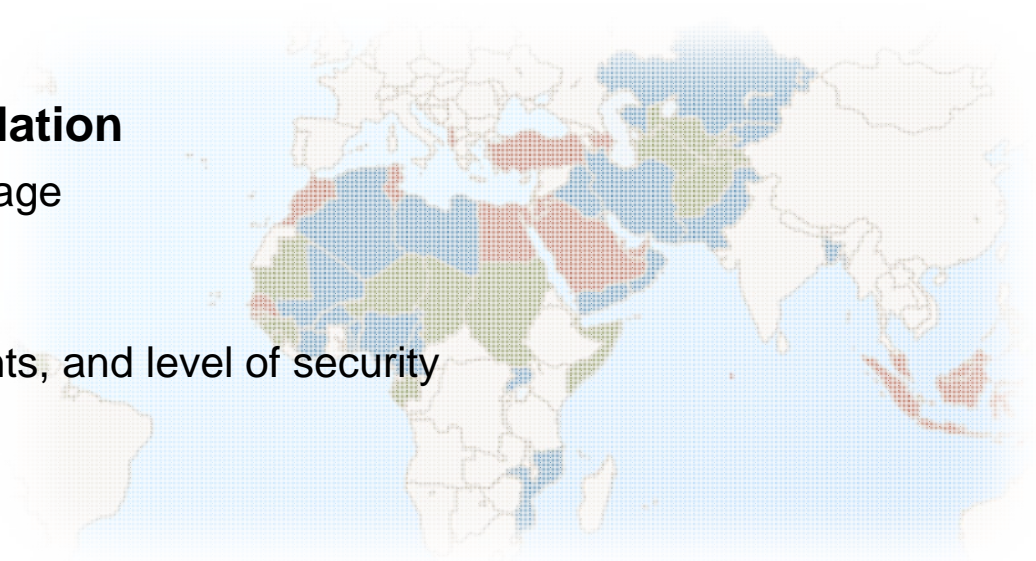


**Global CAGR=5.1%**

Source: ICAO for 1980-2008 data, IATA Financial Monitor 2009-2013

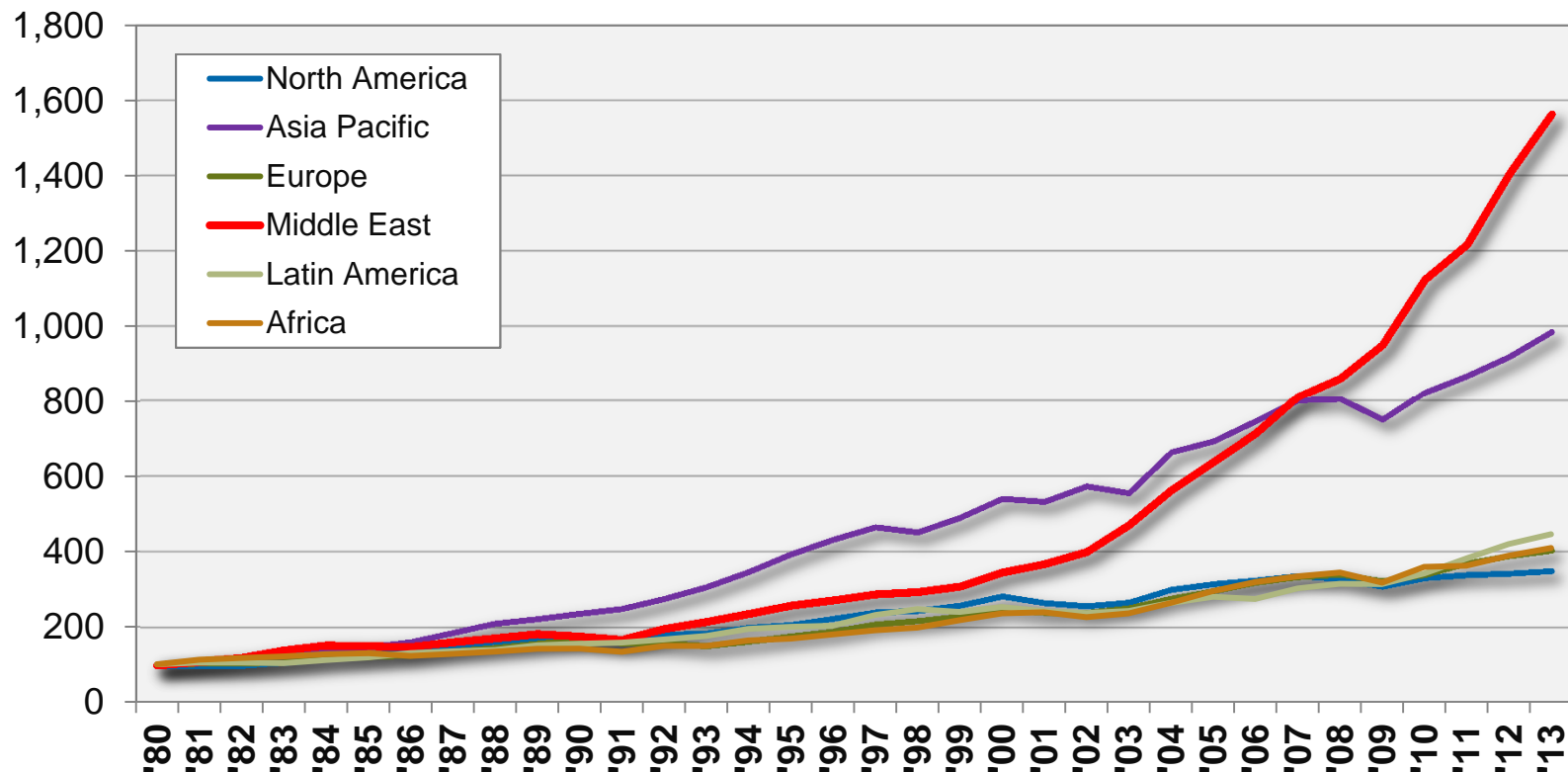
## Aviation growth varies by region, depending on various characteristics

- **Economic characteristics of the region**
  - e.g., level of GDP, income distribution, and type of economic activities
- **Geographic characteristics**
  - e.g., island nations and mountainous areas
- **Availability of alternative modes of transport**
  - e.g., high speed rail
- **Characteristics of the population**
  - e.g., density, distribution, and age
- **Political factors**
  - e.g., existence of air traffic rights, and level of security



**The overall growth in global air traffic has been driven by regional growth in emerging markets as well as explosive growth in the Gulf and Middle East**

*Historical Traffic Growth by Carrier Region 1980-2013*  
*RTK Growth Index (1980 = 100)*

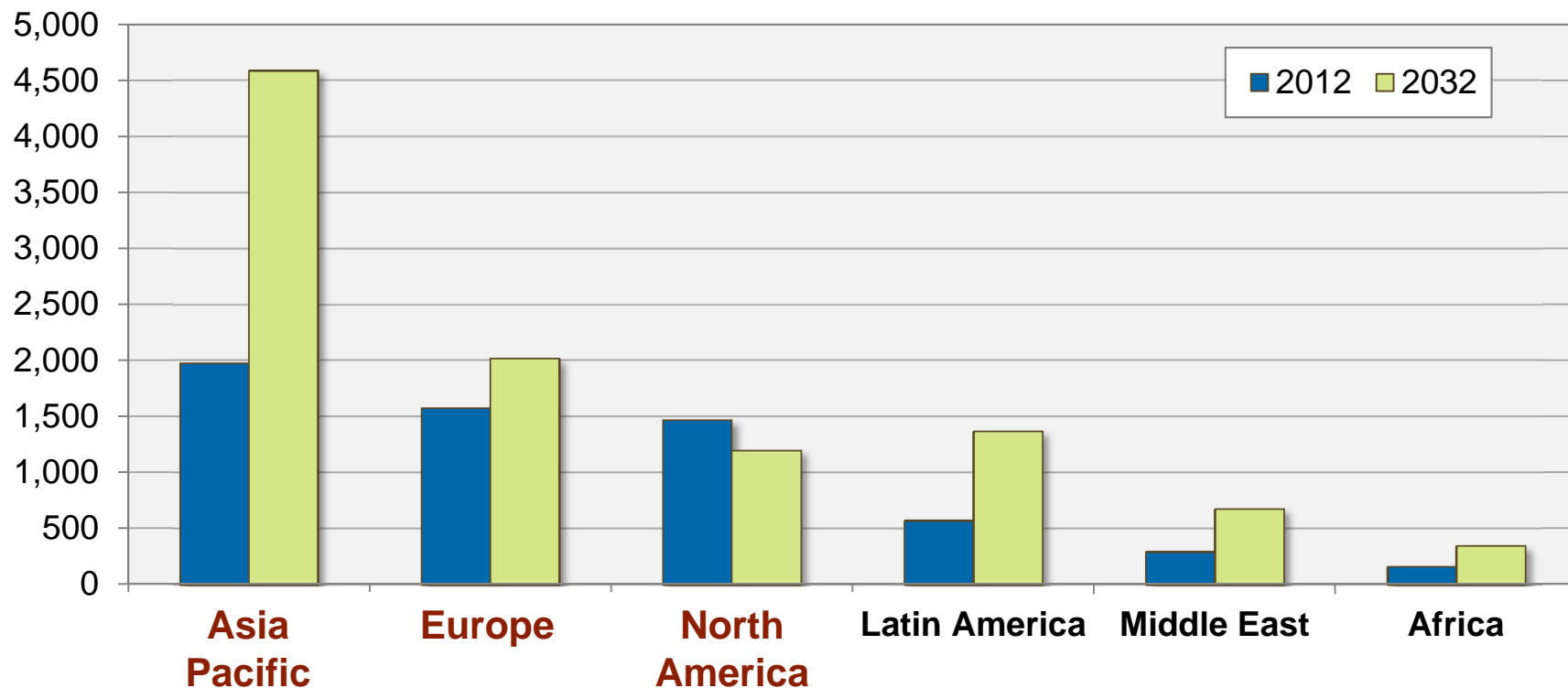


Source: ICAO for 1980-2008 data, IATA Financial Monitor 2009-2013



**The largest aviation markets of the world are Asia Pacific, Europe, and North America, which collectively represented 84% of Revenue Tonne Kilometres (RPKs) in 2013**

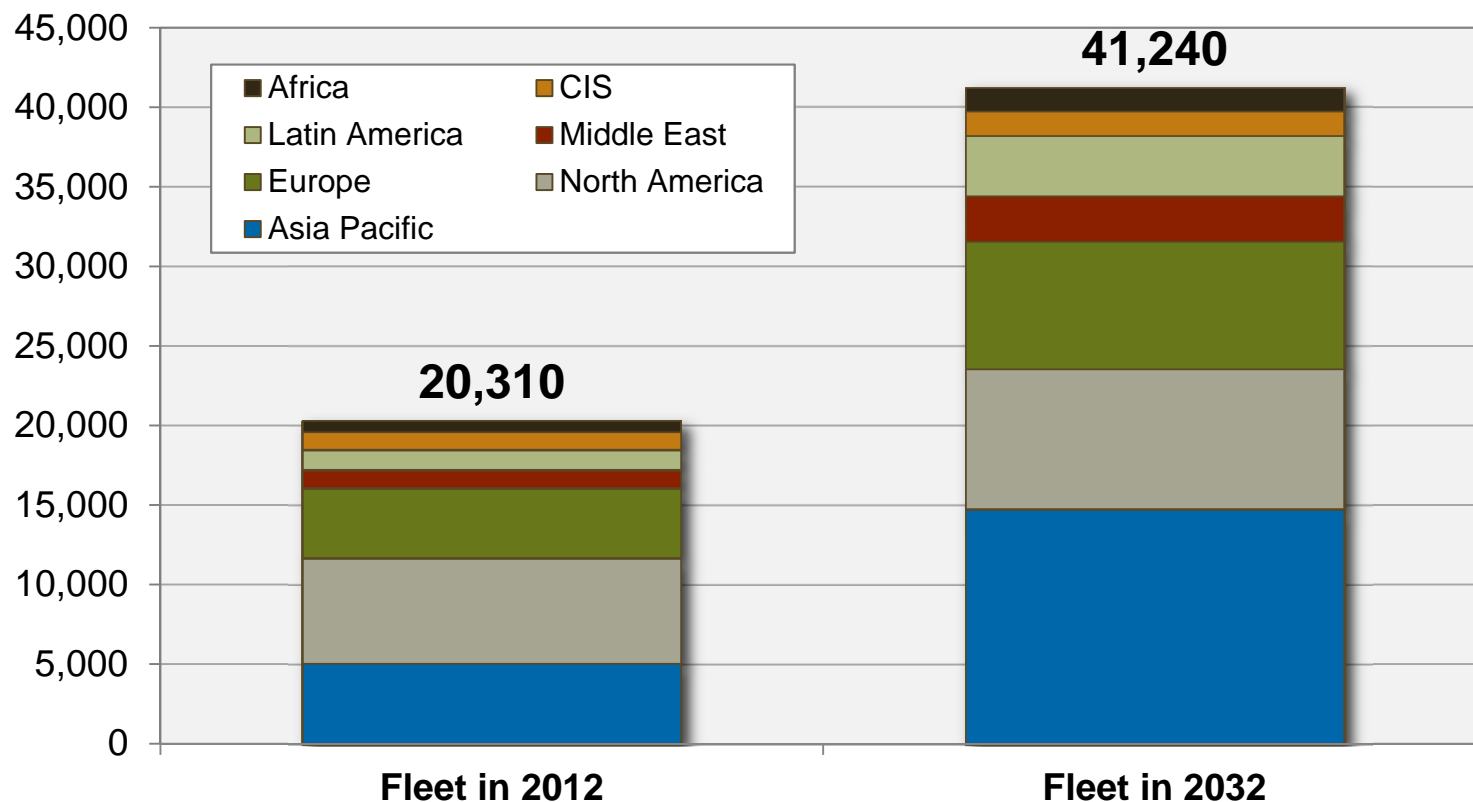
*Current and Forecast Market Size by World Region*  
*RPKS (Billions)*



Source: Boeing Current Market Outlook 2012-2032

**Historically, North America and Europe have accounted for the bulk of global aircraft demand, but this market dominance is slowly eroding**

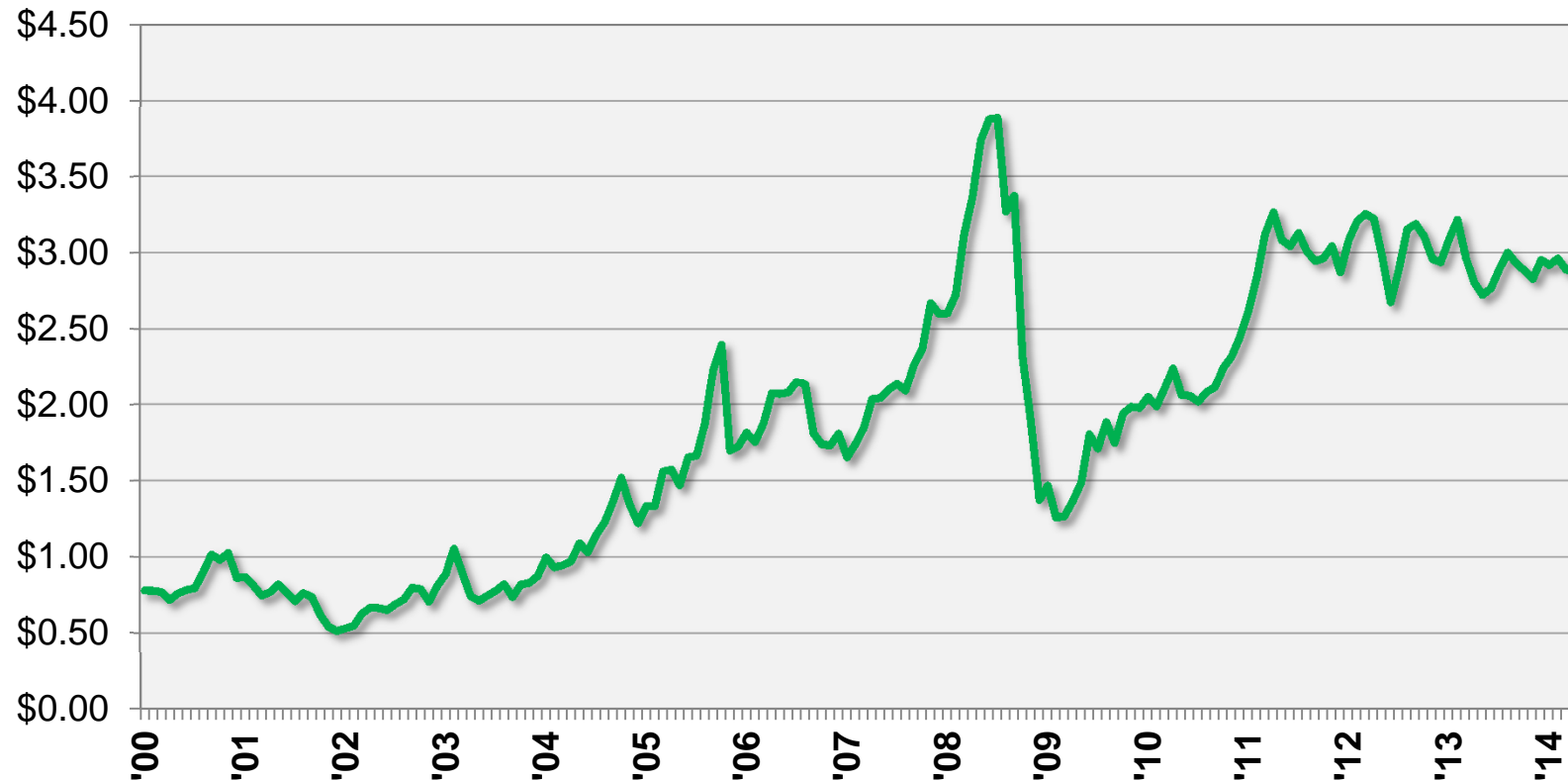
*Current and Expected World Fleet by Region  
Number of Aircraft*



Source: Boeing Current Market Outlook 2012-2032

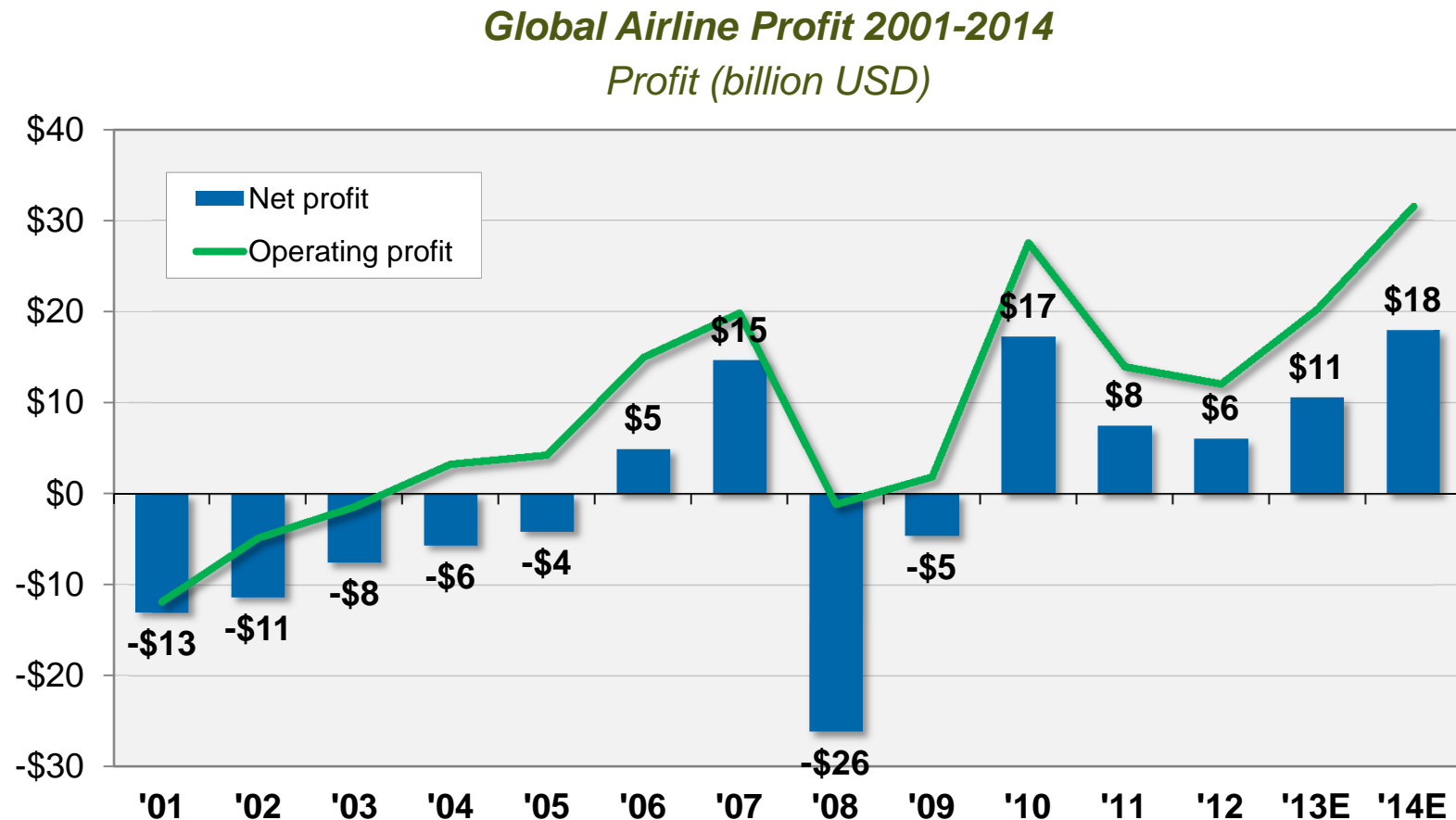
**Fuel price has had a significant effect on air transport growth, as fuel prices directly affect the cost base of airlines and therefore fares**

*Evolution of Jet Fuel Price 2000-2014*  
*USD / Gallon*



Source: US EIA, U.S. Gulf Coast Kerosene-Type Jet Fuel Spot Price FOB (Dollars per Gallon)

**Volatility has resulted in decreasing financial results for the world's airlines and the downturn had a dramatic impact on the already thin margins**



Source: Industry Financial Forecast Table June 2014 (IATA Economics)



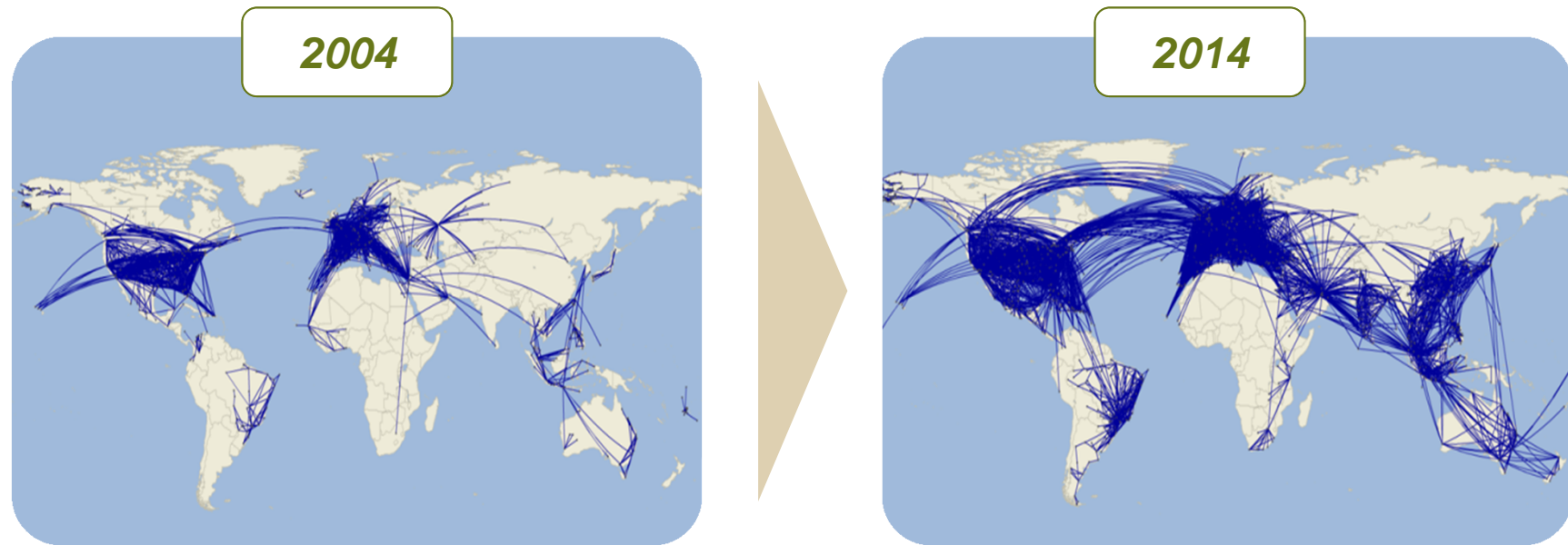
## Since the late 1970's, there has been a trend towards liberalizing international aviation markets

- Often, this process has started with the loosening of regulatory controls applied to domestic air services and is then extended to international services
- While air travel markets have expanded new, liberalized growth has posed greater challenges to old and new airlines alike
- In almost every country where air transport liberalization has occurred, new airlines have been created
  - Focus on short-haul, point-to-point markets where
  - Dramatically lower fares can stimulate significant market growth
- Incumbent carriers tend to respond:
  - First by lowering their own fares
  - Sometimes by establishing low-cost subsidiaries to compete head-to-head in selected markets

## **Bilateral air service agreements remain the primary vehicle for liberalizing international air transport services**

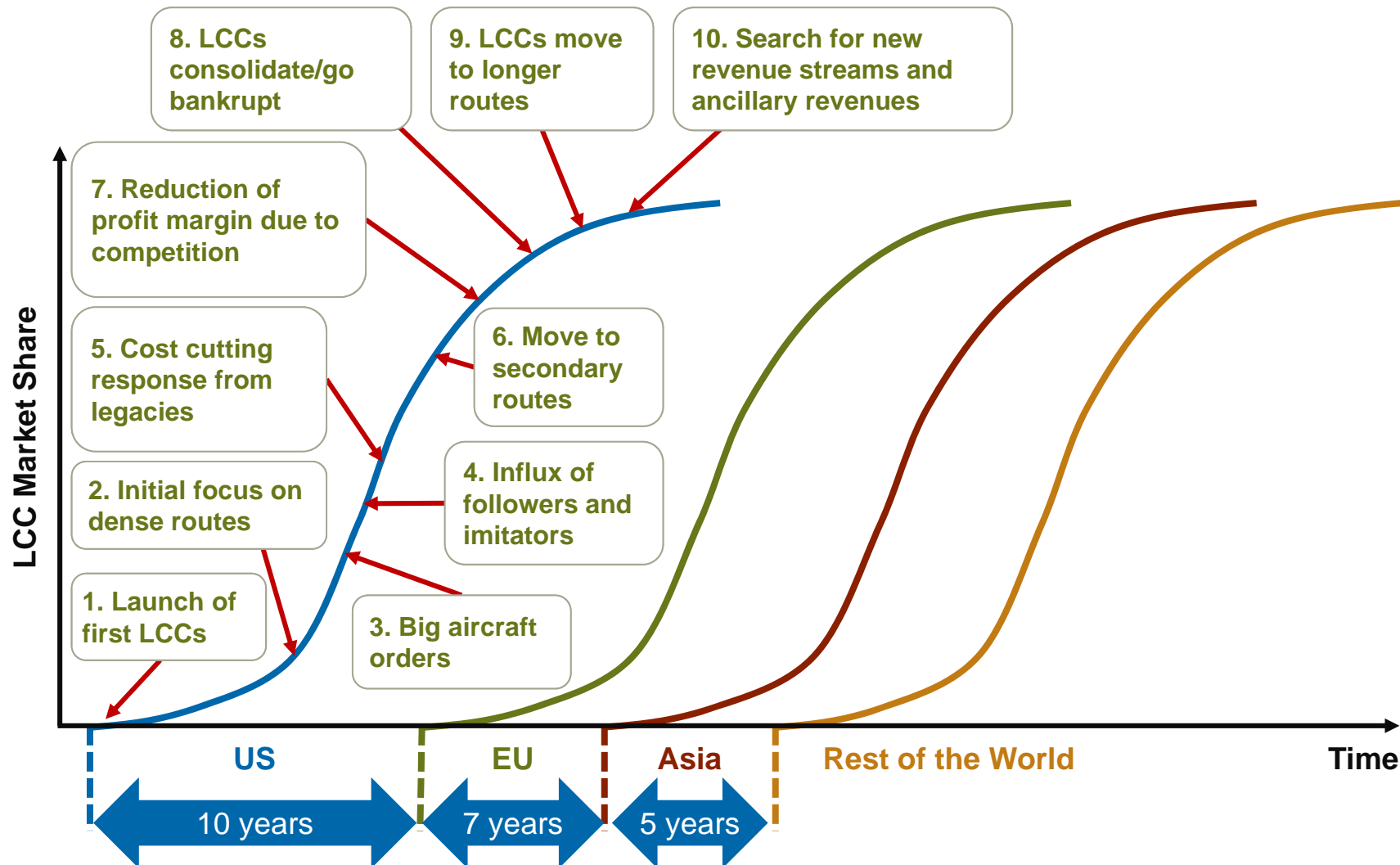
- **The liberalization and expansion of these agreements have gained momentum in the past decade, with over one thousand bilateral air service agreements (including amendments) reportedly signed worldwide**
- **However, many OIC member states maintain the traditional bilateral regime of international traffic regulations**
- **Current bilateral ASAs are protective of national carriers and contain rigorous restrictions on freedoms of the air, as well as frequency and number of designated airlines**

One of the most prominent changes in the last 20 years in the aviation industry has been the emergence of low-cost carriers (LCCs)



Source: PaxIS, OAG, ICF Analysis

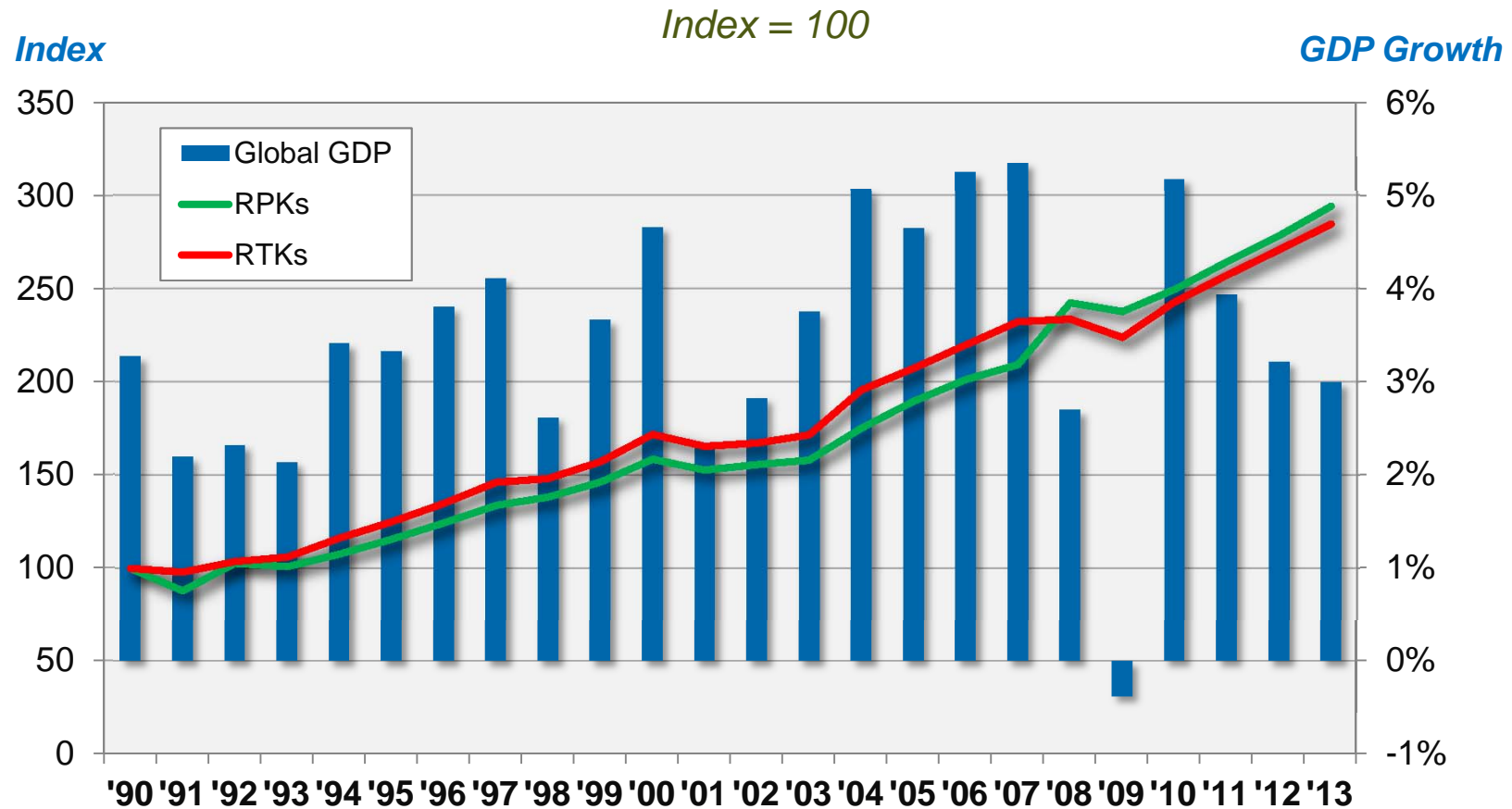
## The Maturing Trend of the LCC Market Segment





## The level of air traffic closely correlates with the level of economic activity

### *Growth in Global GDP and Air Travel 1990-2013*



Note: RTK=Revenue Tonne Kilometre, RPK=Revenue Passenger Kilometre  
Source: ICAO for 1980-2008 data, IATA Financial Monitor 2009-2012, International Monetary Fund, World Economic Outlook Database, April 2014

## Aviation supports over 58 million jobs worldwide and is a critical driver of the global economy, contributing USD 2.4 trillion to global GDP

### *Global Employment and GDP Generated by Air Travel*

Impact	Areas of Impact	Employment Generated (millions)	GDP Generated (USD billion)
Direct	On-site airport (retail, car rental, customs and immigration, etc.), airlines, air navigation on-site airport work, airlines, air navigation	8.7	\$606
Indirect	Suppliers to the industry; examples: aviation fuel suppliers; construction companies that build airport facilities; suppliers of sub-components used in aircraft; manufacturers of goods sold in airport retail outlets	9.8	\$796
Induced	Activity supported through employees in the industry (whether direct or indirect) that use their income to buy goods and services for private consumption	4.6	\$324
Tourism	Hotels, Restaurants, Cultural Institutions, etc.	35.0	\$807
<b>Total</b>		<b>58.1</b>	<b>2,533</b>

Source: Air Transport Action Group, "Aviation Benefits Beyond Borders, April 2014 Report"

## Each new flight at an airport contributes to a country's economic development

*New flights aid development by expanding business sales for local companies, supporting jobs and income for residents and contributing incremental tax revenues*

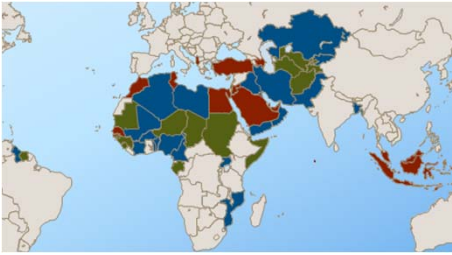
- **Direct economic effects are the changes that occur in the local economy as a direct consequence of the operation of the new air service.**
  - Business activity for tenants at the airport, visitor spending at off-airport businesses in the tourism sector (e.g. hotels and restaurants), and increased business sales by local exporters
- **Indirect economic effects**
  - Economic activity that occurs when on-airport and off-airport businesses that benefit from the new air service purchase goods and services from other businesses in the area
- **Induced economic effects**
  - Workers that are the direct beneficiaries of new air services re-spend their incomes

## The link between GDP growth and air transport can also be seen in the eastward shift of the World's economic and aviation centres of gravity



Source: Air Transport Action Group, "Aviation Benefits Beyond Borders, April 2014 Report"





## SECTION 2

# LINKS BETWEEN AIR TRANSPORT AND TOURISM

## Air transport and tourism are inextricably linked

- An increase in one often accompanies an increase in the other
- Increased air links allow tourists to more readily access a destination
- Demand by tourists to arrive at a destination leads to enhanced air service



**A tourist must make many decisions that can be swayed by the offerings of a particular destination or country**

*Office vs. Vacation*



*Vacation Type*



*Vacation Destination*



*Travel Mode*



*Carrier/Hotel*



## Previous studies have examined the relationship between air transport and tourism

- Links between aviation and tourism are tangible, but countries often pay greater attention to promoting tourism, due to its direct and highly visible impact upon the local economy
- Limitations upon air transport (regulatory or otherwise) often create a negative externality: *A limitation on tourism growth*
- Countries can effectively increase tourism levels by making changes within the local air transport industry
- The drivers of airline profitability may not align with optimal tourism economics
- As a country develops, environmental impacts of air transport become more visible and must be considered when making policy

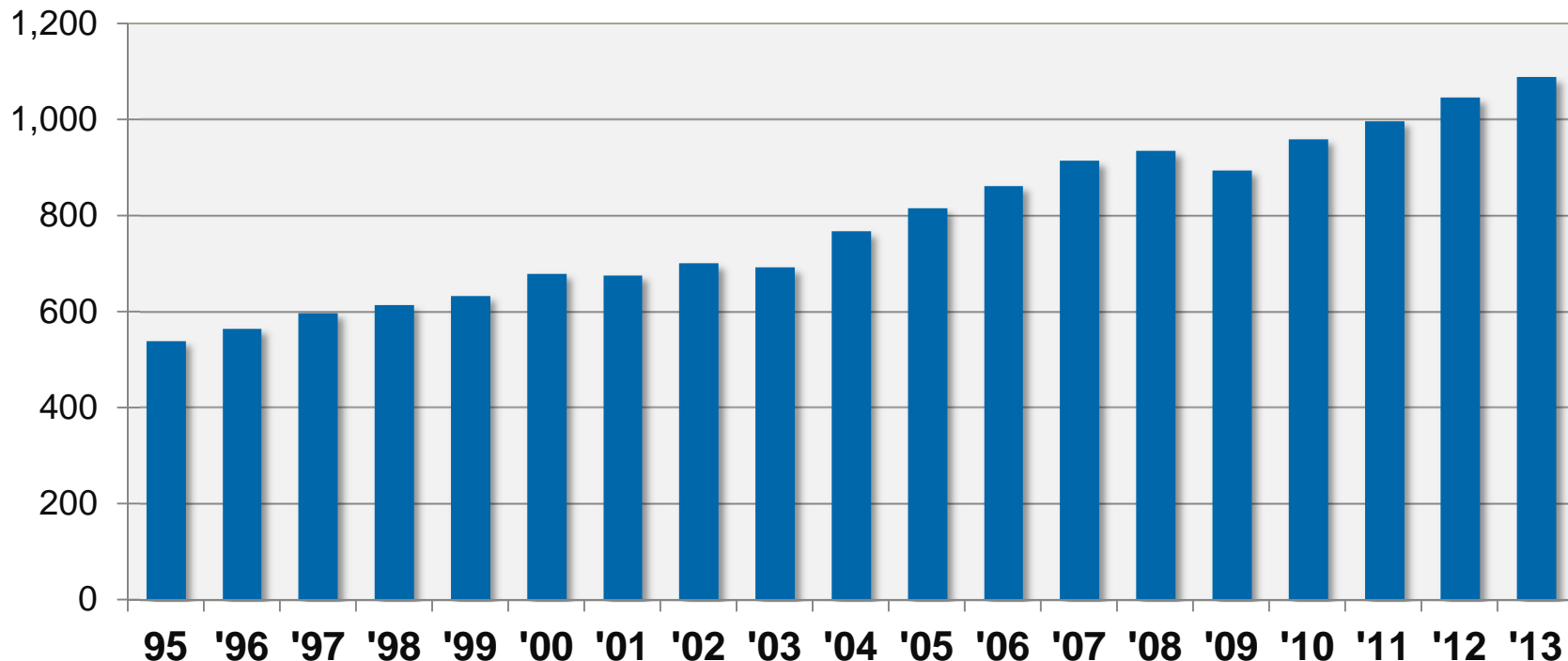
*This study aims to expand previous research to OIC countries and make practical recommendations*



## The growth of global tourism continued its momentum in 2013, achieving a new record of 1.1 billion international tourist arrivals

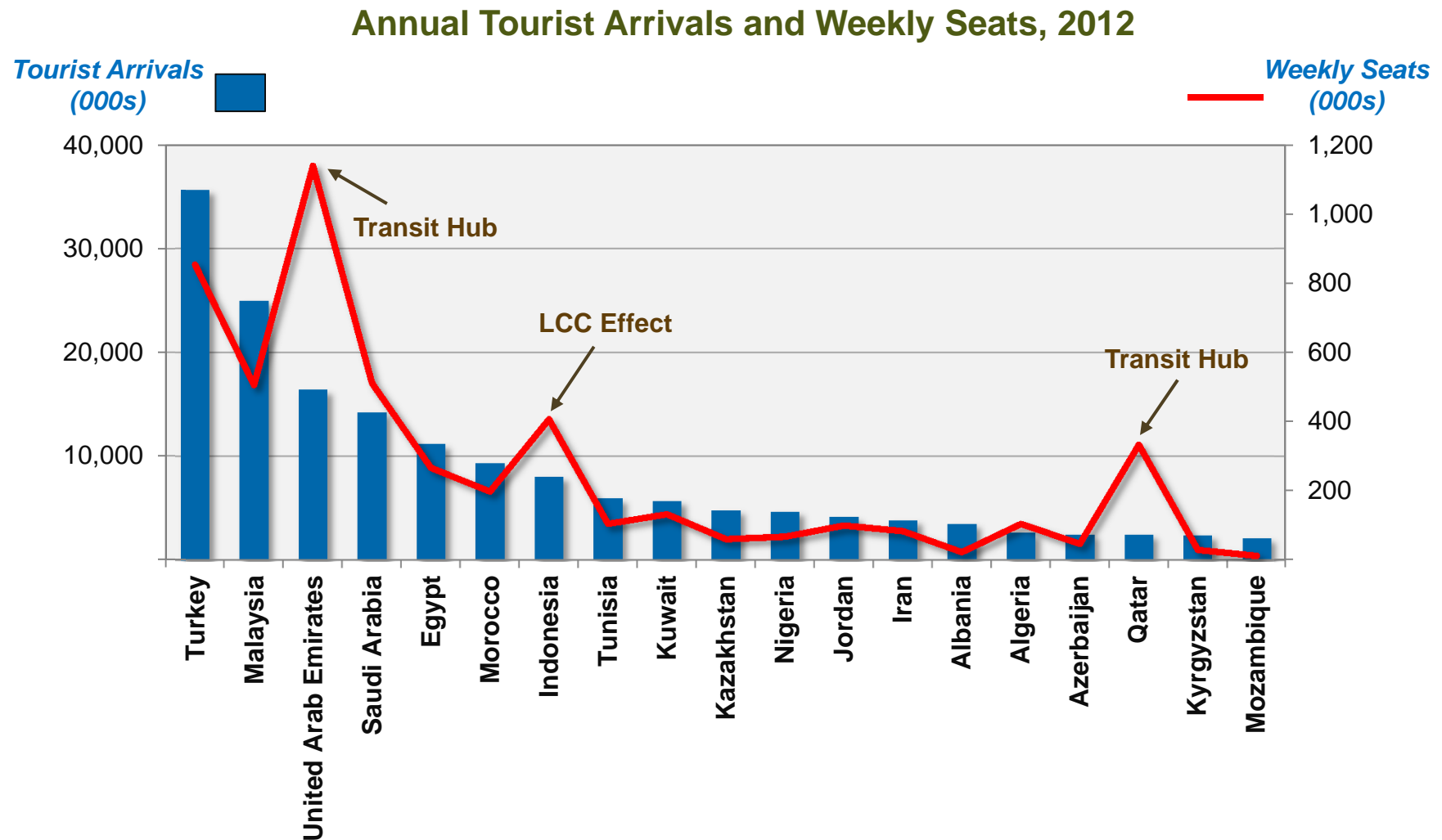
**Worldwide International Tourist Arrivals**  
1995-2013

*Millions*



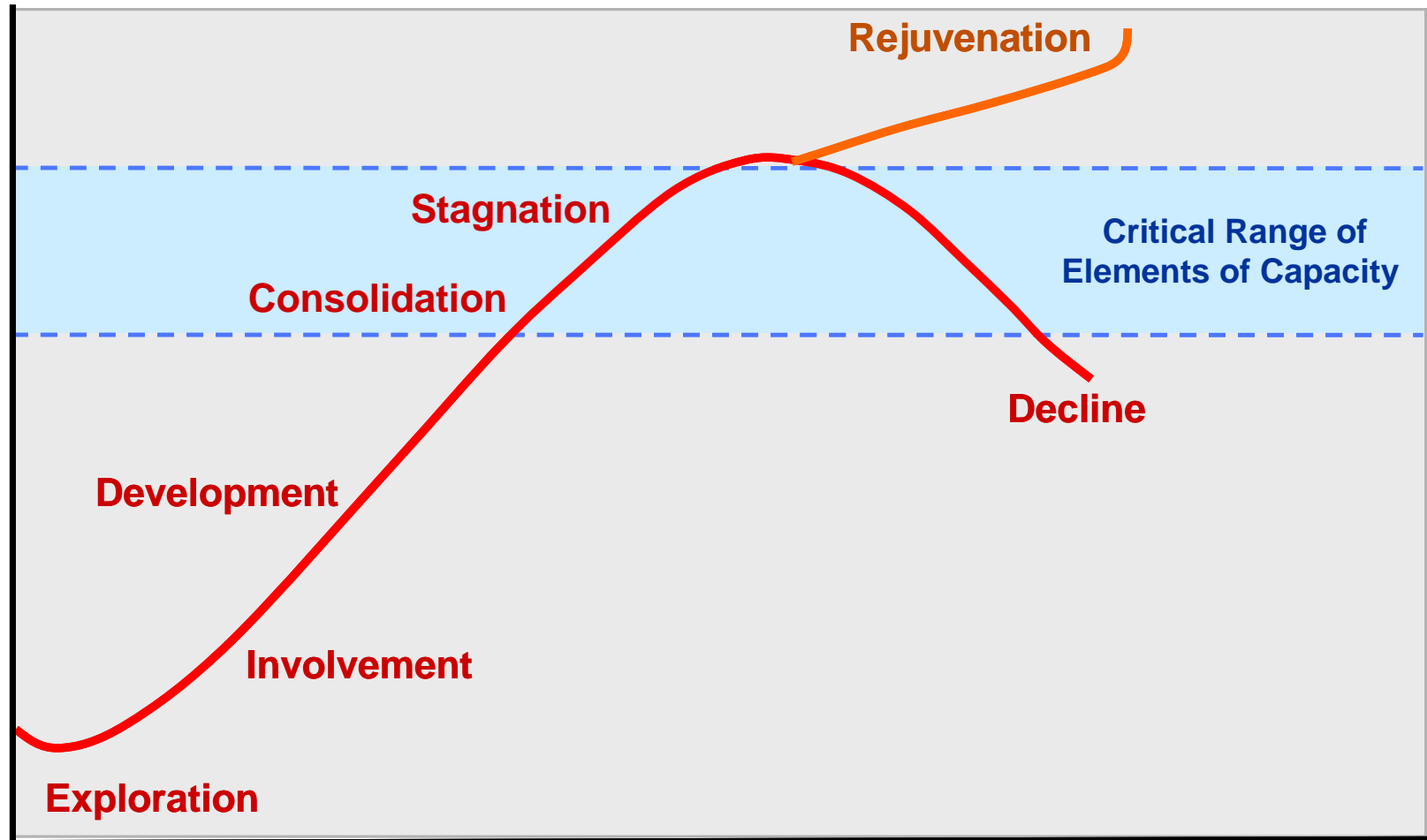
Source: United Nations World Tourism Organization

## Annual Tourist Arrivals and Weekly Seats, 2012



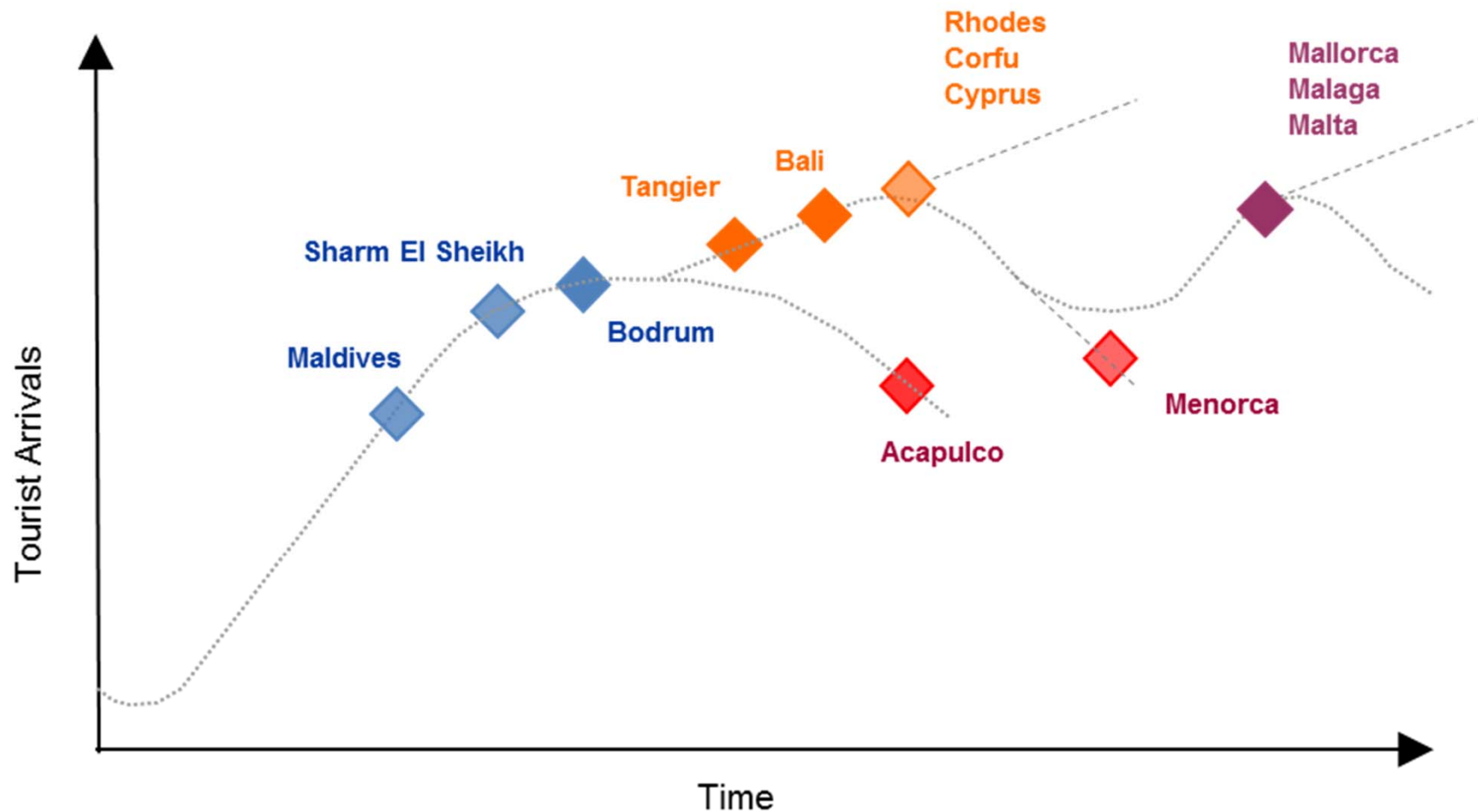
Source: SESRIC, OAG Schedules

## Evolution of a Tourist Destination



Source: Richard W Butler (1980), '*The Concept of a Tourism Area Cycle of Evolution: Implications for the Management of Resources*'.  
*Canadian Geographer*

## Location of Typical Tourist Destinations on the Lifecycle Curve



Note: Prepared for illustrative purposes only  
Source: ICAO, ACI

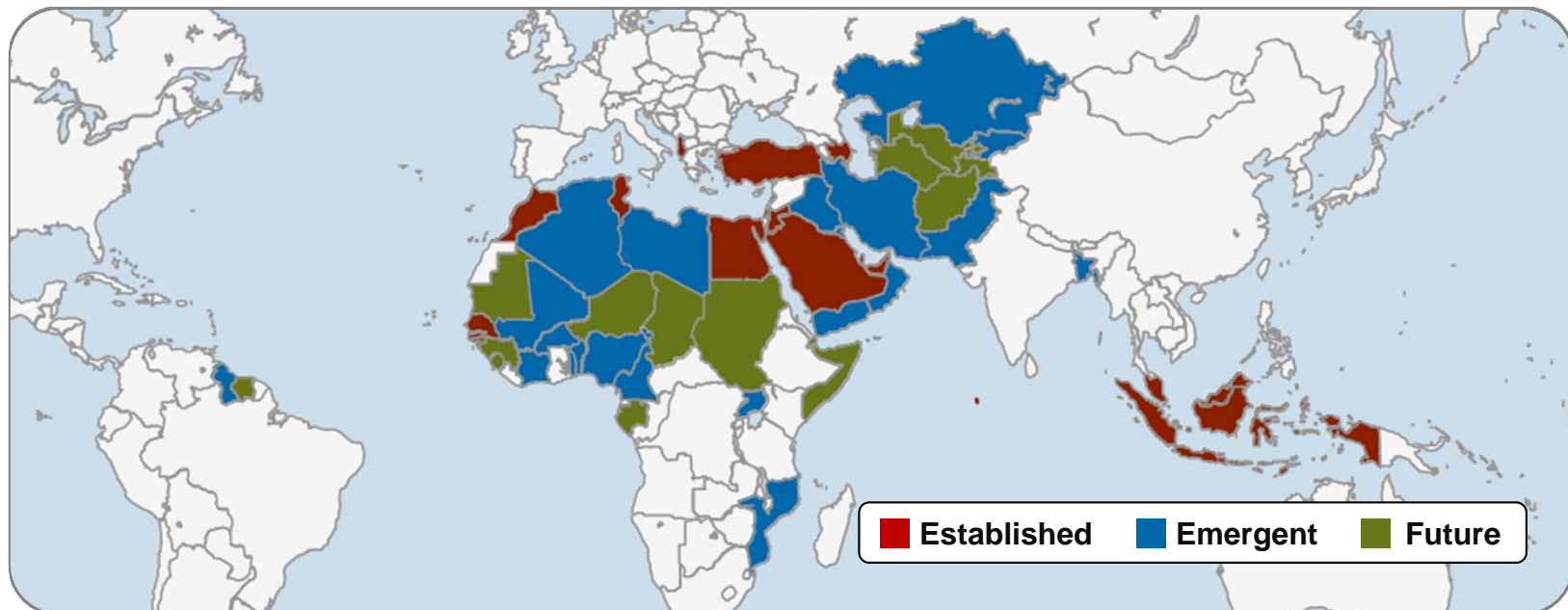


## SECTION 3

# SITUATION OVERVIEW IN MEMBER COUNTRIES

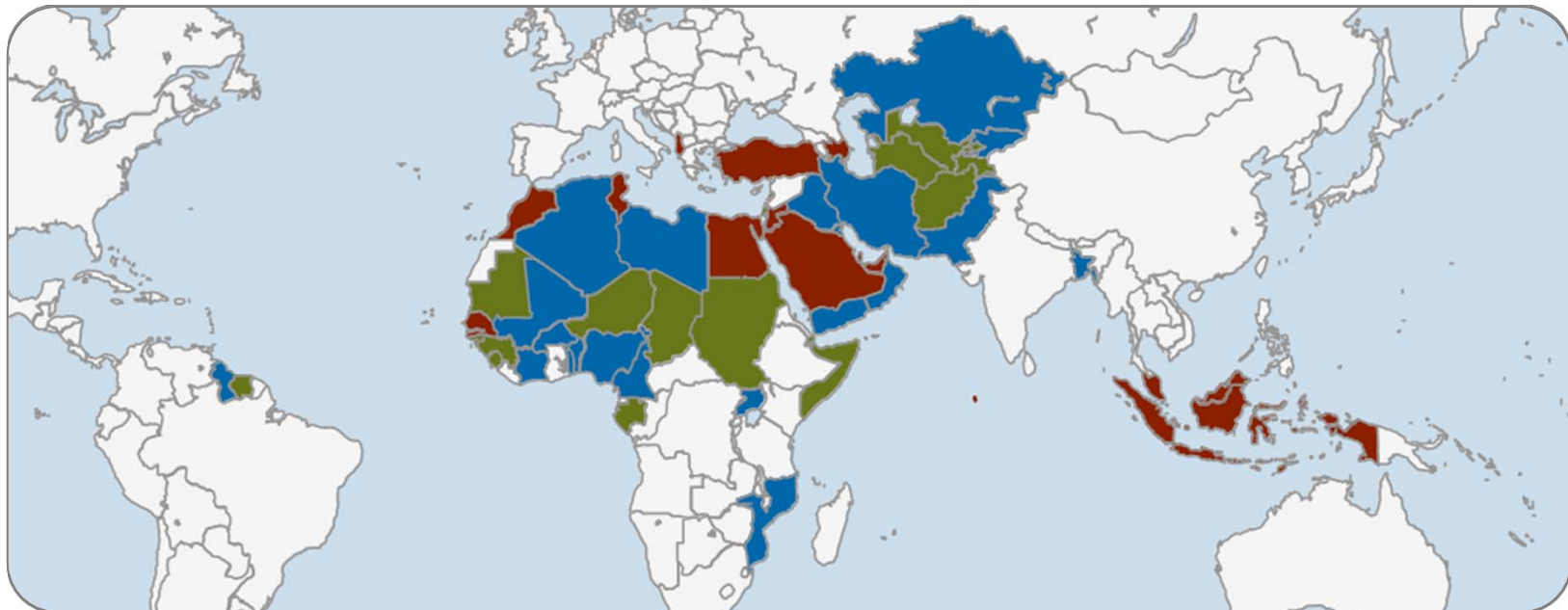
## OIC member countries have been grouped into three groups based on the offering of the tourism sector

- Countries with '**established**' tourism sectors have significant tourism infrastructure and active marketing campaigns
- Countries with '**emergent**' tourism sectors have begun to develop tourism as an industry, but it is currently less than 10% of GDP
- Countries with '**future**' tourism sectors are those with underdeveloped tourism markets often due to political transition



## These countries can also be categorized in terms of the type of tourism on offer

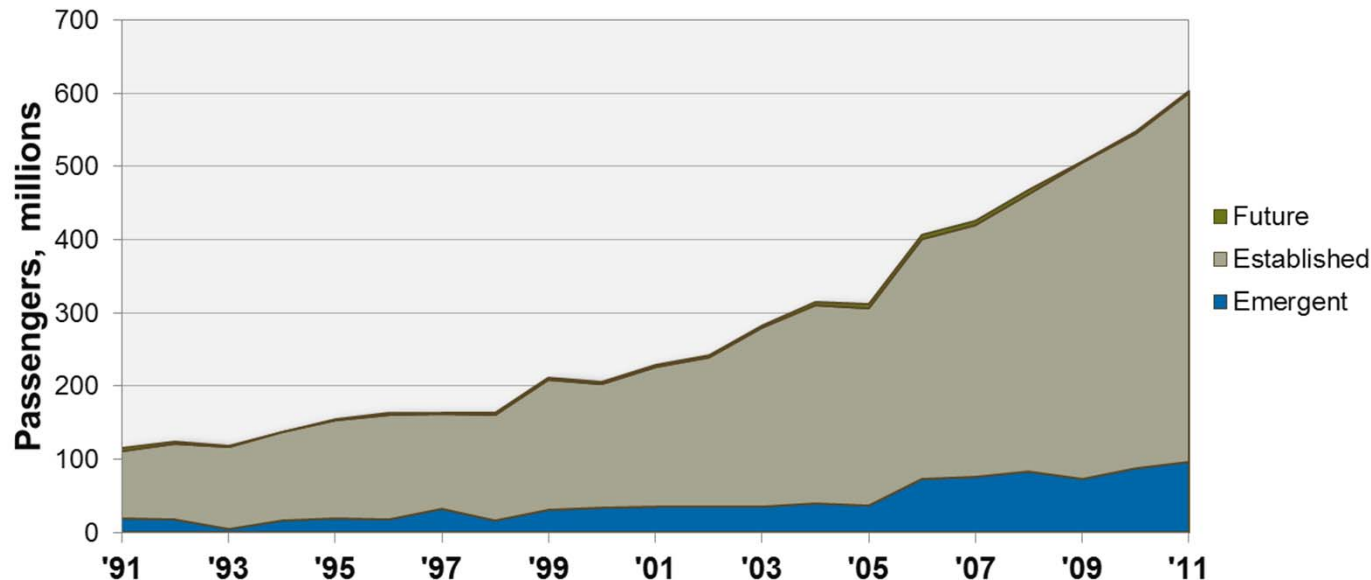
- Beach
- Rest & Relaxation (R&R)
- Ecotourism
- Religious
- Business
- Medical
- Cultural
- Visiting Friends and Relatives (VFR)





## The OIC's combined traffic is in excess of 600m psgrs.

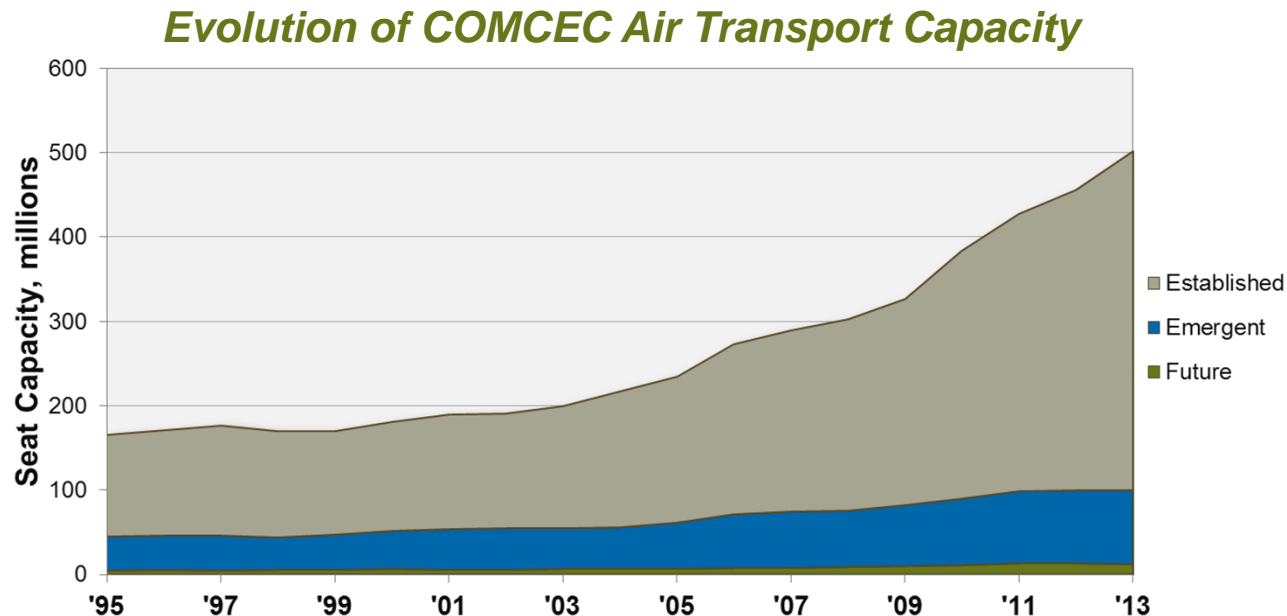
### *Evolution of Passenger Traffic*



- The Established group has increased significantly over the past 20 years as the number of airlines increase as barriers to entry are lowered
- The Emergent and Future groups have seen growth with a significant increase in 2007 in the emergent countries led primarily by the resuming of services in Iraq
- It is far more difficult to track the growth of Future and to a lesser point Emergent tourism markets as many do not report annual passenger figures

Source: ACI

**In terms of aviation capacity the best used metric is departing/arriving seats from a country.**

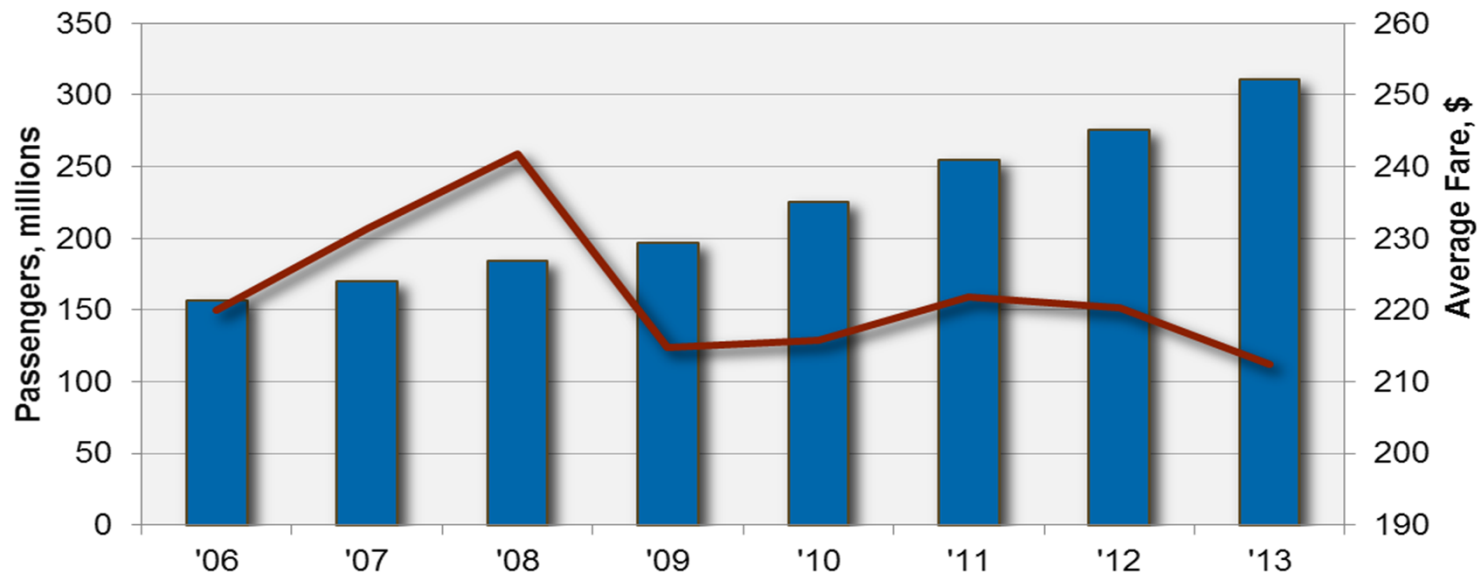


- The importance of home carrier growth is best highlighted by the Established group's strong growth driven by the Middle East carriers in 2006
- For Emergent and Future markets, growth has been limited by foreign carriers who drive the majority of traffic outbound into their home markets

Source: OAG

**Prior to 2008, fares were increasingly in tandem with rising demand – *When the Recession hit, fares fell by 11% in an effort to maintain demand***

*Airfares vs. Passengers*

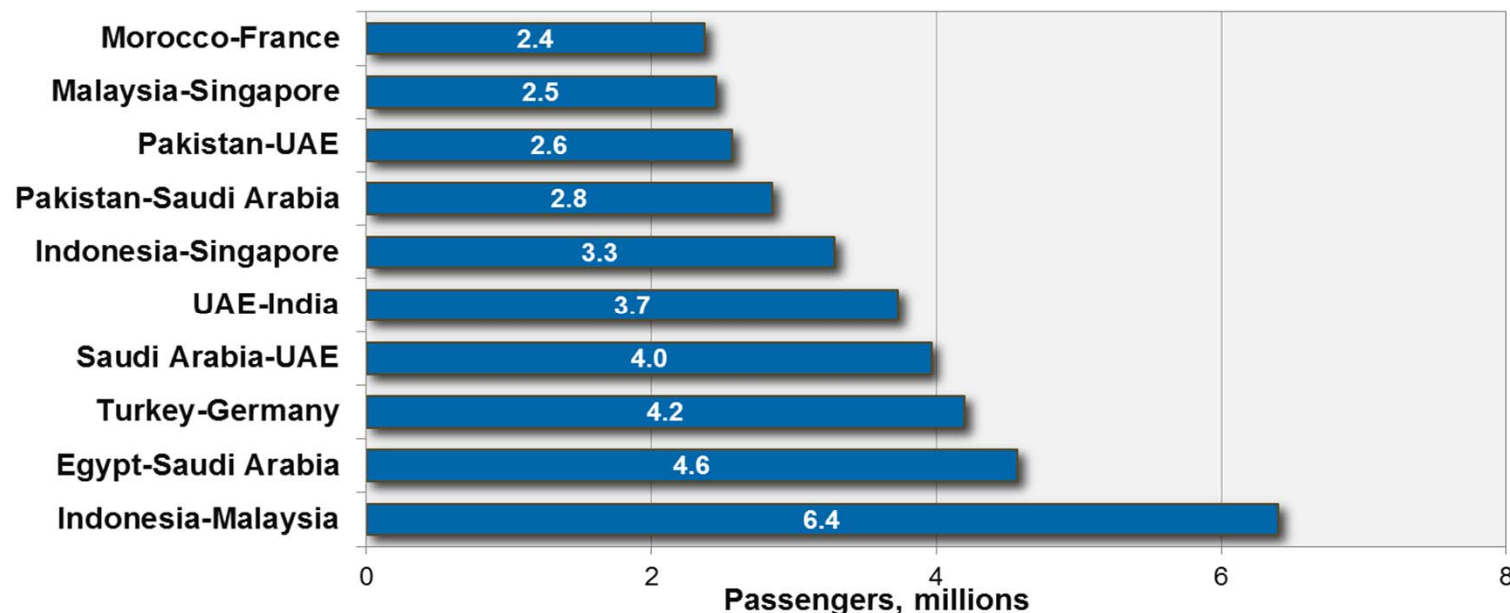


- Future markets saw significant cost cuts in average fares post 2008 largely due to the withdrawal of the more expensive long haul routes operated by foreign carriers
- Average fares in future countries have historically been around \$100 more than those in the Established and Emergent groups

Source: ICF SH&E Analysis, IATA

## Ten country-pairs accounted for 11.7% of the OIC's total passengers as of 602.6m, including both tourism and non-tourism travel

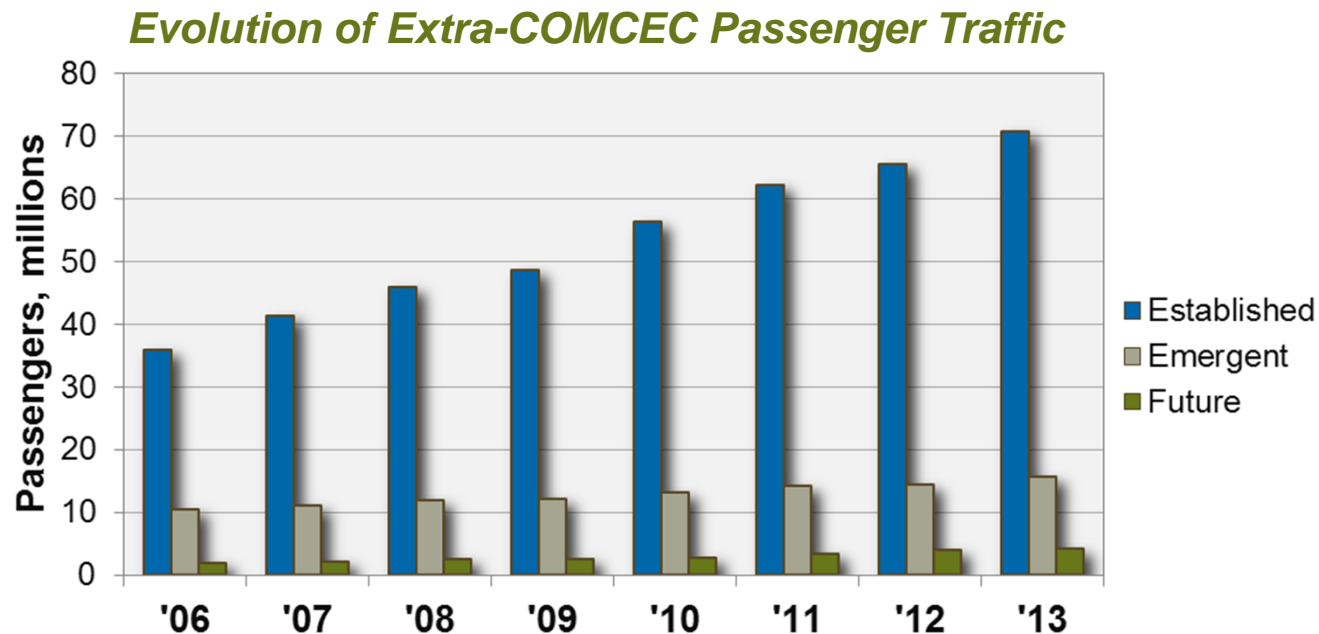
*Top COMCEC Country Pairs by Passenger Traffic*



- Passenger traffic between Indonesia & Malaysia has grown swiftly in recent years due to the emergence of several LCCs, which have stimulated traffic

Source: ICF SH&E Analysis, IATA

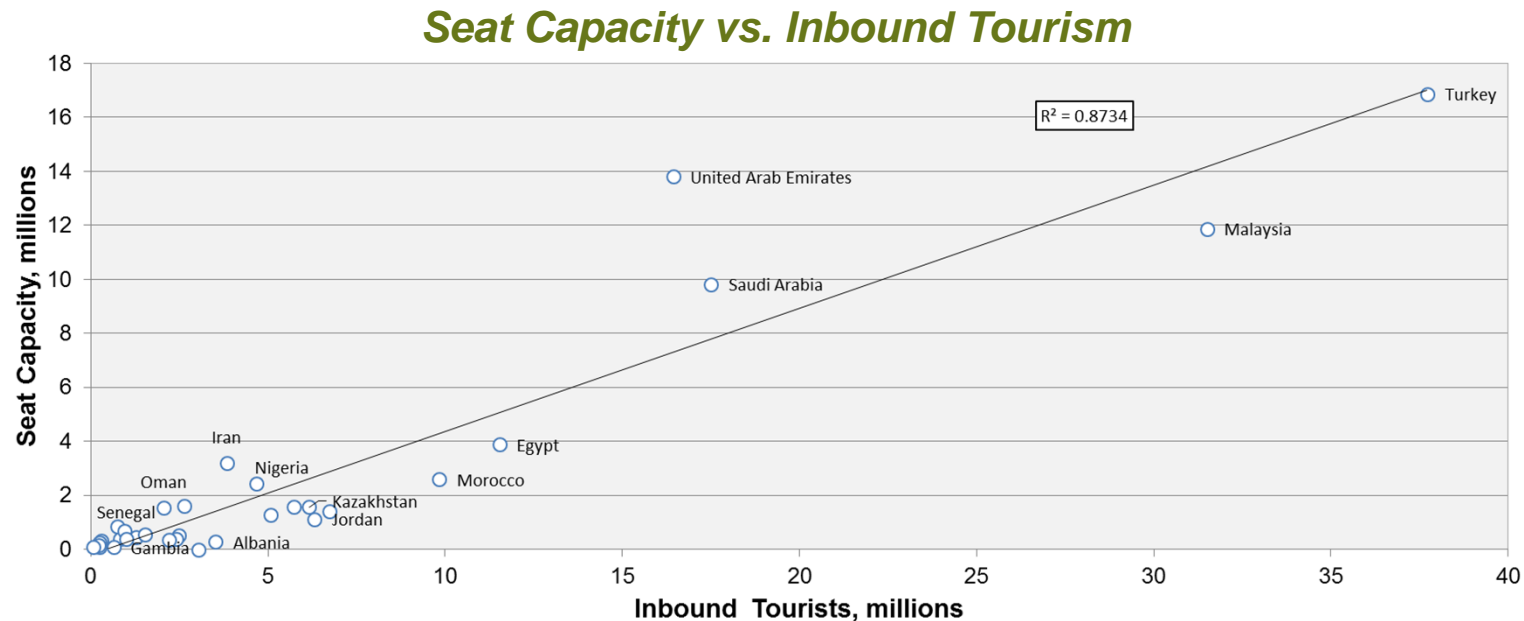
## Historical growth of passenger traffic between OIC member states and non-OIC member states.



- Passenger traffic in Established markets has increased two-fold since 2006 and was the least affected group by the 2008 global recession
- Passenger traffic in Emergent markets has grown 150% since 2006
- Future tourism states have more than doubled passenger traffic since 2006

Note: 'Extra-COMCEC' refers to travel between COMCEC and non-COMCEC countries.  
Source: ICF SH&E Analysis, IATA

## Strong linkages exist between seat capacity within a country and the number of inbound tourists

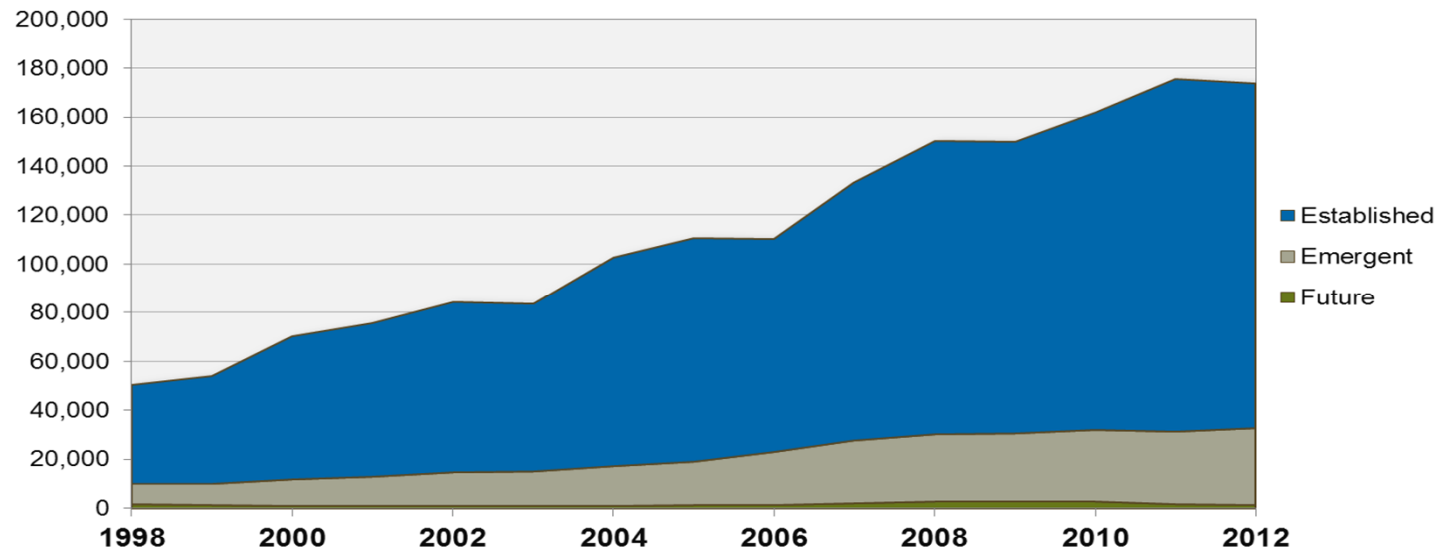


- The trend line indicates whether a country is attracting the expected level of tourists based on its aviation sector
- Countries which are above the line are underperforming in the level of tourists they are attracting
- Those who are beneath the line are showing a strong tourism sector reliant on an adequate aviation industry

Source: ICF SH&E Analysis, OAG, UNWTO

## Tourism Arrivals – *International*

### *Evolution of International Tourist Arrivals in OIC Member States (2012)*



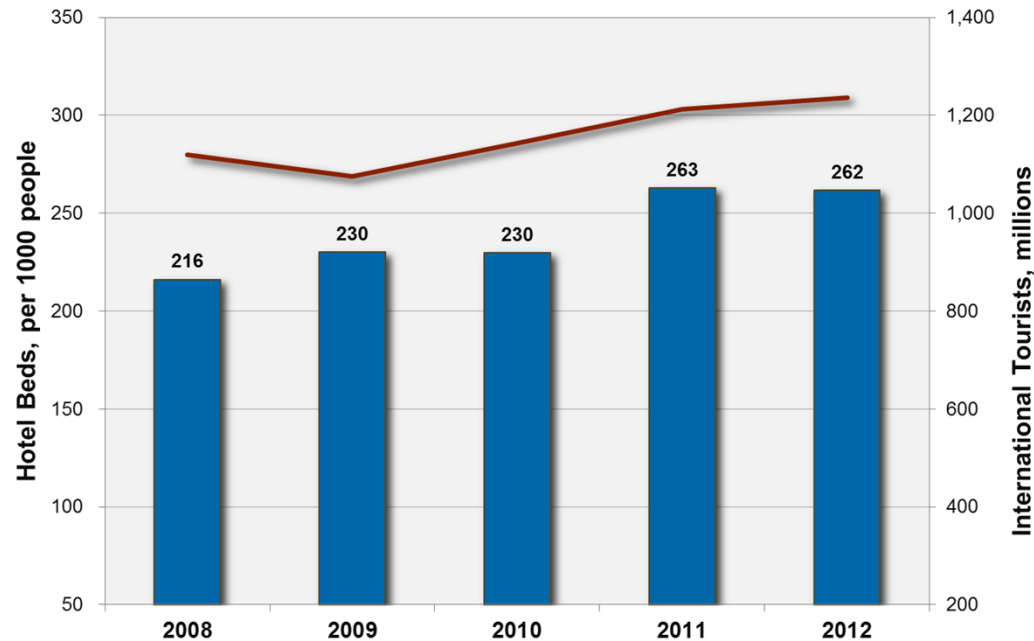
- Since the late 1990s the established market has greatly increased its global market share
- Emergent markets have seen slightly faster growth than Established markets, but albeit from a much lower baseline
- The Future markets should begin to recover as national carriers start to increase capacity

Source: ICF SH&E Analysis, SESRIC



## Tourism Infrastructure

### *Hotel Beds per 1000 people for OIC Member States*

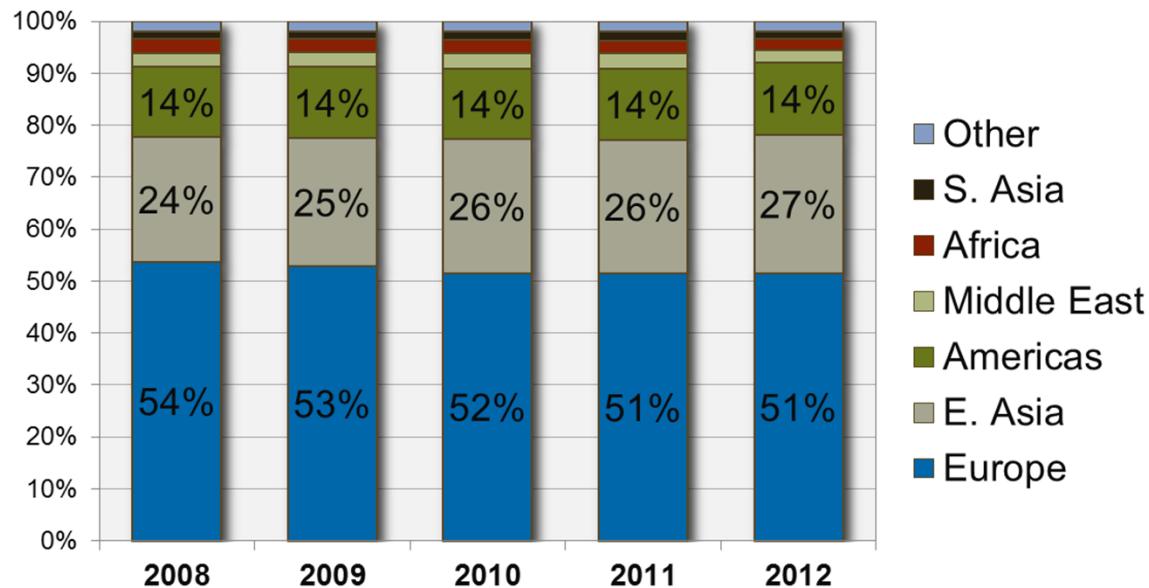


- There is generally a close correlation between the growth in hotel stocks and the growth in tourist arrivals
- Over the past five years the number of hotel beds per 1000 people has increased with jumps in 2009 and 2011
- As hotel infrastructure takes a period of years to complete it is very rare to witness a smooth and gradual increase over time

Source: UNTWO

## For OIC member states the vast majority of inbound visitors come from three key markets; Europe, East Asia and the Americas

*Tourist Arrivals to COMCEC by World Region*

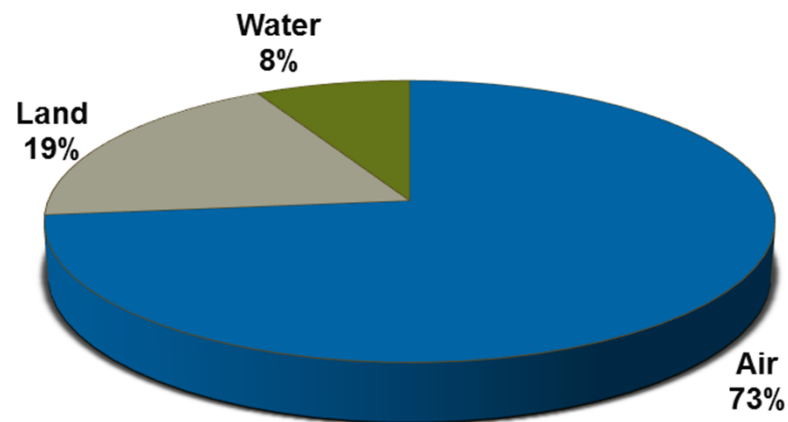


- The European market is by far the largest for international tourism throughout OIC member states
- East Asia, in particular China and Singapore, is the fastest growing market

Source: UNWTO, ICF SH&E

**For Established markets, the vast majority of international tourists arrive via air transport with land transport, road or rail, providing less than 20% of the total arriving tourists**

***Methods of Transportation – Established Tourism Group***

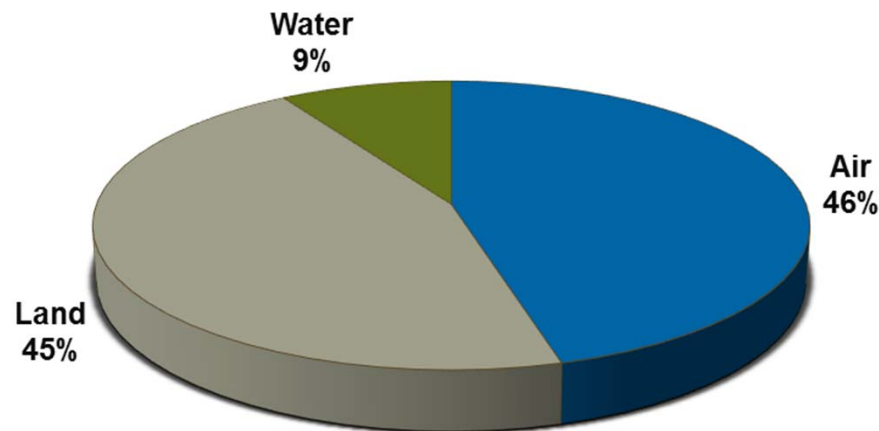


- **The disadvantage of land travel is that a nation limits its catchment to the surrounding nations who could share a very similar climate and geography which obviously limits the appeal to local tourists**
- **Air transport provides a truly global catchment zone for a nation's tourism sector as aircraft are able to pass over all types of terrain and into major hub airports which multiply the demand for a particular route as individual demand is combined**

Source: UNTWO

**Future tourism nations attract far fewer tourists via air than their Established and Emergent counterparts which leaves them missing the previously discussed benefits.**

*Methods of Transportation – Future Tourism Group*



- As a country develops and markets air services it increases its ability to attract higher yielding foreign passengers who will spend more while they are visiting a country
- While land is chosen by 45% of arrivals in Future tourism countries it does not indicate a strong preference for land travel but rather indicates a lack of variety and selection from the air transport sector

Source: UNTWO

