



International Civil Aviation Organization

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## WORKING PAPER

# REGIONAL WORKSHOP ON TRAFFIC FORECASTING AND ECONOMIC PLANNING

Cairo, 2 to 4 November 2010

### Agenda Item 4: Air Transport Potential and Outlook for the Region

(Presented by the Secretariat)

#### Introduction

1. This paper describes past trends in the traffic of airlines in the Latin America/Caribbean region and examines some of the factors which underlie the demand for air transport in the region including an economic overview, operating costs, financial trends and other stimulants and constraints. The purpose is to provide background information for discussions among workshop participants on the prospects for future traffic growth and the potential impact of various causal factors.

#### Historic Traffic Trends

2. Over the past decade, scheduled traffic of airlines registered in the Middle East region grew at an average annual rate of 12 per cent. The trends for, and year-to-year changes in, passenger and freight traffic for the Middle East region and the world are illustrated in **Tables 1 through 6** for the period 1999 - 2009.

**Table 1**

**PASSENGER TRAFFIC OF SCHEDULED AIRLINES  
1999-2009**

|                      | Passenger-kilometres<br>(millions) |         | Average Annual<br>Growth (%)<br>1998-2009 |
|----------------------|------------------------------------|---------|---|
|                      | 1999                               | 2009    |   |
| Middle East Airlines | 82204                              | 254735  | 12.0                                      |
| International        | 70266                              | 238052  | 13.0                                      |
| Domestic             | 11938                              | 16683   | 3.4                                       |
| World                | 2793003                            | 4216733 | 4.2                                       |
| International        | 1619368                            | 2568605 | 4.7                                       |
| Domestic             | 1173635                            | 1648128 | 3.5                                       |

**Table 2**

**FREIGHT TRAFFIC OF SCHEDULED AIRLINES  
1999-2009**

|                      | Freight tonne-kilometres<br>(millions) |        | Average Annual<br>Growth (%)<br>1999-2009 |
|----------------------|--|--------|---|
|                      | 1999                                   | 2009   |   |
| Middle East Airlines | 4222                                   | 10938  | 10.0                                      |
| International        | 4129                                   | 10861  | 10.2                                      |
| Domestic             | 93                                     | 77     | -1.9                                      |
| World                | 108613                                 | 139200 | 2.5                                       |
| International        | 93249                                  | 115643 | 2.2                                       |
| Domestic             | 15364                                  | 23557  | 4.4                                       |

**Table 3**

**TRENDS IN SCHEDULED PASSENGER TRAFFIC FOR  
THE MIDDLE EAST AIRLINES  
1999-2009  
(Millions)**

| Year | International        |          | Domestic             |          | TOTAL                |          |
|------|----------------------|----------|----------------------|----------|----------------------|----------|
|      | Passenger-kilometres | % change | Passenger-kilometres | % change | Passenger-kilometres | % change |
| 1999 | 70266                | 6.4      | 11938                | -3.5     | 82204                | 4.8      |
| 2000 | 81777                | 16.4     | 12061                | 1.0      | 93838                | 14.2     |
| 2001 | 86888                | 6.2      | 16692                | 38.4     | 103580               | 10.4     |
| 2002 | 93249                | 7.3      | 13176                | -21.1    | 106425               | 2.7      |
| 2003 | 108524               | 16.4     | 16492                | 25.2     | 125016               | 17.5     |
| 2004 | 133730               | 23.2     | 14937                | -9.4     | 148667               | 18.9     |
| 2005 | 153098               | 14.5     | 15794                | 5.7      | 168892               | 13.6     |
| 2006 | 175334               | 14.5     | 16885                | 6.9      | 192219               | 13.8     |
| 2007 | 202712               | 15.6     | 17212                | 1.9      | 219924               | 14.4     |
| 2008 | 218213               | 7.6      | 15343                | -10.9    | 233556               | 6.2      |
| 2009 | 238052               | 9.1      | 16683                | 8.7      | 254735               | 9.1      |

**Table 4**

**TRENDS IN SCHEDULED FREIGHT TRAFFIC FOR  
THE MIDDLE EAST AIRLINES  
1999-2009  
(Millions)**

| Year | International            |          | Domestic                 |          | TOTAL                    |          |
|------|--------------------------|----------|--------------------------|----------|--------------------------|----------|
|      | Freight tonne-kilometres | % change | Freight tonne-kilometres | % change | Freight tonne-kilometres | % change |
| 1999 | 4129                     | 3.4      | 93                       | -5.1     | 4222                     | 3.2      |
| 2000 | 4508                     | 9.2      | 97                       | 4.3      | 4605                     | 9.1      |
| 2001 | 4496                     | -0.3     | 111                      | 14.4     | 4607                     | 0.0      |
| 2002 | 5498                     | 22.3     | 104                      | -6.3     | 5602                     | 21.6     |
| 2003 | 6422                     | 16.8     | 112                      | 7.7      | 6534                     | 16.6     |
| 2004 | 7802                     | 21.5     | 97                       | -13.4    | 7899                     | 20.9     |
| 2005 | 8786                     | 12.6     | 93                       | -4.1     | 8879                     | 12.4     |
| 2006 | 9555                     | 8.8      | 90                       | -3.2     | 9645                     | 8.6      |
| 2007 | 10483                    | 9.7      | 96                       | 6.7      | 10579                    | 9.7      |
| 2008 | 11083                    | 5.7      | 81                       | -15.6    | 11164                    | 5.5      |
| 2009 | 10861                    | -2.0     | 77                       | -4.9     | 10938                    | -2.0     |

**Table 5**

**WORLD TRENDS IN SCHEDULED PASSENGER TRAFFIC**  
**1999-2009**  
 (Billions)

| Year | International        |          | Domestic             |          | TOTAL                |          |
|------|----------------------|----------|----------------------|----------|----------------------|----------|
|      | Passenger-kilometres | % change | Passenger-kilometres | % change | Passenger-kilometres | % change |
| 1999 | 1622                 | 7.3      | 1176                 | 5.4      | 2798                 | 6.5      |
| 2000 | 1790                 | 10.4     | 1248                 | 6.1      | 3038                 | 8.6      |
| 2001 | 1727                 | -3.5     | 1223                 | -2.0     | 2950                 | -2.9     |
| 2002 | 1736                 | 0.5      | 1229                 | 0.5      | 2965                 | 0.5      |
| 2003 | 1738                 | 0.1      | 1281                 | 4.2      | 3019                 | 1.8      |
| 2004 | 2015                 | 15.9     | 1430                 | 11.6     | 3445                 | 14.1     |
| 2005 | 2200                 | 9.2      | 1522                 | 6.4      | 3722                 | 8.0      |
| 2006 | 2360                 | 7.3      | 1581                 | 3.9      | 3941                 | 5.9      |
| 2007 | 2558                 | 8.4      | 1676                 | 6.0      | 4234                 | 7.4      |
| 2008 | 2660                 | 4.0      | 1642                 | -2.0     | 4302                 | 1.6      |
| 2009 | 2569                 | -3.4     | 1648                 | 0.4      | 4217                 | -2.0     |

**Table 6**

**WORLD TRENDS IN SCHEDULED FREIGHT TRAFFIC**  
**1999-2009**  
 (Millions)

| Year | International            |          | Domestic                 |          | TOTAL                    |          |
|------|--------------------------|----------|--------------------------|----------|--------------------------|----------|
|      | Freight tonne-kilometres | % change | Freight tonne-kilometres | % change | Freight tonne-kilometres | % change |
| 1999 | 93280                    | 7.2      | 15380                    | 4.1      | 108660                   | 6.7      |
| 2000 | 101560                   | 8.9      | 16520                    | 7.4      | 118080                   | 8.7      |
| 2001 | 95950                    | -5.5     | 14850                    | -10.1    | 110800                   | -6.2     |
| 2002 | 101590                   | 5.9      | 18250                    | 22.9     | 119840                   | 8.2      |
| 2003 | 103130                   | 1.5      | 22630                    | 24.0     | 125760                   | 4.9      |
| 2004 | 115120                   | 11.6     | 23920                    | 5.7      | 139040                   | 10.6     |
| 2005 | 118440                   | 2.9      | 24080                    | 0.7      | 142520                   | 2.5      |
| 2006 | 124180                   | 4.8      | 25470                    | 5.8      | 149650                   | 5.0      |
| 2007 | 131872                   | 6.2      | 26141                    | 2.6      | 158013                   | 5.6      |
| 2008 | 130442                   | -1.1     | 25288                    | -3.3     | 155730                   | -1.4     |
| 2009 | 115643                   | -11.3    | 23557                    | -6.8     | 139200                   | -10.6    |

3. **Table 7** depicts the trends and distribution of passenger traffic for the airlines of the Middle East region and their per cent share in traffic as measured by Revenue Passenger Kilometres (RPK) and Available Seat-kilometres for the period 1999-2009.

**Table 7**

**PASSENGER TRAFFIC OF SELECTED MIDDLE EAST AIRLINES**  
(Millions of International Scheduled RPKs)

|                         | 1999  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008   | 2009   | Annual<br>Growth (%)<br>1999-09 |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|---------------------------------|
| United Arab Emirates    |       |       |       |       |       |       |       |       |       |        |        |                                 |
| EMIRATES IRLINES        | 15318 | 19506 | 23126 | 30181 | 37100 | 48749 | 59199 | 73903 | 90529 | 100672 | 116043 | 22.4                            |
| -Growth (%)             | 18.0  | 27.3  | 18.6  | 30.5  | 22.9  | 31.4  | 21.4  | 24.8  | 22.5  | 11.2   | 15.3   |                                 |
| -Regional RPK share (%) | 21.8  | 23.9  | 26.6  | 32.4  | 34.2  | 36.5  | 38.7  | 42.2  | 44.7  | 46.1   | 48.7   |                                 |
| -Regional ASK share (%) | 20.3  | 21.7  | 24.2  | 29.3  | 32.4  | 34.9  | 37.0  | 40.8  | 42.6  | 44.4   | 46.4   |                                 |
| Qatar                   |       |       |       |       |       |       |       |       |       |        |        |                                 |
| QATAR AIRWAYS           | -     | -     | -     | 5664  | 8003  | 12172 | 17890 | 24032 | 32438 | 36203  | 40407  | -                               |
| -Growth (%)             | -     | -     | -     |       | 41.3  | 52.1  | 47.0  | 34.3  | 35.0  | 11.6   | 11.6   |                                 |
| -Regional RPK share (%) | -     | -     | -     | 6.1   | 7.4   | 9.1   | 11.7  | 13.7  | 16.0  | 16.6   | 17.0   |                                 |
| -Regional ASK share (%) | -     | -     | -     | 6.2   | 7.7   | 9.4   | 11.8  | 13.5  | 15.6  | 14.1   | 17.1   |                                 |
| Saudi Arabia            |       |       |       |       |       |       |       |       |       |        |        |                                 |
| SAUDIA                  | 13357 | 13806 | 13494 | 13817 | 13693 | 14897 | 15534 | 16545 | 18147 | 19451  | 20247  | 4.2                             |
| -Growth (%)             | 3.7   | 3.4   | -2.3  | 2.4   | -0.9  | 8.8   | 4.3   | 6.5   | 9.7   | 7.2    | 4.1    |                                 |
| -Regional RPK share (%) | 19.0  | 16.9  | 15.5  | 14.8  | 12.6  | 11.1  | 10.1  | 9.4   | 9.0   | 8.9    | 8.5    |                                 |
| -Regional ASK share (%) | 20.5  | 18.5  | 16.6  | 15.5  | 13.1  | 12.0  | 11.0  | 10.0  | 10.1  | 10.1   | 9.3    |                                 |
| Gulf States             |       |       |       |       |       |       |       |       |       |        |        |                                 |
| GULF AIR *              | 11344 | 12339 | 12305 | 11120 | 12739 | 16964 | 17467 | 16898 | 13736 | 13656  | 12753  | 1.2                             |
| -Growth (%)             | 6.9   | 8.8   | -0.3  | -9.6  | 14.6  | 33.2  | 3.0   | -3.3  | -18.7 | -0.6   | -6.6   |                                 |
| -Regional RPK share (%) | 16.1  | 15.1  | 14.2  | 11.9  | 11.7  | 12.7  | 11.4  | 9.6   | 6.8   | 6.3    | 5.4    |                                 |
| -Regional ASK share (%) | 15.7  | 14.5  | 14.2  | 12.0  | 11.7  | 12.5  | 11.6  | 9.8   | 7.1   | 6.3    | 5.8    |                                 |
| Kuwait                  |       |       |       |       |       |       |       |       |       |        |        |                                 |
| KUWAIT AIRWAYS          | 6158  | 6134  | 6010  | 6706  | 6311  | 6681  | 7282  | 7864  | 7647  | 7368   | 7669   | 2.2                             |
| -Growth (%)             | -0.8  | -0.4  | -2.0  | 11.6  | -5.9  | 5.9   | 9.0   | 8.0   | -2.8  | -3.6   | 4.1    |                                 |
| -Regional RPK share (%) | 8.8   | 7.5   | 6.9   | 7.2   | 5.8   | 5.0   | 4.8   | 4.5   | 3.8   | 3.4    | 3.2    |                                 |
| -Regional ASK share (%) | 8.3   | 7.2   | 6.9   | 7.3   | 5.8   | 5.0   | 4.8   | 4.5   | 3.9   | 3.6    | 3.3    |                                 |
| Jordan                  |       |       |       |       |       |       |       |       |       |        |        |                                 |
| ROYAL JORDANIAN         | 4195  | 4207  | 3848  | 4146  | 4498  | 5327  | 5389  | 5505  | 6436  | -      | 6269   | 4.1                             |
| -Growth (%)             | 3.2   | 0.3   | -8.5  | 7.7   | 8.5   | 18.4  | 1.2   | 2.2   | 16.9  | -      |        |                                 |
| -Regional RPK share (%) | 6.0   | 5.1   | 4.4   | 4.4   | 4.1   | 4.0   | 3.5   | 3.1   | 3.2   | -      | 2.6    |                                 |
| -Regional ASK share (%) | 5.8   | 5.1   | 4.6   | 4.7   | 4.2   | 4.0   | 3.7   | 3.4   | 3.4   | -      | 2.8    |                                 |
| Iran                    |       |       |       |       |       |       |       |       |       |        |        |                                 |
| IRAN AIR                | 2210  | 2551  | 2695  | 2609  | 2655  | 3239  | 3256  | 3274  | 3720  | 3829   | 3413   | 4.4                             |
| -Growth (%)             | 4.0   | 15.4  | 5.6   | -3.2  | 1.8   | 22.0  | 0.5   | 0.6   | 13.6  | 2.9    | -10.9  |                                 |
| -Regional RPK share (%) | 3.1   | 3.1   | 3.1   | 2.8   | 2.4   | 2.4   | 2.1   | 1.9   | 1.8   | 1.8    | 1.4    |                                 |
| -Regional ASK share (%) | 4.0   | 3.6   | 3.6   | 3.4   | 2.9   | 2.7   | 2.4   | 2.2   | 2.1   | 1.9    | 1.6    |                                 |

|                         | 1999   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007    | 2008    | 2009    | Annual<br>Growth (%)<br>1999-09 |
|-------------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------------------------------|
|                         | -----  | -----  | -----  | -----  | -----  | -----  | -----  | -----  | -----   | -----   | -----   |                                 |
| Lebanon                 |        |        |        |        |        |        |        |        |         |         |         |                                 |
| MEA                     | 1288   | 1483   | 1658   | 1749   | 1905   | 2197   | 2168   | 1940   | 2225    | -       | 2710    | 7.7                             |
| -Growth (%)             | -14.4  | 15.1   | 11.8   | 5.5    | 8.9    | 15.3   | -1.3   | -10.5  | 14.7    | -       |         |                                 |
| -Regional RPK share (%) | 1.8    | 1.8    | 1.9    | 1.9    | 1.8    | 1.6    | 1.4    | 1.1    | 1.1     | -       | 1.1     |                                 |
| -Regional ASK share (%) | 2.7    | 2.3    | 2.4    | 2.3    | 2.0    | 2.0    | 1.8    | 1.6    | 1.6     | -       | 1.4     |                                 |
| Syrian Arab Republic    |        |        |        |        |        |        |        |        |         |         |         |                                 |
| SYRIANAIR               | 1259   | 1381   | 1422   | 1565   | 1727   | 2193   | 2500   | 2311   | -       | -       | 2476    | 7.0                             |
| -Growth (%)             | -9.9   | 9.7    | 3.0    | 10.1   | 10.4   | 27.0   | 14.0   | -7.6   | -       | -       |         |                                 |
| -Regional RPK share (%) | 1.8    | 1.7    | 1.6    | 1.7    | 1.6    | 1.6    | 1.6    | 1.3    | -       | -       | 1.0     |                                 |
| -Regional ASK share (%) | 2.5    | 2.7    | 2.6    | 2.7    | 1.8    | 1.9    | 1.9    | 1.6    | -       | -       | 1.2     |                                 |
| Yemen                   |        |        |        |        |        |        |        |        |         |         |         |                                 |
| YEMEN AIRWAYS           | 960    | 1498   | 1498   | 1518   | 1876   | 2382   | 2716   | 2933   | -       | -       | 2969    | 12.0                            |
| -Growth (%)             | -5.6   | 56.0   | 0.0    | 1.3    | 23.6   | 27.0   | 14.0   | 8.0    | -       | -       |         |                                 |
| -Regional RPK share (%) | 1.4    | 1.8    | 1.7    | 1.6    | 1.7    | 1.8    | 1.8    | 1.7    | -       | -       | 1.2     |                                 |
| -Regional ASK share (%) | 1.8    | 2.3    | 2.4    | 2.1    | 1.9    | 2.0    | 2.0    | 1.9    | -       | -       | 1.6     |                                 |
| Oman                    |        |        |        |        |        |        |        |        |         |         |         |                                 |
| OMAN AIR                | 859    | 816    | 812    | 1045   | 1271   | 1359   | 1547   | 1550   | 2112    | 3276    | 4015    | 16.7                            |
| -Growth (%)             | 42.2   | -5.0   | -0.5   | 28.7   | 21.6   | 6.9    | 13.8   | 0.2    | 36.3    | 55.1    | 22.6    |                                 |
| -Regional RPK share (%) | 1.2    | 1.0    | 0.9    | 1.1    | 1.2    | 1.0    | 1.0    | 0.9    | 1.0     | 1.5     | 1.7     |                                 |
| -Regional ASK share (%) | 0.6    | 1.0    | 0.9    | 1.2    | 1.2    | 1.0    | 1.0    | 0.9    | 1.1     | 1.8     | 2.0     |                                 |
| Total (11 Airlines)     | 56948  | 63721  | 66868  | 80120  | 91778  | 116160 | 134948 | 156755 | 176990  | 189641  | 213785  | 14.1                            |
| (%) of Total            | 81.0   | 77.9   | 77.0   | 85.9   | 84.6   | 86.9   | 88.1   | 89.4   | 87.3    | 86.9    | 89.8    |                                 |
| Total Middle East       | 70266  | 81777  | 86887  | 93249  | 108523 | 133730 | 153098 | 175330 | 202713  | 218213  | 238052  | 13.0                            |
| AFRICA                  |        |        |        |        |        |        |        |        |         |         |         |                                 |
| Egypt                   |        |        |        |        |        |        |        |        |         |         |         |                                 |
| EGYPTAIR                | 8355   | 7631   | 8241   | 8357   | 7517   | 7607   | 8720   | 9683   | -       | 15131   | 14344   | 5.6                             |
| -Growth (%)             | 11.8   | -8.7   | 8.0    | 1.4    | -10.1  | 1.2    | 14.6   | 11.0   | -       |         | -5.2    |                                 |
| -Regional RPK share (%) | 15.7   | 13.4   | 14.1   | 14.7   | 13.1   | 11.7   | 12.1   | 12.3   | -       | 17.4    | 16.9    |                                 |
| -Regional ASK share (%) | 15.2   | 13.8   | 14.5   | 15.0   | 13.7   | 12.3   | 12.8   | 13.5   | -       | 17.5    | 17.0    |                                 |
| Sudan                   |        |        |        |        |        |        |        |        |         |         |         |                                 |
| SUDAN AIRWAYS           | 588    | 639    | 652    | 659    | 659    | 758    | 841    | 908    | -       | -       | 955     | 5.0                             |
| -Growth (%)             | 102.1  | 8.7    | 2.0    | 1.1    | 0.0    | 15.0   | 10.9   | 8.0    | -       | -       |         |                                 |
| -Regional RPK share (%) | 1.1    | 1.1    | 1.1    | 1.2    | 1.1    | 1.2    | 1.2    | 1.2    | -       | -       | 1.1     |                                 |
| -Regional ASK share (%) | 2.1    | 2.2    | 2.2    | 2.3    | 2.3    | 2.3    | 2.3    | 2.3    | -       | -       | 2.3     |                                 |
| Total Africa            | 53226  | 57087  | 58503  | 56898  | 57322  | 64835  | 72203  | 78500  | 85069   | 86876   | 85121   | 4.8                             |
| EUROPE                  |        |        |        |        |        |        |        |        |         |         |         |                                 |
| Cypres                  |        |        |        |        |        |        |        |        |         |         |         |                                 |
| CYPRES AIRWAYS          | 2711   | 2687   | 3012   | 3275   | 3352   | 3417   | 3187   | 3270   | 3378    | 3379    | 3081    | 1.3                             |
| -Growth (%)             | 2.0    | -0.9   | 12.1   | 8.7    | 2.4    | 1.9    | -6.7   | 2.6    | 3.3     | 0.0     | -8.8    |                                 |
| -Regional RPK share (%) | 0.4    | 0.4    | 0.5    | 0.5    | 0.5    | 0.4    | 0.4    | 0.3    | 0.3     | 0.3     | 0.3     |                                 |
| -Regional ASK share (%) | 0.4    | 0.4    | 0.5    | 0.5    | 0.5    | 0.5    | 0.4    | 0.4    | 0.4     | 0.3     | 0.3     |                                 |
| Total Europe            | 623180 | 671802 | 650048 | 645938 | 696047 | 786354 | 865876 | 942010 | 1028644 | 1082453 | 1058699 | 5.4                             |

|                         | 1999   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | Annual<br>Growth (%)<br>1999-09 |
|-------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------------------|
| ASIA/PACIFIC            | -----  | -----  | -----  | -----  | -----  | -----  | -----  | -----  | -----  | -----  | -----  |                                 |
| Pakistan                |        |        |        |        |        |        |        |        |        |        |        |                                 |
| PIA                     | 8654   | 10103  | 9854   | 9089   | 10153  | 11713  | 9372   | 13163  | 11980  | 12075  | 11280  | 2.7                             |
| -Growth (%)             | -1.7   | 16.7   | -2.5   | -7.8   | 11.7   | 15.4   | -20.0  | 40.5   | -9.0   | 0.8    | -6.6   |                                 |
| -Regional RPK share (%) | 1.9    | 1.9    | 1.9    | 1.7    | 2.1    | 2.0    | 1.5    | 2.0    | 1.7    | 1.7    | 1.7    |                                 |
| -Regional ASK share (%) | 2.2    | 2.2    | 2.1    | 1.8    | 2.0    | 2.1    | 1.5    | 2.2    | 1.9    | 1.8    | 1.8    |                                 |
| Total Asia/pacific      | 461852 | 526919 | 514044 | 543358 | 492878 | 588725 | 622517 | 654480 | 696174 | 696312 | 653300 | 3.5                             |

## Factors Affecting Air Transport Potential for the Region

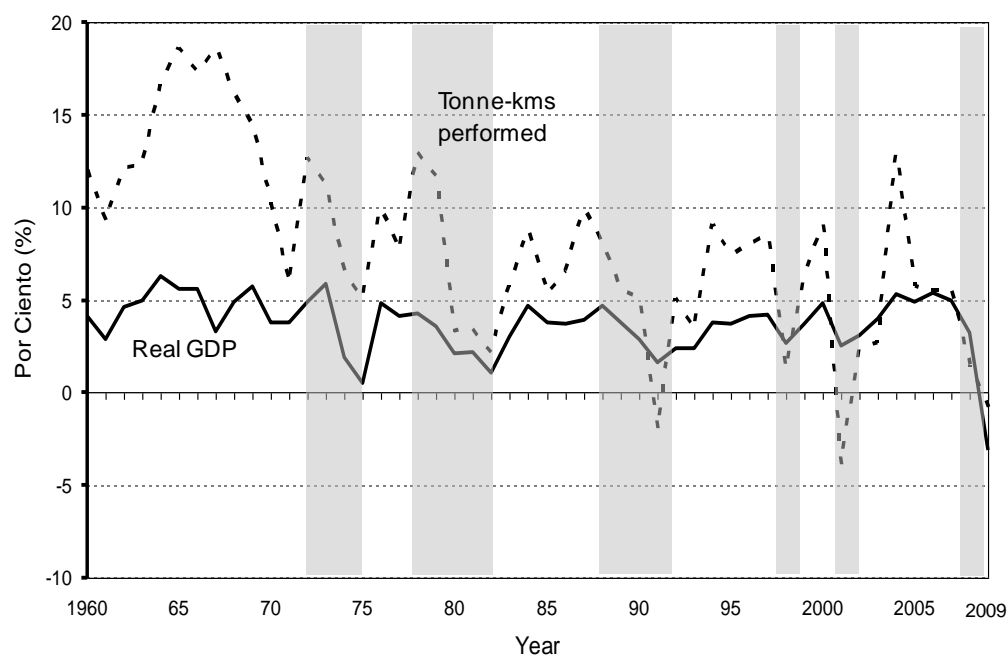
4. In order to assess the prospects for future traffic growth in the region, it is necessary to identify and, if possible, quantify the factors behind the demand for air passenger travel and air freight demand for the region. The remainder of this working paper discusses these factors.

## Economic Trends

5. The demand for air passenger travel is primarily determined by income levels and demographics, and the cost of air travel. World energy demand, supply and prices are critically important both to economic progress and to the cost of travel. Hence, the airline industry is highly vulnerable to economic cycles and fluctuations in fuel prices. **Figure 1** depicts the relation between World GDP and traffic growths.

**Figure 1**

## WORLD ANNUAL GROWTH IN GDP AND AIRLINE TRAFFIC 1960-2009



## World Market Perspective

6. The world air travel market has entered the ninth stage of development since the advent of jet airplanes. **Table 8** characterizes the various stages of the air transport market.

**Table 8**

### STAGES OF GROWTH IN THE ECONOMY AND THE AIR TRANSPORT MARKET

| Time Period | Traffic Growth (%) |      |             | GDP Growth (%)<br>Real Terms |      |             | Yield Growth (%)<br>Real Terms |       |             |
|-------------|--------------------|------|-------------|------------------------------|------|-------------|--------------------------------|-------|-------------|
|             | World              | U.S. | Middle East | World                        | U.S. | Middle East | World                          | U.S.  | Middle East |
| 1960-1973   | 14.0               | 11.9 | 16.2        | 4.8                          | 4.2  | -           | -3.7                           | -2.4  | -           |
| 1973-1975   | 4.7                | 1.7  | 19.7        | 1.2                          | 1.7  | 4.8         | 4.1                            | 2.1   | 5.0         |
| 1975-1979   | 10.7               | 11.2 | 21.6        | 4.4                          | 4.7  | 3.6         | -2.0                           | -3.5  | -2.9        |
| 1979-1982   | 2.2                | -0.9 | 6.2         | 1.2                          | -0.3 | -1.3        | 4.6                            | 1.3   | 2.0         |
| 1982-1990   | 6.5                | 7.6  | 4.4         | 3.6                          | 3.3  | 1.1         | -2.3                           | -2.4  | -7.8        |
| 1990-1997   | 4.5                | 3.9  | 4.3         | 3.3                          | 2.3  | 2.4         | -3.4                           | -2.8  | -2.6        |
| 1997-2001   | 3.5                | 2.0  | 3.1         | 3.4                          | 3.1  | 3.2         | -4.6                           | -4.4  | -6.1        |
| 2001-2008   | 5.4                | 3.2  | 13.8        | 4.3                          | 2.5  | 5.4         | 0.6                            | -0.1  | -2.3        |
| 2008-2009P  | -2.0               | -3.9 | 9.1         | -0.7                         | -2.6 | 0.4         | -14.2                          | -13.2 | -13.0       |

**Sources:** ICAO and IHS.

7. Since 1960, the world has experienced six major periods of economic slowdown, in 1974/1975 and 1980-1982, in 1991/1992, in 1997/1998 in 2001 and in 2009. These periods of global economic downturns, which occurred as a result of a range of political/economic/social forces, are highlighted in Figure 1. However, most of them have been preceded by a serious shock: the Arab-Israeli conflict in 1973, the Iranian revolution in 1979, the Gulf war in 1990, the Asian crisis in 1997 and the events of 11 September in 2001; rapid oil price increases were associated with most of these occurrences, especially the most recent recession in 2009, and contributed significantly to the economic slowdown (particularly in the three earlier occasions and the one in 2009). Although the capability of economies to cope with the oil price increases has improved because of reduced energy dependency and the effects of structural reforms since the 1980s, due to uncertainty and trends in somewhat higher oil prices coupled with the disaster in Gulf of Mexico in June 2010, the recent economic situation is expected to affect the global economic performance in the near future.



8. In 2001, due to the events of 11 September, the United States' economy slowed down sharply and registered a growth of only 1.1 per cent. It also sparked a slowdown in the economic growth for the rest of the world and as a result, the world economy grew at 2.2 per cent in 2001. The performance of the world economy, since 2002, has been improving consistently and has shown significant growth rates in the range of 2.8 to 3.1 per cent until the year 2008. The world GDP for 2009 went into recession and declined about one per cent due mainly to the effects of global economic crisis. For the period up to 2030, the world economy is projected to grow at an average annual rate of 3.9 per cent in real terms whereas the Middle East GDP is forecast to grow at the average annual rate of about 4.0 per cent.

9. **Figure 2** depicts the relationship between GDP growth and passenger traffic for the region. **Figure 3** compares the annual growth of GDP with that of GDP per capita in the Middle East region.

**Figure 2**

**ANNUAL GROWTH IN GDP AND AIRLINE TRAFFIC  
MIDDLE EAST**

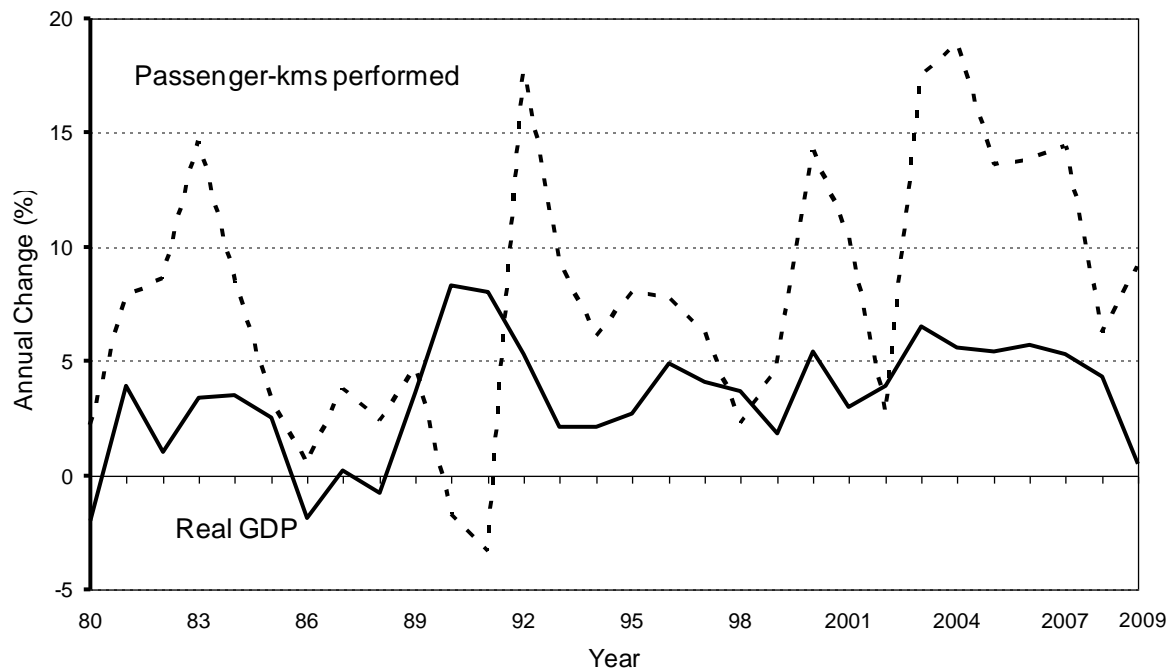
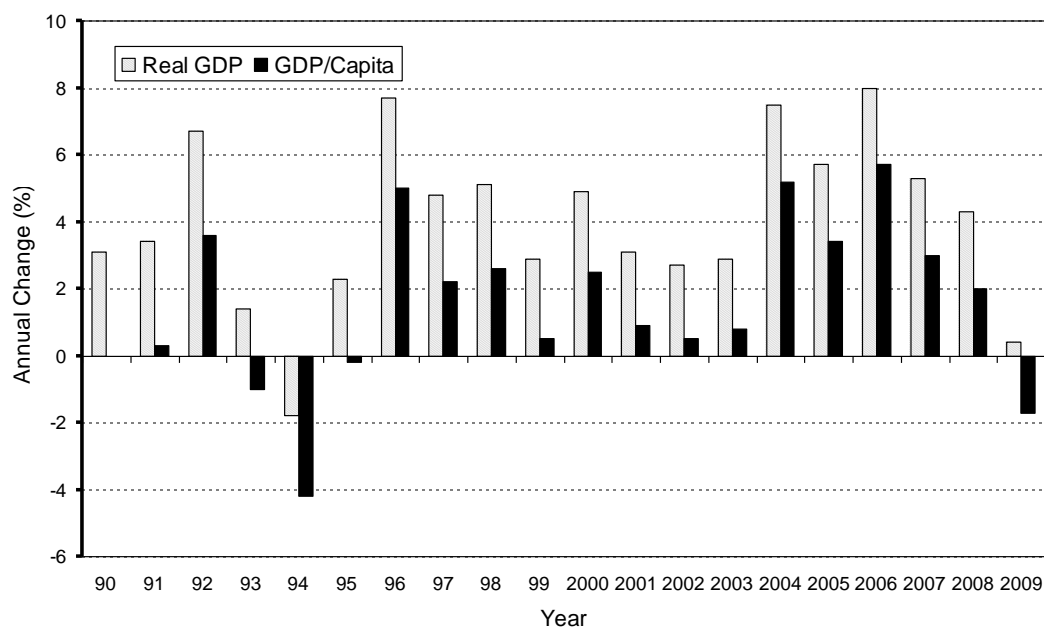


Figure 3

### GDP, GDP PER CAPITA GROWTH MIDDLE EAST, 1990-2009

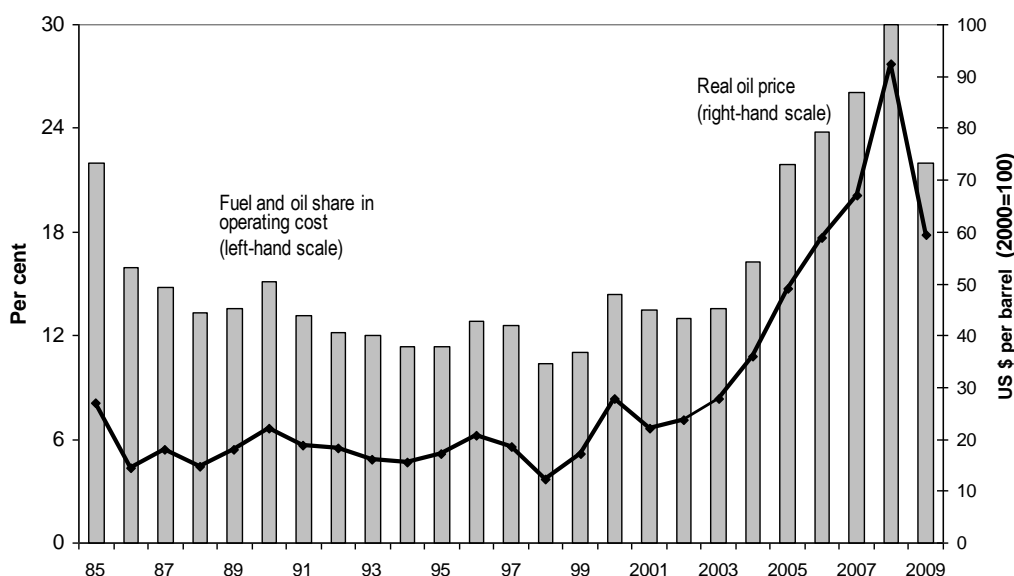


### Oil and Fuel Prices and Airline Profitability

10. World energy demand, supply and prices are critically important to economic progress, the costs of travel and to airline profitability. **Figure 4** below, shows the relationship between oil prices, per cent shares of fuel and oil costs in airlines expenses and the operating margin for the world scheduled airlines. Since 1973, there have been several hikes in the price of crude oil as mentioned in paragraph 7. As a result of higher fuel costs and slower revenue growth, airline profitability declined precipitously from 1979 to 1982. During the years 1983 to 1989, fuel prices declined thereby helping airlines to return to profitability and to maintain a positive financial result. The period 1990-1992 saw again an increase in oil prices and once more the airlines incurred financial losses. From 1993 to 1999 the airlines returned to profitability due to efficiency gains and declining oil prices. Since 2000, with the exception of 2001 and due to a strong global demand, the oil prices have been rising each year. Crude oil prices jumped 22, 33 and 36 per cent in the years 2003, 2004 and 2005, respectively. During the 2001-2007 period, these prices rose at an annual average growth rate of 17.2 per cent. Despite all the negative impact of oil price increases, the airlines still managed to post a positive operating result in 2006 and 2007, due mainly to the timely improvements in airline operations. In the first half of 2008, oil prices increased to about 70 per cent (based on January and June 2008 prices). As expected, these increases produced serious consequences for the airline industry. A few airlines went into bankruptcy, airline capacity was reduced to improve the load factors, many aircraft were retired or put in storage and the airline fares were increased. The world airlines in 2008 suffered sizeable financial losses. In 2009 the severity of the economic crisis had slowed down but the Airlines were still faced with difficulties as they tried to recover from a difficult economic environment. According to the preliminary estimates, it is expected that the world airlines will again suffer a loss but not as severe as the previous year.

**Figure 4**

**OIL PRICES, SHARE OF FUEL AND OIL IN OPERATING EXPENSES  
AND OPERATING MARGIN  
WORLD SCHEDULED AIRLINES, 1985 - 2009**



### International Trade

11. The demand for air freight depends on the volume of international trade in manufactured goods and other products suitable for shipment by air. Trade volumes are generally correlated with trends in economic conditions, and are sensitive to the development strategies and trade policies of countries and their major trading partners. In 2001, worldwide trade in goods and services slowed sharply – its volume grew at only 0.3 per cent compared to a strong growth rate of 12.3 per cent in the preceding year. However, the world trade activity bounced back and its volume grew 3.5 per cent during the year 2002. The world trade in goods and services in terms of volume has continued to grow impressively during the years 2003 to 2008 showing growth rates in the range of 2.8 and 10.7 per cent. The world trade volume has declined at about 10.7 per cent during 2008 and is expected to grow 7 per cent in 2010.

### Monetary Factors

12. Inflation, interest rates and exchange rates have an effect on economic growth in real terms and the demand for air transport. For example, a high inflation rate and high interest rates can dampen demand for goods and services including air transport. Balance of payment problems and increased foreign debt have led, in the past, to the imposition of exchange controls in some countries which, in turn, affects international travel.

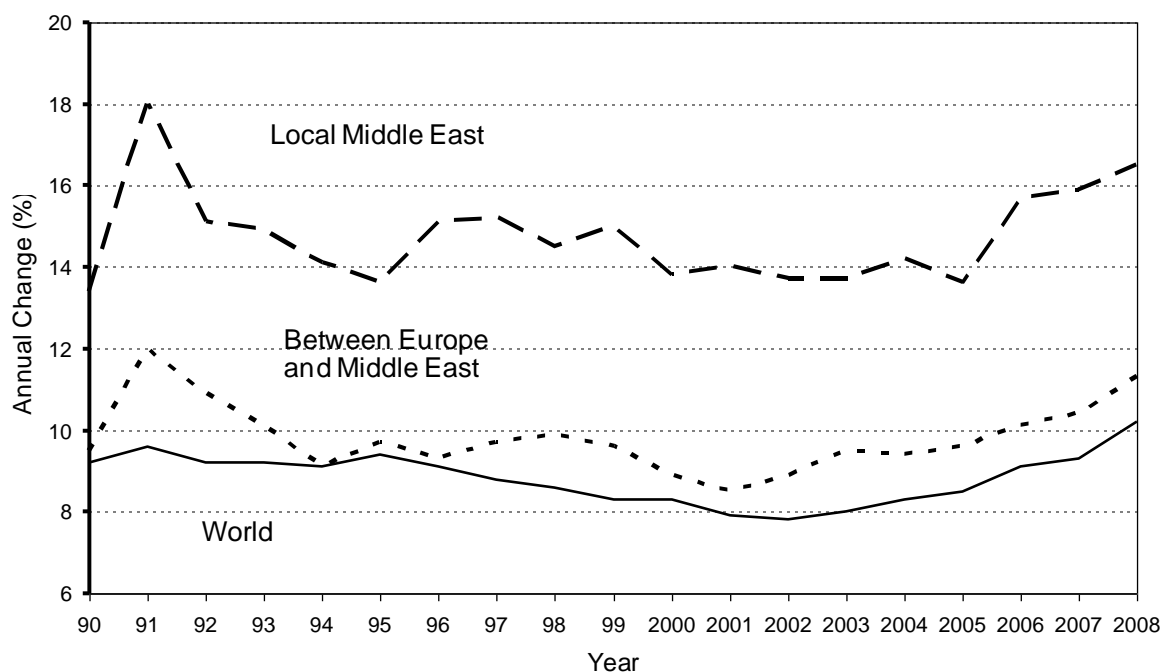
13. Travel decisions are affected by exchange rates and price comparisons at home and abroad. Differences in inflation rates and changes in exchange rates have at various times encouraged traffic in some markets, and discouraged traffic in others. Monetary factors are likely to continue to have an effect on the geography of traffic flows.

## Travel Costs

14. The cost of travel substantially influences air travel growth. Changes in travel costs are generally represented by changes in airline yields (passenger revenues divided by RPKs). Airline yields are a convenient measure of airline fares, which usually constitute a major part of the total trip cost. **Figure 5** and **Table 9** depict the airline yields in current terms for the route groups local Middle East and between Middle East and Europe, as well as the world. According to figure 5, the yields had been declining until the year 2001, but since then the trend has reversed and yields have started to increase. The level of airline yield is related on the productivity performance of the airlines and the prices of inputs such as fuel, labour and aircraft used.

**Figure 5**

### PASSENGER YIELDS FOR SELECTED TRAFFIC ROUTES, MIDDLE EAST REGION



**Table 9**

**AVERAGE PASSENGER YIELDS BY SELECTED ROUTE  
GROUPS AFFECTING MIDDLE EAST REGION**

| Year | U.S. Cents (current terms) |                                |       |
|------|----------------------------|--------------------------------|-------|
|      | Local Middle East          | Between Europe and Middle East | World |
| 1992 | 15.1                       | 10.9                           | 9.2   |
| 1993 | 14.9                       | 10.1                           | 9.2   |
| 1994 | 14.1                       | 9.1                            | 9.1   |
| 1995 | 13.6                       | 9.7                            | 9.4   |
| 1996 | 15.1                       | 9.3                            | 9.1   |
| 1997 | 15.2                       | 9.7                            | 8.8   |
| 1998 | 14.5                       | 9.9                            | 8.6   |
| 1999 | 15                         | 9.6                            | 8.3   |
| 2000 | 13.8                       | 8.9                            | 8.3   |
| 2001 | 14                         | 8.5                            | 7.9   |
| 2002 | 13.7                       | 8.9                            | 7.8   |
| 2003 | 13.7                       | 9.5                            | 8     |
| 2004 | 14.2                       | 9.4                            | 8.3   |
| 2005 | 13.6                       | 9.6                            | 8.5   |
| 2006 | 15.7                       | 10.1                           | 9.1   |
| 2007 | 15.9                       | 10.4                           | 9.3   |
| 2008 | 16.5                       | 11.3                           | 10.2  |

**Fleets of the Middle East Carriers**

15. **Table 10** below shows the fleet of some of the region's carriers by aircraft type for the years 1999 and 2009. During the past decade, the total fleet has increased from 438 to 721 aircraft, representing a growth of about 64 per cent. Major Jet aircraft types of recent models form a huge part of this fleet and have also increased from 320 to 639 units during the same period. B777, A320 and A330 were the dominating aircraft types with about 376 units being operated by the region's airlines by end of 2009.

**Table 10**  
**AIRCRAFT FLEETS OF SELECTED MIDDLE EAST AIRLINES**  
**1999 and 2009**

| CARRIER                  | YEAR | 300/310 | A320 | A330 | A340 | A380 | B737 | B747 | B757 | B767 | B777 | DC10 | DC9 | ERJ 170 | OTHER | Total |
|--------------------------|------|---------|------|------|------|------|------|------|------|------|------|------|-----|---------|-------|-------|
| CYPRUS AIRWAYS           | 1999 | 4       | 5    | 0    |      |      |      |      |      |      |      |      |     |         |       | 9     |
|                          | 2009 | 0       | 8    | 2    |      |      |      |      |      |      |      |      |     |         |       | 10    |
| EGYPTAIR                 | 1999 | 11      | 11   | 0    | 3    |      | 4    | 2    |      | 1    | 3    |      |     |         | 1     | 36    |
|                          | 2009 | 0       | 17   | 7    | 3    |      | 16   | 0    |      | 0    | 5    |      |     |         | 0     | 48    |
| EMIRATES                 | 1999 | 13      |      | 5    | 0    | 0    |      | 0    |      |      | 11   |      |     |         |       | 29    |
|                          | 2009 | 0       |      | 29   | 18   | 7    |      | 5    |      |      | 83   |      |     |         |       | 142   |
| ETIHAD AIRWAYS           | 1999 |         | 0    | 0    | 0    |      |      |      |      |      | 0    |      |     |         |       | 0     |
|                          | 2009 |         | 15   | 17   | 11   |      |      |      |      |      | 6    |      |     |         |       | 49    |
| GULF AIR                 | 1999 |         | 13   | 4    | 5    |      |      |      |      | 10   | 0    |      |     |         |       | 32    |
|                          | 2009 |         | 17   | 10   | 7    |      |      |      |      | 0    | 1    |      |     |         |       | 35    |
| IRAN AIR                 | 1999 | 7       | 0    |      |      |      | 3    | 8    |      |      |      |      |     |         | 15    | 33    |
|                          | 2009 | 17      | 6    |      |      |      | 0    | 9    |      |      |      |      |     |         | 18    | 50    |
| KUWAIT AIRWAYS           | 1999 | 7       | 3    |      | 4    |      |      | 1    |      |      | 2    |      |     |         | 5     | 22    |
|                          | 2009 | 8       | 4    |      | 4    |      |      | 1    |      |      | 2    |      |     |         | 3     | 22    |
| MIDDLE EAST AIRLINES     | 1999 | 5       | 4    | 0    |      |      |      |      |      |      |      |      |     |         | 2     | 11    |
|                          | 2009 | 0       | 9    | 4    |      |      |      |      |      |      |      |      |     |         | 0     | 13    |
| OMAN AIR                 | 1999 | 2       |      | 0    |      |      | 1    |      |      |      |      |      |     |         | 6     | 9     |
|                          | 2009 | 0       |      | 4    |      |      | 15   |      |      |      |      |      |     |         | 2     | 21    |
| PIA                      | 1999 | 16      |      |      |      |      | 6    | 12   |      |      | 0    |      |     |         | 13    | 47    |
|                          | 2009 | 12      |      |      |      |      | 6    | 6    |      |      | 9    |      |     |         | 7     | 40    |
| QATAR AIRWAYS            | 1999 | 3       | 4    | 0    | 0    |      |      |      |      |      | 0    |      |     |         | 1     | 8     |
|                          | 2009 | 3       | 24   | 29   | 4    |      |      |      |      |      | 13   |      |     |         | 0     | 73    |
| ROYAL JORDANIAN          | 1999 | 9       | 5    |      | 0    |      |      |      |      |      |      |      |     | 0       | 2     | 16    |
|                          | 2009 | 5       | 12   |      | 4    |      |      |      |      |      |      |      |     | 7       | 0     | 28    |
| SAUDI ARABIAN AIRLINES   | 1999 | 12      | 0    | 0    |      |      | 10   | 25   | 0    |      | 19   | 4    | 25  | 0       |       | 95    |
|                          | 2009 | 3       | 9    | 2    |      |      | 1    | 29   | 4    |      | 23   | 4    | 28  | 15      |       | 118   |
| SAUDIA SPECIAL FLT. SVS. | 1999 |         |      |      |      |      |      |      |      |      |      |      |     |         | 18    | 18    |
|                          | 2009 |         |      |      |      |      |      |      |      |      |      |      |     |         | 10    | 10    |
| SAUDIA PRIVATE AVIATION  | 1999 |         |      |      |      |      |      |      |      |      |      |      |     |         | 0     | 0     |
|                          | 2009 |         |      |      |      |      |      |      |      |      |      |      |     |         | 4     | 4     |
| SUDAN AIRWAYS            | 1999 | 3       |      |      |      |      | 1    |      |      |      |      |      |     |         | 8     | 12    |
|                          | 2009 | 4       |      |      |      |      | 0    |      |      |      |      |      |     |         | 9     | 13    |
| SYRIAN AIR               | 1999 |         | 6    |      |      |      |      | 2    |      |      |      |      |     |         | 30    | 38    |
|                          | 2009 |         | 7    |      |      |      |      | 0    |      |      |      |      |     |         | 17    | 24    |
| YEMENIA                  | 1999 | 3       |      | 0    |      |      | 3    |      |      |      |      |      |     |         | 15    | 21    |
|                          | 2009 | 3       |      | 2    |      |      | 4    |      |      |      |      |      |     |         | 12    | 21    |
| Total Sum of 1999        |      | 95      | 51   | 9    | 12   | 0    | 28   | 50   | 0    | 11   | 35   | 4    | 25  | 0       | 118   | 438   |
| Total Sum of 2009        |      | 55      | 128  | 106  | 51   | 7    | 42   | 50   | 4    | 0    | 142  | 4    | 28  | 22      | 82    | 721   |

### Average Age of Fleets and Aircraft Types

16. **Tables 11 and 12** show the average ages of aircraft by airline and by aircraft type. The overall average age of the Middle East fleet including all aircraft types of selected carriers decreased slightly from 12.4 years in 1999 to about 10.5 years by end 2009. At the end of 1999 the average fleet age by airline varied between 4.6 (Emirates) and 21.3 (Iran Air and Sudan Airways) years, whereas for the year 2009 it was between 3.1 (Etihad Airways) to about 25.7 (SyrianAir) years. Similarly, the average age by aircraft type for selected airlines as a group, ranged between 1.5 (DC9) to 18.3 (B737) years in 1999 and between 1.8 (A380) to 19.8 (A300) years by end of 2009.

**Table 11**

### **AVERAGE AGE OF FLEETS BY CARRIER** (Selected Middle East Airlines)

| CARRIER                           | 1999                |                    | 2009                |                    |
|-----------------------------------|---------------------|--------------------|---------------------|--------------------|
|                                   | Average Age (Years) | Number of Aircraft | Average Age (Years) | Number of Aircraft |
| CYPRUS AIRWAYS                    | 12.3                | 9                  | 12.6                | 10                 |
| EGYPTAIR                          | 8.3                 | 36                 | 9.2                 | 48                 |
| EMIRATES                          | 4.6                 | 29                 | 5.8                 | 142                |
| ETIHAD AIRWAYS                    | 0                   | 0                  | 3.1                 | 49                 |
| GULF AIR                          | 5.9                 | 32                 | 9.6                 | 35                 |
| IRAN AIR                          | 21.3                | 33                 | 23                  | 50                 |
| KUWAIT AIRWAYS                    | 5.8                 | 22                 | 15                  | 22                 |
| MIDDLE EAST AIRLINES              | 12.9                | 11                 | 3.6                 | 13                 |
| OMAN AIR                          | 9.7                 | 9                  | 3.3                 | 21                 |
| PAKISTAN INTERNATIONAL AIRLINES   | 21                  | 47                 | 13.7                | 40                 |
| QATAR AIRWAYS                     | 5.4                 | 8                  | 4.4                 | 73                 |
| ROYAL JORDANIAN AIRLINES          | 11.8                | 16                 | 7.8                 | 28                 |
| SAUDI ARABIAN AIRLINES            | 8.9                 | 95                 | 12.4                | 118                |
| SAUDIA AIRLINES SPECIAL FLT. SVS. | 16.1                | 18                 | 22.1                | 10                 |
| SAUDIA PRIVATE AVIATION           | 0                   | 0                  | 0.9                 | 4                  |
| SUDAN AIRWAYS                     | 21.3                | 12                 | 24.2                | 13                 |
| SYRIANAIR                         | 17.4                | 38                 | 25.7                | 24                 |
| YEMENIA                           | 16.2                | 21                 | 17.8                | 21                 |

**Table 12**

**AVERAGE AGE BY AIRCRAFT TYPE**  
(Selected Middle East Airlines)

| Aircraft Type | 1999                |                    | 2009                |                    |
|---------------|---------------------|--------------------|---------------------|--------------------|
|               | Average Age (years) | Number of Aircraft | Average Age (years) | Number of Aircraft |
| A300          | 11.8                | 95                 | 19.8                | 55                 |
| A320          | 5.6                 | 51                 | 7.8                 | 128                |
| A330          | 2.6                 | 21                 | 6.6                 | 106                |
| A380          | 0                   | 0                  | 1.8                 | 7                  |
| B737          | 18.3                | 28                 | 7.8                 | 42                 |
| B747          | 16.8                | 50                 | 22                  | 50                 |
| B757          | 0                   | 0                  | 14.4                | 4                  |
| B767          | 8.4                 | 11                 | 0                   | 0                  |
| B777          | 1.8                 | 35                 | 5.3                 | 142                |
| DC10          | 2.5                 | 4                  | 12.5                | 4                  |
| DC9           | 1.5                 | 25                 | 11.3                | 28                 |
| ERJ170        | 0                   | 0                  | 3.1                 | 22                 |
| OTHER         | 20.7                | 118.0              | 21.2                | 82                 |

**Destinations Flown by Scheduled Airlines of Middle east**

**Table 13** below, shows the regional distribution of countries serviced by selected Middle East carriers in 2009. On a worldwide basis, a total of 46 countries were being served by these carriers. The total number of countries served by individual airlines ranged from 6 to 31 among all the regions. The number of international destinations served in Europe was the highest among all other regions with flights operated to 27 countries in that region, whereas the regions of Africa and Asia/Pacific were next with flights being operated to 25 and 20 countries respectively, in each region. The number of countries in other regions served by these carriers were 14 in Middle East, 3 in Latin America and 2 in North America.



**Table 13**  
**NUMBER OF COUNTRIES SERVED BY**  
**SELECTED MIDDLE EAST CARRIERS, 2009**

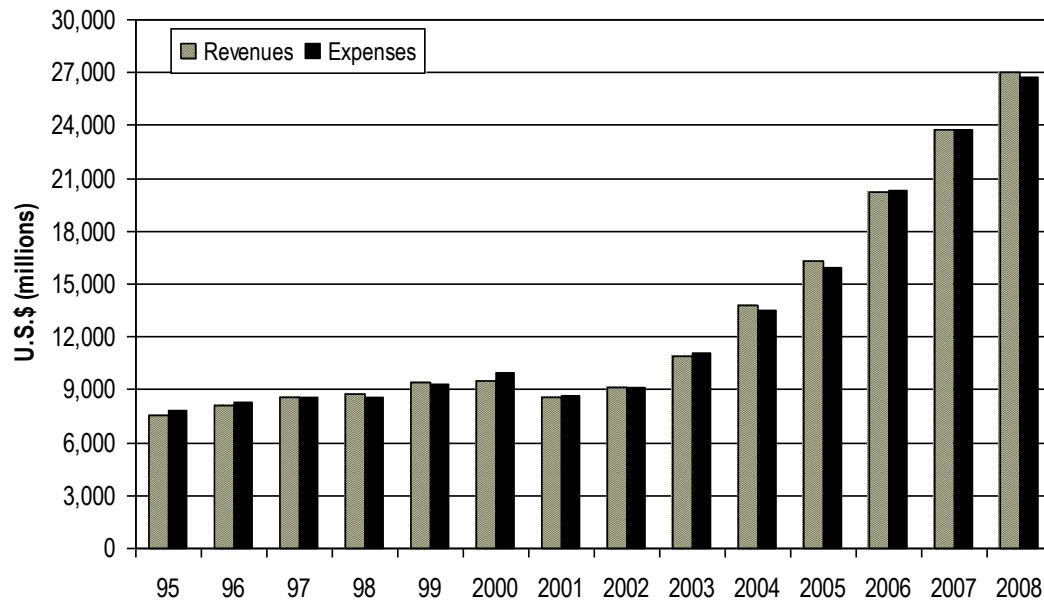
| AIRLINES               | Africa | Asia/<br>Pacific | Europe | Middle<br>East | North<br>America | Latin<br>America | Total |
|------------------------|--------|------------------|--------|----------------|------------------|------------------|-------|
| Cyprus Airways         | 1      |                  | 13     | 7              |                  | 1                | 21    |
| Egyptair               | 17     | 7                | 18     | 11             | 2                | 0                | 31    |
| Emirates Airlines      | 15     | 15               | 11     | 12             | 2                | 1                | 26    |
| Etihad Airways         | 3      | 13               | 12     | 10             | 2                | 0                | 24    |
| Gulf Air               | 2      | 8                | 6      | 12             | 0                | 0                | 18    |
| Iran Air               | 0      | 8                | 12     | 8              | 0                | 1                | 21    |
| Kuwait Airways         | 3      | 8                | 6      | 10             | 1                | 0                | 17    |
| Middle East Airlines   | 4      | 0                | 9      | 7              | 0                | 0                | 16    |
| Oman Aviation          | 2      | 5                | 3      | 8              | 0                | 0                | 11    |
| Pakistan Intl Airline  | 0      | 9                | 10     | 6              | 2                | 0                | 18    |
| Qatar Airways          | 10     | 16               | 11     | 12             | 1                | 0                | 24    |
| Royal Jordanian        | 3      | 4                | 15     | 12             | 2                | 0                | 29    |
| Saudi Arabian Airlines | 8      | 10               | 7      | 12             | 1                | 0                | 20    |
| Sudan Airways          | 8      | 0                | 1      | 5              | 0                | 0                | 6     |
| Syrian Arab Airlines   | 4      | 0                | 15     | 9              | 0                | 0                | 24    |
| Yemenia Yemen Airways  | 6      | 4                | 4      | 9              | 0                | 0                | 13    |
| Total countries served | 25     | 20               | 27     | 14             | 2                | 3                | 46    |

### Operating Revenues and Cost Comparisons

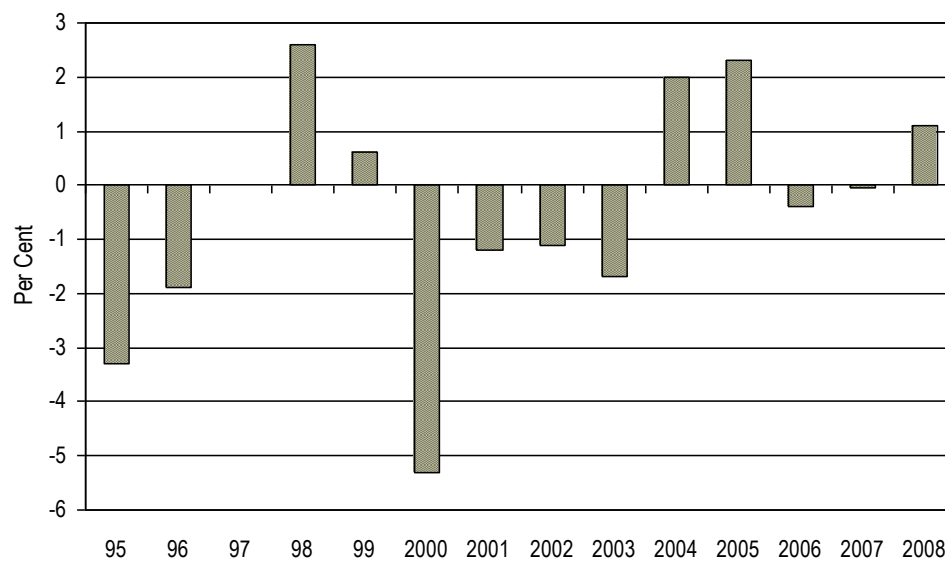
17. For the Carriers registered in the Middle East region, **Figure 6** illustrates graphically the trends in revenues and expenses over the past decade and **Figure 7** shows the changes in operating profits as a per cent of revenues.

**Figure 6**

**SCHEDULED AIRLINE OPERATING REVENUES AND EXPENSES  
MIDDLE EAST**

**Figure 7**

**OPERATING PROFITS AS PER CENT OF REVENUE  
MIDDLE EAST**



18. The most recent ICAO forecasts of passenger-kilometres for the Middle East region and the world, prepared in 2010, are shown in **Table 14 and 15** below. These forecasts and others will be included in a new ICAO Forecast Document, soon to be published by the end of this year.

**Table 14**

**FORECASTS OF SCHEDULED PASSENGER TRAFFIC TO  
THE YEAR 2030 FOR AIRLINES OF MIDDLE EAST REGION**

|               |  | Passenger-kilometres<br>(thousand-million) |       |          |      |       | Average Annual Growth<br>(per cent) |              |              |              |
|---------------|--|--|-------|----------|------|-------|-------------------------------------|--------------|--------------|--------------|
|               |  | Actual                                     |       | Forecast |      | 2030  | 1999<br>2009                        | 2008<br>2010 | 2010<br>2020 | 2010<br>2030 |
|               |  | 1995                                       | 2008  | 2010     | 2020 |       |                                     |              |              |              |
| Middle East   |  | 80.7                                       | 253.4 | 245      | 415  | 675   | 9.2                                 | -1.6         | 5.4          | 5.2          |
| International |  | 69.9                                       | 237.8 | 230      | 391  | 635   | 9.9                                 | -1.7         | 5.4          | 5.2          |
| Domestic      |  | 10.8                                       | 15.6  | 15       | 25   | 39    | 2.8                                 | -0.5         | 4.8          | 4.8          |
| WORLD         |  | 2476                                       | 4509  | 4436     | 7111 | 11028 | 4.7                                 | -0.8         | 4.8          | 4.7          |

**Table 14**

**FORECASTS OF SCHEDULED FREIGHT TRAFFIC TO  
THE YEAR 2030 FOR AIRLINES OF MIDDLE EAST REGION**

|               |  | Freight-Tonne Kms<br>(millions) |        |          |        | Average Annual Growth<br>(per cent) |              |              |              |
|---------------|--|---------------------------------|--------|----------|--------|-------------------------------------|--------------|--------------|--------------|
|               |  | Actual                          |        | Forecast |        | 1989<br>2009                        | 2009<br>2020 | 2020<br>2030 | 2009<br>2030 |
|               |  | 1989                            | 2009   | 2020     | 2030   |                                     |              |              |              |
| Middle East   |  | 2570                            | 10938  | 25348    | 52438  | 7.5                                 | 7.9          | 7.5          | 7.7          |
| International |  | 2481                            | 10861  | 25195    | 52170  | 7.7                                 | 8.0          | 7.6          | 7.8          |
| Domestic      |  | 89                              | 77     | 153      | 268    | -0.7                                | 6.4          | 5.8          | 6.1          |
| WORLD         |  | 57260                           | 139201 | 253564   | 433876 | 4.5                                 | 5.6          | 5.5          | 5.6          |

— END —