

CARGO E-CHARTBOOK

Q3 2008

KEY POINTS

After a reasonable first quarter, a very severe deterioration in the business environment for cargo has produced a worsening of performance. During Q2 air freight volumes shrank and fuel prices rose one-third. Costs have since eased back, though are still much higher than last year. The major change in the outlook has been the weakness in freight volumes. Forward-looking indicators point to further weakness in the months ahead.

HEADLINES BY SECTION

Economic Outlook (page 2)

There has been a significant deterioration in the economic outlook in the past quarter. Inflation has prevented central banks outside the US cutting interest rates, and disposable incomes have been squeezed by high food and energy costs. Economic growth is likely to be weaker in 2009.

Demand Environment (page 4)

The sharpness of the decline in July freight volumes was unexpected. However, forwardlooking indicators such as confidence in manufacturing, falling inventory-sales ratios and weak shipments by the semi-conductor industry all point to further air freight weakness ahead.

Costs (page 6)

Fuel prices hit a new peak in Q2 and then rose above \$180/b in July. At the same time a rise in the US\$ accentuated these cost increase for non-\$-based airlines. Weaker economic growth has since helped reduce fuel prices from their peak, but they are still up 60%. Labour costs have peaked.

Competition (page 8)

Ocean freight – one key competitor to air freight – is now facing slowing demand despite anecdotal evidence that it is gaining share at the expense of air freight. Certainly excess capacity is growing, reducing container freight rates and improving the competitiveness of ocean versus air freight.

Traffic Growth (page 3)

Air freight markets began to shrink – faster than expected – at the end of Q2 and both domestic and international freight markets continued to decline in July. There may be some special factors in China but weakness in Asia-Pacific also reflects worse than expected economic performance.

Revenue and Yields (page 5)

Cargo revenues may have continued to grow during the first half of 2008 but the mix of slower/falling volumes and higher yields suggests this growth is not sustainable. Already volumes are slowing under pressure from economic weakness and costs. Revenues are likely to slow.

Capacity (page 7)

▼ Excess capacity is now emerging as a problem. The fall in air freight volumes during Q2 and July was much faster than efforts to slow capacity. Load factors fell as a result. New deliveries, now accelerating, are producing much needed cost savings but are adding to excess capacity.

Profitability (page 9)

Cargo profitability fell in Q1, but volume growth was strong and fuel prices considerably lower than today Shrinking freight volumes and a one-third rise in spot fuel prices will have severely damaged profitability in Q2. The majority of airlines were making significant losses during the first half.

Economic Outlook

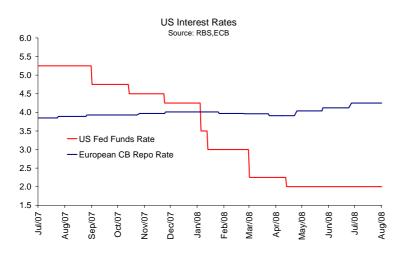
Key Issue:

To a seconomic growth is now slowing sharply in a number of major economies, with 2009 looking much weaker.

Expected implications for the air freight industry:

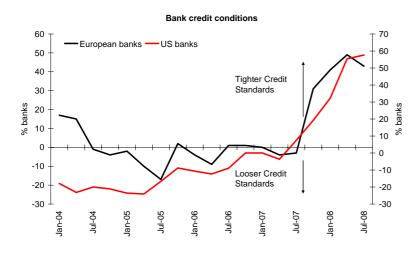
Air freight volumes have fallen more than expected; a combination of economic weakness and fuel costs.

US interest rates have been slashed but inflation prevents lower rates elsewhere



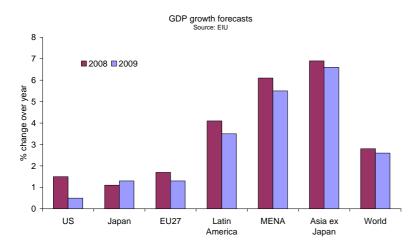
- With consumer and business confidence hitting new lows in many of the developed economies, a significant stimulus is required to avert recession and restart growth in trade.
- However, inflation from food and energy prices has prevented central banks outside the US from cutting interest rates. In fact the European Central Bank has been raising interest rates, increasing the chances of recession in Europe.

Banks credit conditions still restrictive in Europe as well as the US



- Even though the US Federal Reserve Bank has slashed the cost of credit it provides, the commercial banks are still tightening their credit conditions.
- Until the banks are able to repair the balance sheets damaged by the subprime mortgage crisis, it will be harder to get credit and harder for the US central bank to stimulate growth.
- Banks in Europe eased credit conditions in July but they remain restrictive and contribute to the weakening of economic growth.

Economic growth is now expected to slow further into 2009, particularly in the US



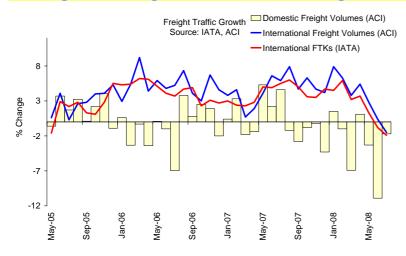
- Previous hopes that the second half of this year would mark the low point for economic growth have disappeared. 2009 is expected to see a further weakening in most parts of the world.
- The US economy has been doing better than expected as a result of strong exports, stimulated by the weak US dollar. This boost is expected to die away in 2009 with growth of just 0.5%.
- Emerging markets are also expected to slow further, but to still robust growth.

Traffic Growth

Key Changes in the data this quarter:

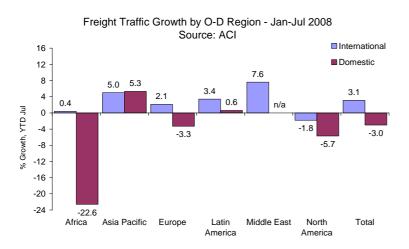
Air freight markets began to shrink – faster than expected - at the end of Q2 and both domestic and international air freight volumes continued to decline at the start of Q3, in July. Freight had been expected to hold up better than the passenger business, because of its larger exposure to stronger Asian markets. Recent weakness in international air freight to/from Asia is an unexpected change.

Air freight volume growth has now been negative for two successive months



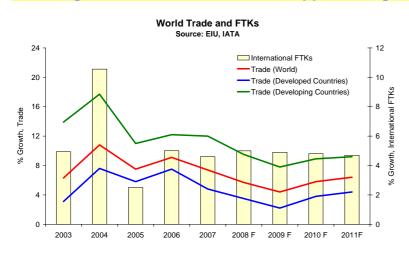
- Air freight volume growth held up robustly for the first four months of this year. Since then the volumes carried have fallen very sharply.
- In the past 10 years international air freight volumes have only fallen more than 2 consecutive months when world trade was shrinking, as in 2001.
- → However, the price of fuel has never been higher which, to an uncertain extent, is driving some business onto alternative transport modes.

Emerging markets freight now slowing sharply along with developed markets



- The most significant development in recent months has been the weakening of international air freight originating to and from emerging market regions, which had shown strong growth in Q1.
- In the largest market Asia Pacific growth held up until July. Domestic expansion continued strongly so there may be some temporary knock-on from the visa-restricted passenger business.
- But European markets have slowed sharply as economies weakened.

Weaker growth in world trade will disappoint freight expectations



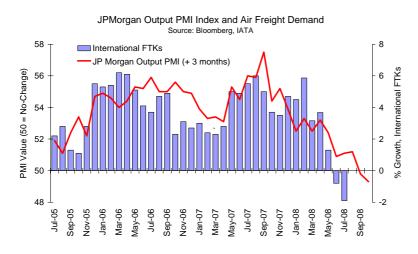
- Recent weakness in air freight will have reduced expected air freight growth in 2009, from the bars shown in the chart which were taken from the 2007 industry survey. New survey results will be available in the next eChartbook.
- The most significant change in this chart is the sharp downward revision in forecasts for world trade in 2009, which is negative for air freight. Previously, an acceleration had been expected.

Demand Environment

Key Changes in the data this quarter:

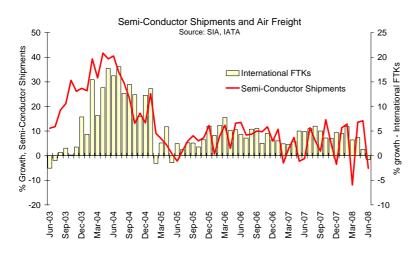
■ The sharpness of the decline in July freight was unexpected. However, forward-looking indicators from manufacturing, inventories and semi-conductors are all pointing to further weakness ahead for air freight.

PMI global manufacturing indicator is pointing towards further freight weakness



- The confidence of manufacturers in the leading economies has proved to be a good leading indicator for the growth of air freight volumes. The sharp decline in manufacturing confidence in February and March was a good predictor of the decline in air freight three months later in May-July.
- The July decline in air freight was unexpectedly sharp and may rebound, but a further fall in confidence points to further falls in air freight during the next three months.

Semi-conductor shipments were falling at the end of the second quarter



- The semi-conductor industry is one of the main customers for air freight, due to the high-value low-volume and usually time sensitive nature of the product.
- Growth in semi-conductor shipments have been volatile but the trend has been weak in recent years. At the end of Q2 shipments were declining.
- Economic weakness is likely to reduce demand for semi-conductors and weaken demand for air freight from this key customer.

The decline in inventories may also have acted as a constraint on air freight growth



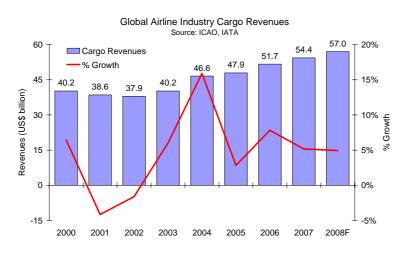
- In the last eChartbook we noted that the rise in inventories, relative to sales, in February and March could reduce shipment and air freight growth until inventories had been reduced.
- That indeed seems to have happened. Now that the inventory-sales ratio is lower the question is whether it is low enough. Given the weak outlook manufacturers may reduce inventories and shipments further; a negative prospect for air freight in the near-term.

Revenues and Yields

Key Changes in the data this quarter:

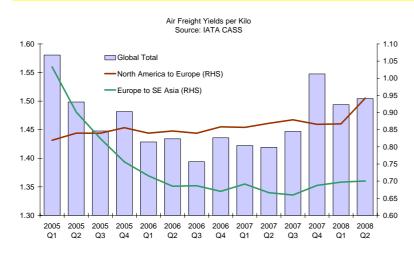
Cargo revenues may have continued to grow in the first half of this year but the mix of slower/falling volumes and higher yields suggests this growth is not sustainable. Already volumes are falling. Revenues will slow.

Cargo revenue growth continuing but slower volumes offsetting higher yields



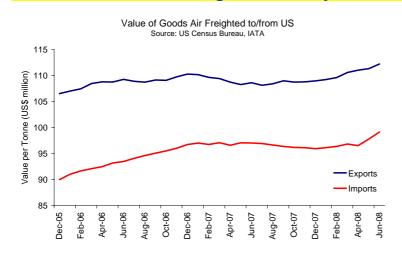
- Cargo revenue growth has continued during the first half of this year but it has slowed and its composition has changed greatly.
- Cargo yields are significantly higher as airlines seek to recover some of the rise in fuel costs. However, volumes have slowed and, in some instances, have fallen.
- The sharp fall in volumes at the start of Q3 suggests fuel costs are now adding to the downward pressures on air freight. Revenues are likely to slow.

Fuel costs pushing yields higher but much variation between markets



- Air freight yields are not as high globally as at the end of 2007 but rose in Q2 to a level 6% higher than last year, as a result of the spike in fuel costs.
- ✓ Yields on some markets (e.g. from Japan & Korea) continued to fall in Q2 but rose on the majority, due to high fuel costs, such as the 8.4% rise on the North America to Europe market.
- ✓ Jet fuel cost \$157/b on spot markets in Q2, an 83% rise in last year.

US international trade being stimulated by weak US dollar



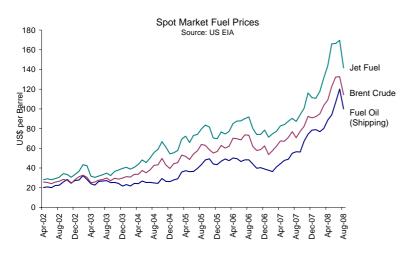
- 7 The US economy was kept afloat in the second quarter by a 13% rise in export volumes and a 7% fall in the volume of imports, driven largely by the earlier weakness of the US dollar.
- 7 The US dollar has reversed the weakness seen earlier in the year but US exporters remain competitive, which should support outbound air freight flows. However, inflows will remain depressed and net air freight flows to and from N America are likely to fall.

Costs

Key Changes in the data this quarter:

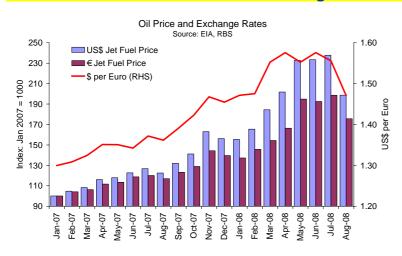
▼ Fuel prices hit a new peak in Q2 and then in July. At the same time a rise in the US dollar accentuated these cost increases for non-US dollar-based airlines. Weaker economic growth has helped reduce fuel prices from their peak, but they are still up 60%. Labour costs are also peaking, but at high levels.

Oil and jet fuel prices rise sharply to new record highs in Q2 and in July



- ✓ Jet fuel prices rose to a new peak in Q2 of \$157/b, and then hit \$180/b in July as crude oil rose above \$147/b.
- Since then prices have fallen back significantly. Nonetheless, at end August levels of \$139/b spot fuel prices were still 60% higher than a year ago.
- Hedging may delay the impact of spot prices on the fuel bill. Without it these spot price increases imply an average rise of unit costs of 25-30%.

Now the rise in the US dollar is increasing the Euro cost of jet fuel



- The US dollar has risen 5% against the Euro since July, as interest rates are seen to have reached a floor in the US whereas cuts are expected to come in Europe.
- As a result the spot price of fuel fell by 17% between July and August for US dollar-based airlines, but only 12% for euro-based airlines.
- The dollar is widely expected to have reached a floor against the Euro. As a result the currency benefits on fuel from Euro appreciation are expected to end.

Unit labour cost pressures are now peaking in the face of economic weakness



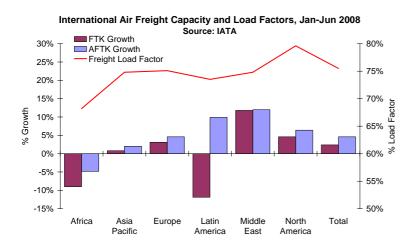
- Economic weakness is now undermining air freight volumes, however, it is bringing fuel prices down and also other key airline costs.
- Labour costs had been rising sharply in the face of widespread shortages of skilled labour.
- Wage inflation on US markets has been slowing for the past year. In the past quarter it appears to have peaked in Europe and China also.

Capacity

Key Changes in the data this quarter:

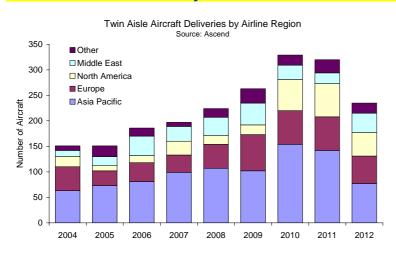
Excess capacity is now emerging as a problem. The fall in air freight volumes during Q2 and July was much faster than efforts to slow capacity growth and load factors have fallen as a result. New deliveries, now accelerating, are producing much needed cost savings but are starting to add to excess capacity problems.

Air freight volumes slow faster than capacity during the first half of 2008



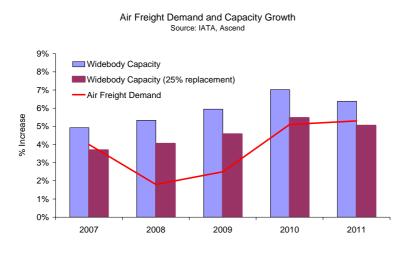
- Capacity growth matched freight volumes in the first three months of this year but the speed of the subsequent decline in demand during the second quarter outpaced capacity.
- With the exception of airlines in the Middle East, where growth remained strong, load factors fell in all markets on average during the first half of the year.
- Airlines in Africa and Latin America suffered particularly large falls in freight load factors, as market shares fell.

The rate of new widebody aircraft deliveries is rising sharply



- The number of aircraft (jets + turboprops) parked rose to 38 a month in July, but deliveries of new capacity are accelerating.
- Twin aisle deliveries are booked at 224 aircraft this year, rising to 263 in 2009.
- The advantage for airlines is that they are getting a 20-30% fuel efficiency advantage from the new aircraft over those that are being parked.
- Given the 25-30% rise in unit costs due to jet fuel prices this replacement is essential for profitability.

A risk of excess capacity if less than 25% of new deliveries are for replacement



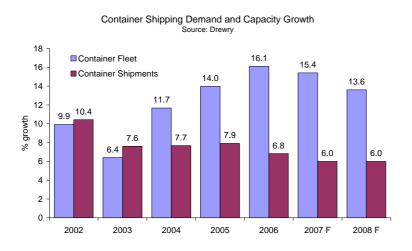
- The problem created by the delivery of new twin-aisle aircraft is the excess capacity likely to be created.
- The bars show the growth in the twinaisle fleet, with the red bar showing an assumption that 25% of deliveries are for replacement.
- The chart does not show the number of twin-aisle aircraft being parked but it suggests excess capacity may indeed become a problem due to the weak outlook for air freight demand.

Competition

Key Changes in the data this quarter:

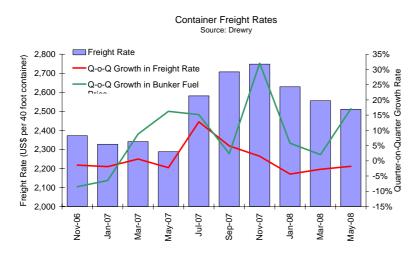
Ocean freight is now facing slowing demand, despite anecdotal evidence that it is gaining share at the expense of air freight. Certainly excess capacity is growing, reducing container freight rates and improving the competitiveness of ocean compared with air freight.

Container shipping supply growth is rising at a much faster pace than demand growth



- On particular routes ocean container freight companies are rapidly adjusting capacity to demand. However as at the end of June the global container fleet was up 13.3% over the previous year, compared to growth in global container handling activity of 8.5%.
- Excess capacity in container shipping, with new deliveries rising, are likely to keep this transport mode a fierce competitor against air freight on some markets.

Container freight rates have continued to decline despite rise in bunker fuel cost



- Bunker fuel prices rose sharply during Q2 but container freight rates continued to decline, under pressure from excess capacity.
- Since late last year container freight rates have fallen 9%, compared with a decline of just 3% in air freight yields, which turned up in Q2.
- The improving price competitiveness of ocean freight may have played a part in the recent weakness of air freight, as transport modes were switched on some markets.

Growth in container demand has weakened during the first half of 2008



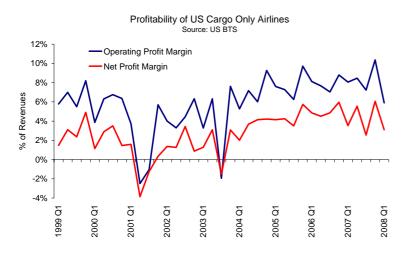
- Ocean freight activity slowed markedly on some major markets during the first half of the year. North American markets in particular fell, reflecting the weakness of domestic demand in the US economy.
- Western European volumes strengthened but given recent economic weakness this is likely to reverse later this year.

Profitability

Key Changes in the data this quarter:

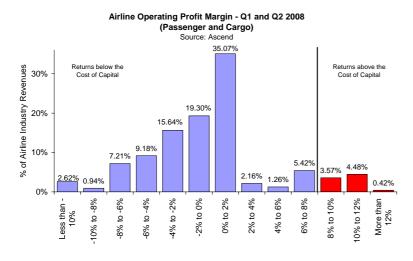
Cargo profitability fell in Q1 but volume growth was strong and spot fuel prices were considerably lower than today. Shrinking freight volumes and a one-third rise in spot fuel prices will have severely damaged profitability. The majority of airlines were making significant losses during the first half of this year.

Cargo-only profitability fell in Q1 and will have fallen substantially in Q2



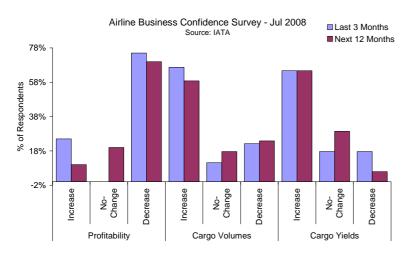
- Cargo profitability continued to decline in Q1, based on a sample of US cargoonly airlines.
- However, this gives little indication of the pressure profitability came under during the second quarter.
- Spot fuel prices rose to \$157/b in Q2 from \$118/b in Q1, a rise of one-third. At the same time international air freight growth having averaged 4.4% growth in Q1 shrank -0.6% in Q2.

The median airline just broke even in 2008H1 but the majority made operating losses



- This chart shows the major passenger and cargo airlines who have reported so far during the first half of this year. The median airline is just about breaking even during the first half.
- However, 55% are losing money at the operating level despite Q2 being a seasonally strong quarter.
- Only 8% of airlines in this sample were earning enough to meet their cost of capital during the first half of 2008.

Business confidence fell sharply in the July survey



- IATA's July survey of airline heads of cargo showed a very sharp deterioration in confidence over profitability, even compared to the April survey.
- Very few expect profitability to improve while 70% expect a deterioration over the next 12 months.
- One key issue is whether expectations of further significant growth in cargo volumes are consistent with expectations of rising yields, given the weak economic environment.

Air Freight Routes and Direction

International Freight Volume Growth by Route Area (Source: IATA ODS statistics)

| Route Area | % Growth in Freight Tonnes, year-on-year | | | | | | |
|-------------------------------|--|----------|----------|----------|----------|----------|--|
| | Jan 2008 | Feb 2008 | Mar 2008 | Apr 2008 | May 2008 | Jun 2008 | |
| Africa - Middle East | 16.3% | 9.3% | 14.5% | 17.1% | 6.4% | 9.4% | |
| Europe - Far East | 6.4% | 6.0% | 2.4% | 3.2% | 5.1% | 1.6% | |
| Europe - Middle East | 4.0% | 4.4% | 3.6% | 16.4% | 14.3% | 21.2% | |
| Within Far East | 17.2% | 9.4% | 4.3% | 10.2% | 11.0% | 7.7% | |
| Within Middle East | 8.5% | 12.0% | 14.7% | 25.2% | 19.2% | 27.3% | |
| Within South America | -8.8% | 1.2% | -39.8% | 12.2% | 25.1% | 15.4% | |
| Mid Atlantic | 7.9% | 13.3% | -2.3% | 1.2% | 16.8% | 3.9% | |
| Middle East - Far East | 6.7% | 4.0% | 6.8% | 13.3% | 12.9% | 14.9% | |
| North Atlantic | 1.6% | 7.0% | 6.5% | 10.2% | 5.2% | 2.8% | |
| North America-Central America | -13.8% | -10.4% | -9.7% | -10.3% | -9.7% | 0.7% | |
| Europe - Africa | -3.6% | -0.3% | -10.8% | 4.7% | 2.6% | 2.0% | |
| North America - South America | -6.9% | 5.8% | -33.5% | -3.3% | 11.9% | 8.6% | |
| Far East - Southwest Pacific | 3.2% | 9.2% | 0.5% | 4.5% | 0.3% | 2.1% | |
| North and Mid Pacific | 8.8% | 4.6% | 5.0% | 9.5% | 6.6% | 1.4% | |
| South Atlantic | 12.1% | 17.0% | 6.7% | 22.7% | 11.7% | 17.0% | |
| Within Europe | -5.5% | 2.0% | -5.5% | 11.9% | 3.4% | 9.3% | |

Outbound CASS Market Revenues

| Origin Region | US\$m | % Growth in Air Freight Revenues, year-on-year | | | | | |
|--------------------|---------|--|---------|---------|---------|---------|---------|
| | Q4 2007 | Q1 2007 | Q2 2007 | Q3 2007 | Q4 2007 | Q1 2008 | Q2 2008 |
| Africa | 42.27 | 4.9 | 22.6 | 32.7 | 25.3 | 10.4 | 9.4 |
| Caribbean | 4.65 | -9.2 | -7.7 | 3.4 | 8.4 | 20.7 | 8.9 |
| Central America | 48.93 | 7.8 | 3.5 | 2.8 | 6.4 | 12.0 | 9.1 |
| Europe | 1500.84 | 11.6 | 10.3 | 11.7 | 12.4 | 8.2 | 9.2 |
| Japan & Korea | 843.75 | -13.4 | -16.0 | -3.9 | 6.3 | 6.3 | -4.1 |
| Middle East | 44.96 | 46.0 | 114.6 | 137.8 | 77.9 | 65.9 | 15.2 |
| North America | 724.26 | 9.9 | 13.4 | 15.3 | 15.0 | 13.8 | 13.8 |
| South America | 196.30 | 9.4 | 4.6 | 0.3 | 7.6 | 9.5 | 12.8 |
| South East Asia | 846.50 | 116.1 | 131.0 | 153.3 | 151.9 | 30.6 | 27.2 |
| South West Pacific | 153.28 | 13.7 | 20.5 | 16.7 | 15.8 | 10.7 | 10.8 |

Inbound CASS Market Revenues

| Destination Region | US\$m | % Growth in Air Freight Revenues, year-on-year | | | | | |
|--------------------|---------|--|---------|---------|---------|---------|---------|
| | Q2 2008 | Q1 2007 | Q2 2007 | Q3 2007 | Q4 2007 | Q1 2008 | Q2 2008 |
| Africa | 295.4 | 18.3 | 17.5 | 21.7 | 22.6 | 16.2 | 17.2 |
| Caribbean | 35.0 | 7.2 | 3.6 | 6.4 | 12.2 | 10.6 | 11.2 |
| Central America | 98.6 | 13.4 | 11.4 | 25.3 | 17.5 | 9.9 | 14.7 |
| Europe | 98.6 | 13.4 | 11.4 | 25.3 | 17.5 | 9.9 | 14.7 |
| Japan & Korea | 269.9 | 4.6 | 6.8 | 9.2 | 15.4 | 0.7 | -2.0 |
| Middle East | 286.5 | 19.0 | 21.0 | 22.1 | 18.6 | 19.8 | 17.8 |
| North America | 871.3 | 10.2 | 7.7 | 15.1 | 21.8 | 4.1 | 2.2 |
| South America | 340.6 | 17.3 | 23.1 | 30.5 | 33.3 | 30.8 | 28.7 |
| South Asia | 136.4 | 9.5 | 13.8 | 21.7 | 30.8 | 17.8 | 30.2 |
| South East Asia | 577.7 | 6.1 | 4.8 | 9.6 | 16.7 | 8.6 | 6.8 |
| South West Pacific | 265.4 | 13.9 | 17.4 | 19.8 | 30.3 | 29.2 | 26.2 |

IATA Economics August 2008