

CARGO E-CHARTBOOK

Q3 2009

KEY POINTS

- Developments since the second quarter eChartbook have been mixed for the air cargo industry. The improvement in air freight volumes predicted by leading indicators has occurred, albeit at a slow pace, as reduced de-stocking generates some uplift in industrial production, particularly in a number of Asia economies. Heads of cargo are now expecting to see further improvements in freight volumes in the year ahead, and also better yields. But even if economies continue to grow the problem is that excess capacity has forced yields down sharply and new aircraft deliveries risk an accentuation of this problem for yields. Moreover, fuel costs have continued to rise. First half losses may continue into the second half unless fuel prices drop back and/or the inventory-driven economic improvements strengthen into a fully-fledged economic recovery. For the rest of this year, the chances of both remain slim, given strong investor demand for commodities and headwinds from debt on economic growth in the OECD economies.

HEADLINES BY SECTION

Economic Outlook (page 2)

- Massive monetary easing is narrowing credit spreads and, with fiscal stimulus, is starting to turn economies around, particularly in Asia where debt problems are fewer. But the 2010 upturn is likely to be weak and uneven.

Demand Environment (page 4)

- Significant improvements in the business confidence of purchasing managers as the inventory overhang diminishes, boosting shipments in sectors such as semi-conductors, have been key to the recent rise in air freight volumes.

Costs (page 6)

- Fuel prices are lower than the exceptional levels reached last year but have risen sharply since the start of this year. US dollar weakness is providing a moderate offset for some. Other major cost items such as aircraft and labour costs are easing.

Competition (page 8)

- Air freight volumes are improving ahead of other transport modes. With ocean freight yields down 39% in Q2 it seems that the rise in air freight is due to shippers requiring more timely transport as economies revive, rather than relative prices.

Traffic Growth (page 3)

- World trade in goods started to rise in June but air freight volumes began upturn several months earlier and are now 10% up on December low point. The uneven geographical spread to the upturn reflects the pattern of economic growth.

Revenue and Yields (page 5)

- Excess capacity forced yields down over 20% in Q2 leading to a decline of around 40% in revenues from international air freight markets. There are encouraging signs that economic improvements are now boosting air freight's share of world trade.

Capacity (page 7)

- Since the start of the year more than 150 freighters have been taken out of active service, reducing air freight capacity by around 2%. However, deliveries of new aircraft and flows out of storage risk increasing excess capacity in the year ahead.

Profitability (page 9)

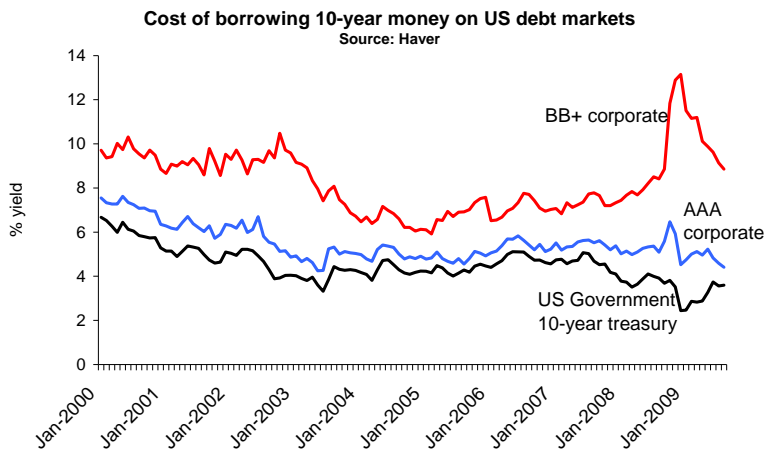
- All-cargo airlines in the US fell into loss in Q1 and a broad sample of airlines worldwide saw financial performance deteriorate further in Q2. Heads of cargo expect a rise in volumes and yields over the year but costs are rising now too.

Economic Outlook

Key Issue:

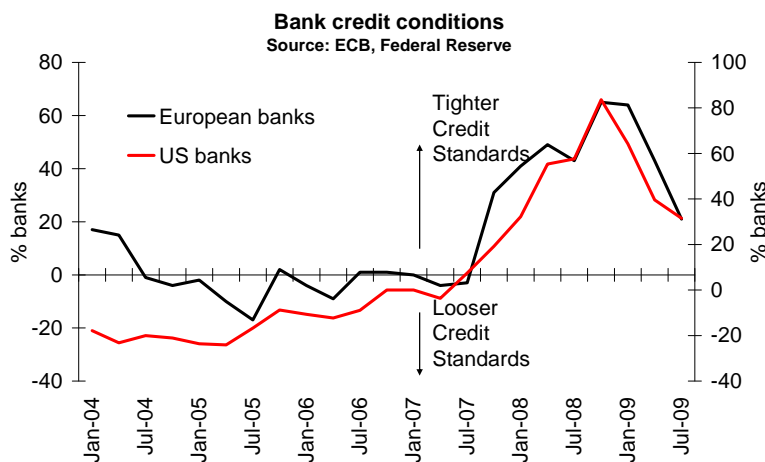
- Massive monetary easing narrowing credit spreads and, with fiscal stimulus, is starting to turn economies around, particularly in Asia where debt problems are fewer. But 2010 upturn likely to be weak and uneven.

Continued exceptionally loose monetary policy is cutting borrowing costs



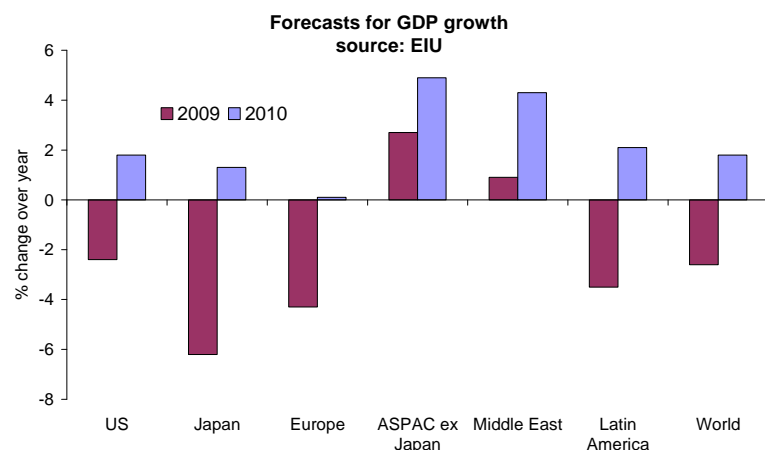
- Central bank interest rates continue at record low levels and many authorities are further injecting liquidity through 'quantitative easing' (QE).
- There has been some scaling back in QE but, with few exceptions, central banks plan to keep interest rates exceptionally low well into 2010.
- Bond markets are anticipating economic recovery as a result of the monetary and fiscal stimulus. AAA borrowers face lower debt costs but BB+ corporates (most airlines) still have to pay a premium of over 520 points over Treasuries.

The credit crunch is now starting to ease



- Far fewer banks in the US and Europe are now reporting that they are tightening the conditions on which they will expand credit. The 'credit crunch' is clearly easing as a result of the massive bank rescues and part nationalisations in many countries.
- However, there remains a net tightening of credit conditions and bank loans are being repaid or remain low. Large corporates have been able to access debt markets (major airlines have raised \$12 billion so far this year).

Upturn in economic growth through 2010 forecast to be weak and uneven



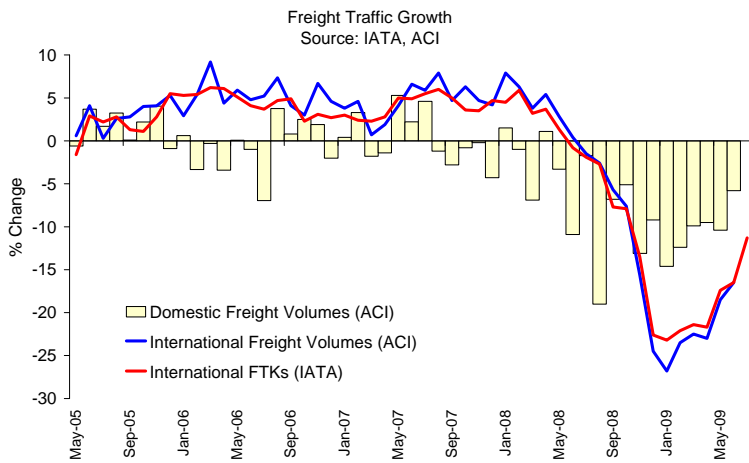
- Economic activity (GDP) started to turn upwards during the second quarter in a number of Asia economies and parts of Europe, though continued to shrink in the US and elsewhere.
- Even with some 2009H2 growth average GDP levels for the year will be sharply down on 2008. The consensus expects some growth in 2010, due to the massive monetary and fiscal stimulus packages. But compared to previous recoveries this one will be weak and uneven.

Traffic Growth

Key Changes in the data this quarter:

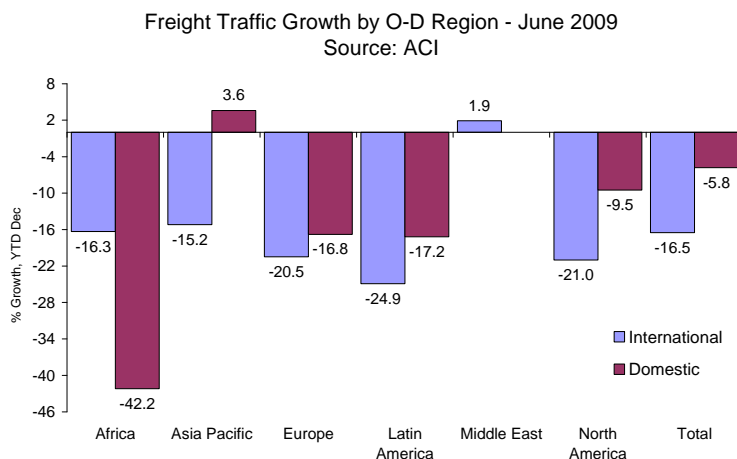
- World trade in goods started to rise in June but air freight volumes began upturn several months earlier and are now 10% up on December low point. Uneven geographical spread reflects pattern of economic upturn.

Air freight volumes turning up as inventory cycle begins to turn



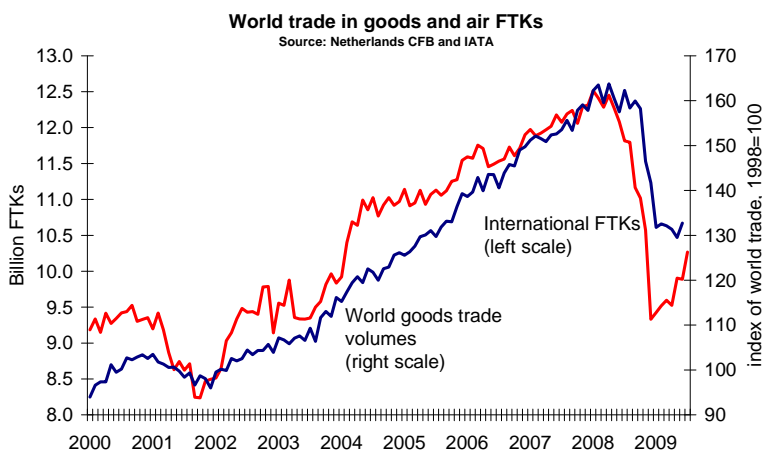
- Air freight data, whether measured on international or domestic markets, by airline or airport, are now painting a consistent picture of stabilisation in Q1, followed by an upturn in Q2 which has continued into the first part of Q3.
- Freight tonne kilometres flown are still lower than levels last year but from June to July this year volumes were up almost 4%. Since the low point was hit last December air freight volumes have risen by 10%.

Regional data on air freight flows reflects the pattern of the emerging economic upturn



- The latest O-D data available (June) for air freight volumes reflects the pattern of economic growth reported for the second quarter, with an upturn in many Asian economies producing positive growth in domestic air freight markets in that region.
- With the exception of the capacity and oil price driven gains in the Middle East, international markets continued to show FTK levels sharply down on June last year. However, all are up significantly on Q1 levels.

Air freight upturn beginning ahead of world trade as shippers switch from ocean to air



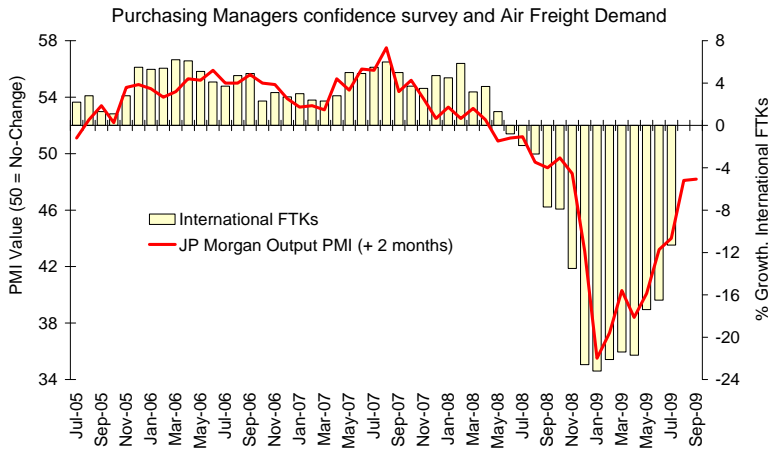
- Air freight FTKs have risen 10% from their December low point, whereas the volumes of world trade only began to move upwards in June. This is a typical upturn pattern as in 2002. As manufacturers anticipate economic recovery time becomes more important and so inventories are restocked by air at the expense of ocean freight.
- However, the upturn remains fragile until the economic recovery broadens out from an inventory cycle to stronger consumption and business investment.

Demand Environment

Key Changes in the data this quarter:

- Significant improvements in the business confidence of purchasing managers as their inventory overhang diminishes, boosting shipments in sectors such as semi-conductors, have been key to the recent FTK rise.

Purchasing managers confidence points to further gains in air freight volumes



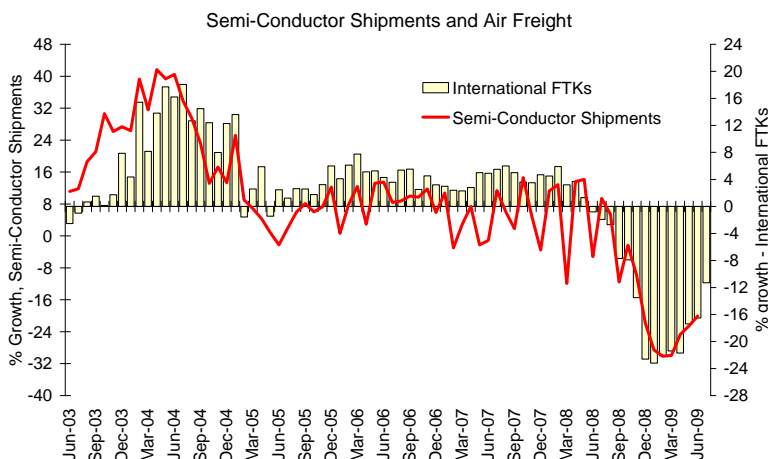
- The confidence of purchasing managers in the manufacturing sectors of the major economies world-wide has proved to be a good leading index of moves in air freight volumes, since a large proportion of air freighted goods are components or capital goods.
- The surveys of confidence in June and July point to a further diminution of the negative year-on-year FTKs growth rates to around -5% in August and September, consistent with further month-to-month growth in volumes.

De-stocking by manufacturers is now reducing the inventory overhang



- The swings of the inventory cycle are highly correlated to changes in air freight. When warehouses are full shipments by air are cut and vice versa. The recent rise in air freight volumes has been associated with a fall in inventory to sales ratios in the US and elsewhere.
- The key issue is whether de-stocking really has come to an end since, in the absence of a near-term revival in consumer and business spending, the inventory overhang still looks large. This could for a time limit the strength of the upturn in air freight.

Semi-conductors are still down on last year but some month-to-month upturn is visible



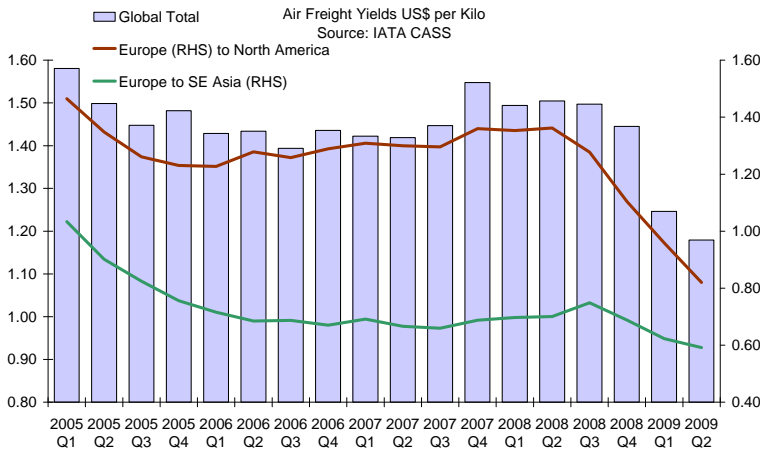
- Semi-conductor shipments are a good coincident indicator of air freight shipments, since computers and electronic goods are such a high proportion of air freighted goods.
- Semi-conductors fell further than air freight and did not bottom until the end of Q1. However during Q2 there has been a significant upturn, albeit to levels still over 20% below those seen at the same time last year.

Revenues and Yields

Key Changes in the data this quarter:

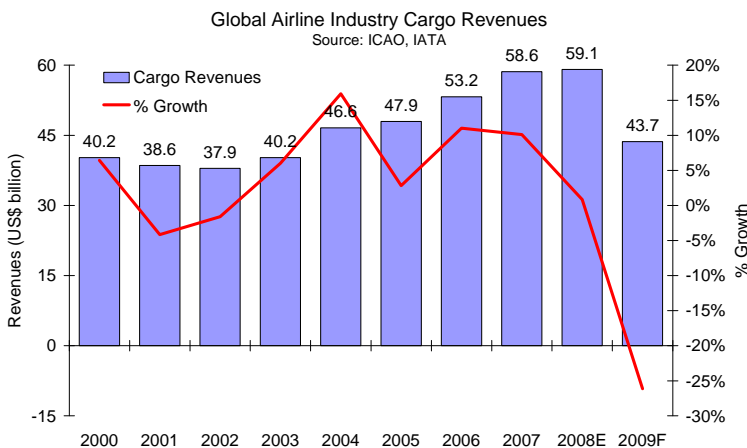
- Excess capacity forced yields down 21% in Q2 leading to decline of 40% in revenues from international markets. Encouraging signs that economic improvements now boosting air freight share of world trade.

Cargo yields fall over 21% in Q2 as excess capacity continues to grow



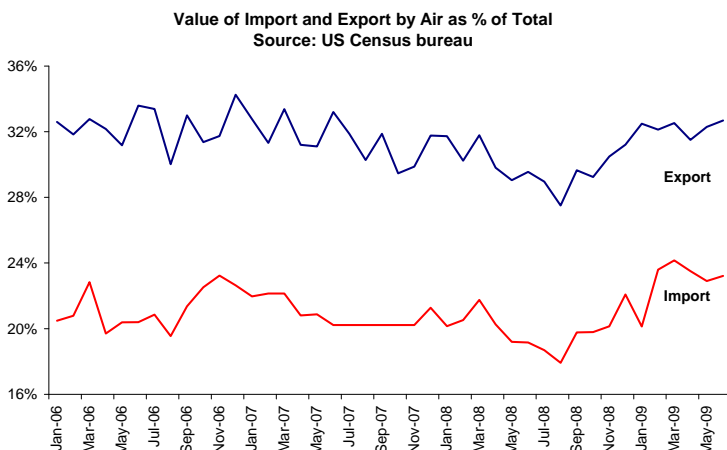
- Part of the upturn in air freight volumes may have been achieved at the expense of lower yields. Average air freight yields were down 16% over the year to Q1, but then fell even further to down 21% in Q2.
- The rate at which freight yields were falling slowed in Q2 but the excess capacity driving this decline is only slowly being eliminated. As a result downward pressure on yields is likely to persist into the third quarter.

Cargo revenues were down 40% in 2009H1 with both lower volumes and yields



- With freight volumes and yields both down close to 20% during the first half of 2009 freight revenues on international markets will have shrunk some 40% over year earlier levels. Domestic freight volumes are falling at a slower rate of around 11%. Total freight revenues were probably falling at a rate of 35% in the first half.
- IATA's June forecast projected an average decline of just over 25% for the whole of 2009. At the moment the risks to this are on the downside.

Air freight regains lost market share at the start of an upturn in economic activity



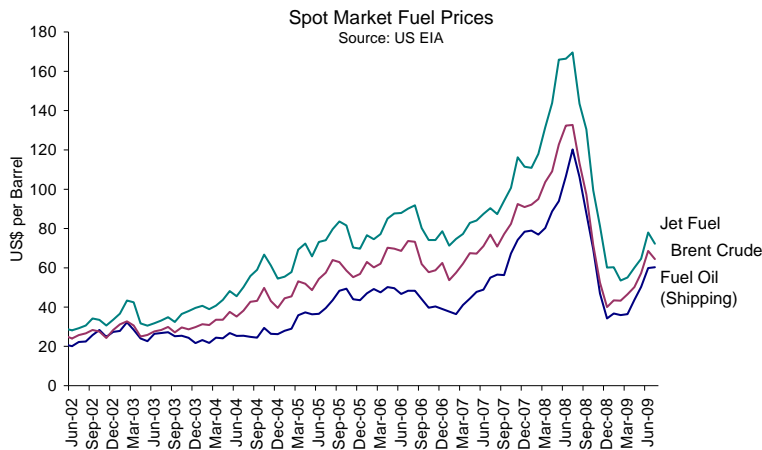
- In previous research we have shown how air freight gains market share at the start of an economic improvement, as shippers need to restock quickly. Data on the value of US international trade by mode is showing this pattern.
- The rise and fall in oil prices shaped the decline and early rise in the share of air freight. However, oil prices have risen sharply since January. The further rise in the share of air freight (33% share of US exports by June) was driven by the early stages of improving economic activity.

Costs

Key Changes in the data this quarter:

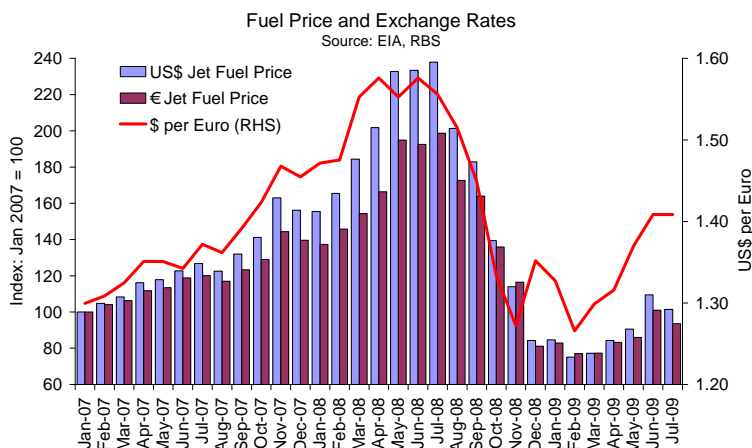
- Fuel prices are lower than the exceptional levels reached last year but have risen sharply since the start of this year. US dollar weakness is providing a moderate offset for some. Other major cost items are easing.

Jet fuel price, pushed higher by oil prices, rises back over \$80 a barrel



- Increasing signs that the world economy is lifting off the floor, having suffered its worst economic and financial crisis since the 1930s, is pushing oil prices higher. OPEC supply constraint is also contributing. So far strong demand is from financial investors rather than commercial, which remains depressed.
- Crack spreads remain relatively low due to excess refinery capacity, at present, but jet has now moved back above \$80 a barrel.

US dollar weakness this year provides a moderate offset to jet fuel price rises for some



- Weakness in the US dollar, down 6% against the Euro and other currencies since the start of the year, is providing a moderate offset to the rise in jet fuel prices for non-US dollar based airlines.
- As economic recovery becomes more widely anticipated investors are getting back their appetite for risk and switching out of US dollar assets, which had been perceived as relatively 'safe' in the financial crisis induced flight to quality.

Looser labour markets are reducing wage pressures in most regions



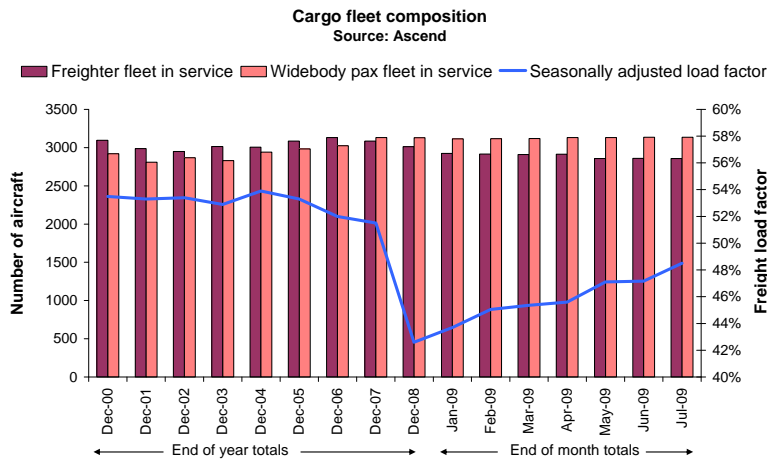
- Although fuel costs are rising once more, other major airline cost items like aircraft leasing costs and wage costs are falling or, at least, not increasing so much.
- Unemployment is still increasing, and will do so until any economic recovery gathers sufficient pace to offset new entrants into the labour markets. Excess supply is producing a significant slowdown in wage increases across the US, Europe and in Asia. This environment should help airlines in their efforts to restructure workforces and employment contracts.

Capacity

Key Changes in the data this quarter:

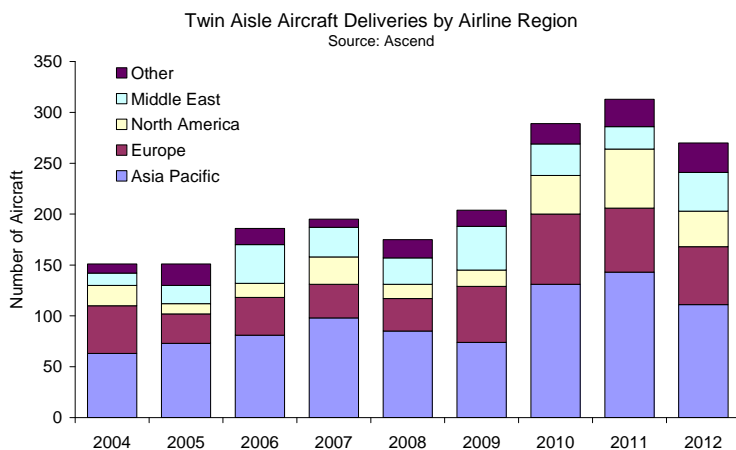
- ↗ Since the start of the year 227 freighters have been taken out of active service, reducing air freight capacity by around 3%. However, deliveries of new aircraft and flows out of storage risk increasing excess capacity.

Freighters being parked but load factors take most of the strain of recession



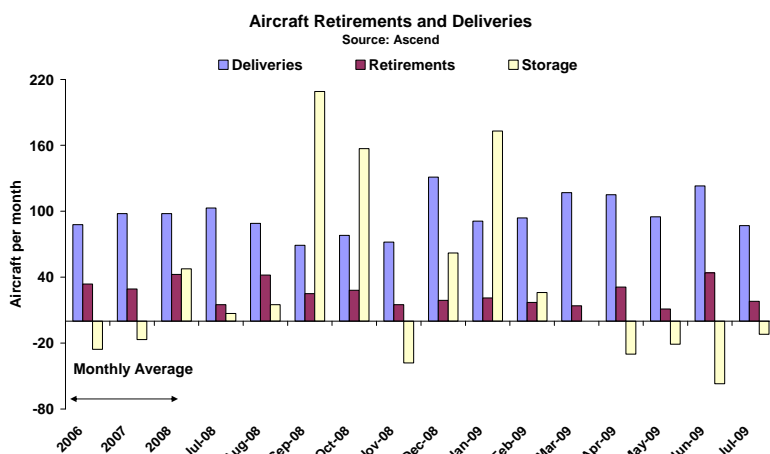
- ↗ Since the start of the year 150 freighters have been taken out of the in-service fleet. Twin aisle passenger aircraft, with freight capacity, have increased a little over this time. Nonetheless a further 2% of air freight capacity was removed in the first seven months of this year.
- ↗ With the stabilisation of freight demand in Q1 and a moderate Q2 recovery this has allowed load factors to slowly improve from a 42.6% low point in December to 48.5% (s.a.) by July.

New aircraft deliveries adding to capacity pressures



- ↗ At this time last year there were 263 twin aisle aircraft scheduled for delivery in 2009 and a further 329 in 2010. Today these numbers for 2009 and 2010 have been cut by 100 aircraft, with 2011 deliveries lower as well.
- ↗ Retirements and storage have limited the impact of these deliveries on capacity so far this year. However, the risk is that even these reduced delivery levels create the potential for excess capacity to develop in the second half of this year.

Twin and single aisle fleet expanding as older aircraft no longer being parked



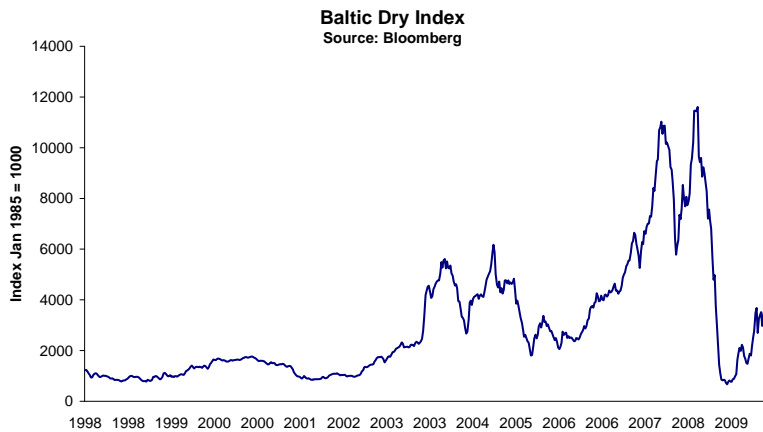
- ↗ This point is emphasised by the fact that airlines are no longer retiring or parking older aircraft at the rates seen late last year. In fact in the past few months aircraft have been taken out of storage and put back into the active fleet.
- ↗ These numbers include single aisle and turboprop, as well as twin aisle aircraft and freighters, but it emphasises the risk that the improvement in freight volumes could generate a damaging early return of capacity.

Competition

Key Changes in the data this quarter:

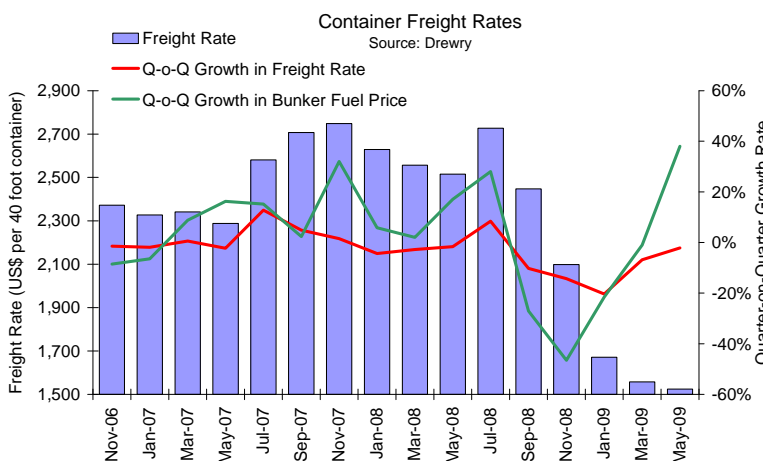
- Air freight volumes are improving ahead of other transport modes. With ocean freight yields down 39% in Q2 it seems that the rise in air freight is due to shippers requiring more timely transport as economies revive.

Cost of shipping bulk commodities pulled up by (transitory?) demand from China



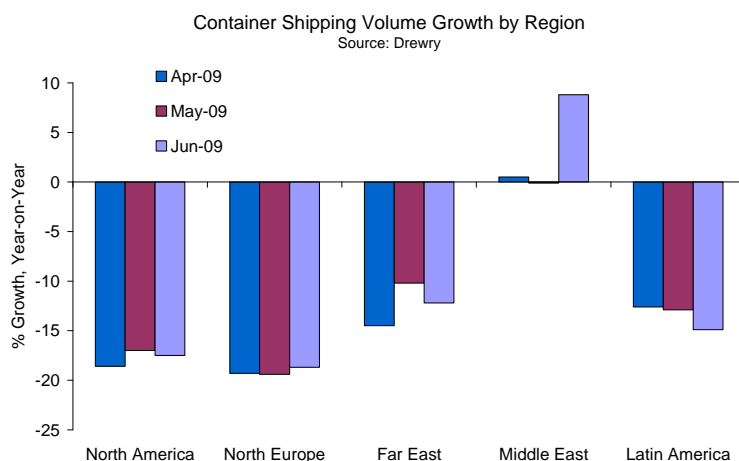
- The Baltic Dry index – representing the cost of shipping bulk commodities – is less than half its level this time last year, however it is over 400% up on its low point at the end of last year.
- This revival however appears to be driven by special factors – largely a strategic (and temporary?) move by the Chinese government and companies to build up stocks of commodities while prices are low. There is little signs so far of any widespread revival of demand for bulk commodities.

Container freight rates fell 39% in the 12 months to May



- The improvement in air freight volumes in Q2 and July appears to have little to do with better price competitiveness. Its main competitor on many trade lanes – containerised ocean freight – saw yields fall 39% in the 12 months to May, almost double the decline in air freight yields.
- As residual fuel oil prices rise the decline in ocean freight rates has slowed, but excess capacity and little revival in demand is keeping rates low.

Container demand shows little sign of a Q2 improvement unlike air freight



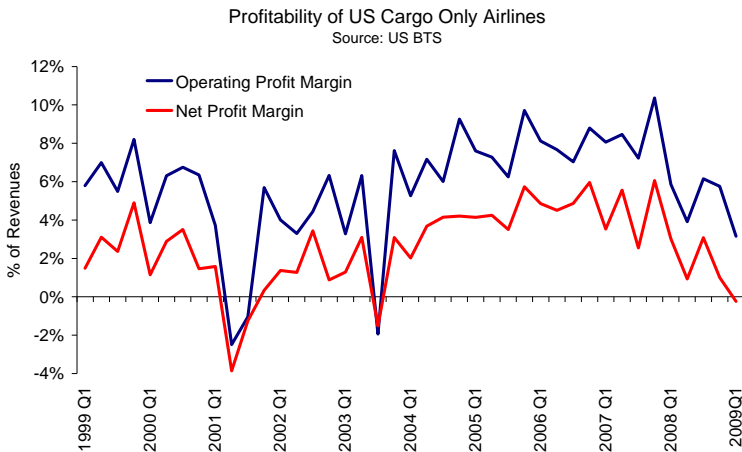
- There has been some improvement in ocean freight volumes in the Far East, which reflects stronger Q2 economic improvements seen in many Asian economies, including China and Japan. However, the overall picture is of continued weakness in ocean freight during the second quarter, in contrast to the improvement in air freight.
- The contrasting improvement in air freight during Q2 appears driven not by changes in price competitiveness but by shippers requiring more timely transport in the early stage of a turnaround in economic activity.

Profitability

Key Changes in the data this quarter:

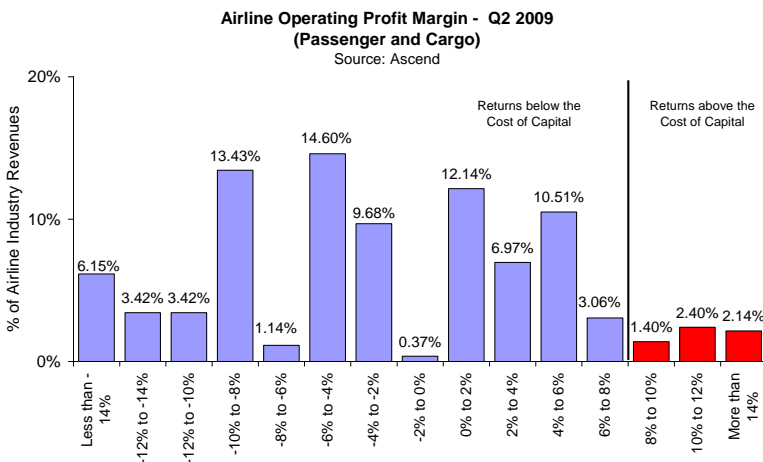
- All-cargo airlines fell into loss in Q1 and a broad sample of airlines saw financial performance deteriorate further in Q2. Heads of cargo expect a rise in volumes and yields over the year but costs are rising now too.

All-cargo airlines fall into loss in the first quarter of 2009



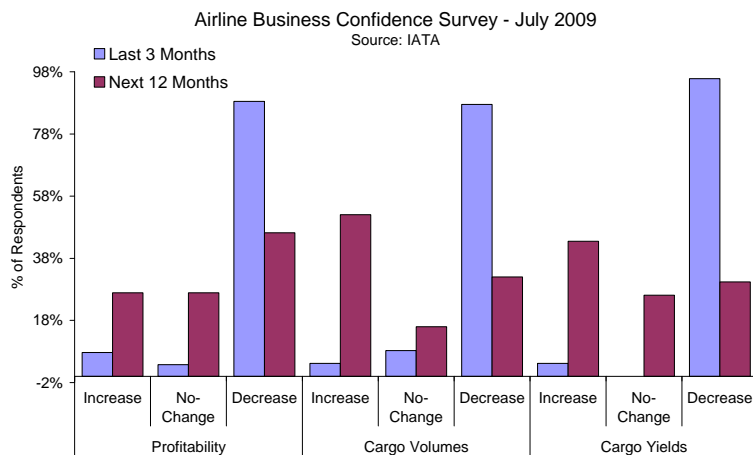
- The slump in freight volumes at the end of last year, and in yields early in 2009, was reflected in a sharp fall in the net profits of all-cargo airlines in the US. The paradox is that freight markets weakened faster and deeper than passenger markets yet the US passenger airlines have been reporting large losses throughout 2008.
- The answer lies partly with the dominance of the express carriers. But the revenue environment deteriorated very sharply in 2009Q1; US all-cargo net losses emerged early this year.

Operating losses were widespread during the second quarter of 2009 as well



- Looking more broadly at the profitability of all the 50+ major airlines reporting on their Q2 results, the majority continued to make losses despite this usually being the high demand quarter normally generating 50% of the year's profits.
- Some 38% of these airlines did make money in Q2, which is an improvement over the 18% in Q1. However, the median airline was making losses of 4-6% in Q2, and less than 6% made enough to deliver shareholder value.

Business confidence over future cargo revenues improves in July survey



- Heads of cargo were noticeably less pessimistic about future prospects than their passenger business counterparts in IATA's July confidence survey.
- Most expect further losses but more heads of cargo now anticipate further improvements in volumes over the next 12 months (already underway) and better yields (not in evidence so far). Unfortunately fuel costs are also rising from lower levels earlier this year, so better revenues may not translate though into profits.

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 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009
Africa - Middle East	2.2%	-8.4%	-1.8%	-5.7%	-2.1%	6.1%
Europe - Far East (Except Polar)	-27.9%	-52.0%	-35.2%	-50.4%	-52.2%	-32.5%
Europe - Middle East	12.3%	-8.4%	9.3%	-28.9%	-14.8%	-20.4%
Within Far East	-29.3%	-27.4%	-23.0%	-26.0%	-21.5%	-21.6%
Within Middle East	-10.6%	-7.6%	-6.4%	-8.4%	-8.5%	-11.7%
Within South America	-24.3%	-30.7%	-31.7%	-34.6%	-23.9%	-29.3%
Mid Atlantic	-18.0%	-32.1%	-35.7%	-24.9%	-28.2%	-25.9%
Middle East - Far East	6.5%	-0.7%	-10.3%	5.6%	-1.0%	-39.0%
North Atlantic	38.4%	-37.0%	9.4%	-15.7%	9.7%	60.6%
North America-Central America	-34.3%	-24.7%	-24.0%	-20.2%	-14.5%	-10.4%
Europe - Africa	3.1%	-2.8%	4.1%	1.1%	0.8%	-3.1%
North America - South America	-46.0%	-33.0%	-37.3%	-29.5%	-22.9%	-11.2%
Far East - Southwest Pacific	-3.2%	-21.0%	-9.9%	-23.7%	-17.7%	-10.8%
North and Mid Pacific	-17.5%	-18.1%	-14.8%	-23.7%	-21.9%	-21.0%
South Atlantic	-20.4%	-22.0%	-14.2%	-14.8%	-16.3%	-17.8%
Within Europe	-2.4%	-1.5%	-1.6%	-3.4%	-2.5%	-4.1%

Outbound CASS Market Revenues

Origin Region	US\$m Q2 2009	% Growth in Air Freight Revenues, year-on-year					
		Q1 2008	Q2 2008	Q3 2008	Q4 2008	Q1 2009	Q2 2009
Africa	34.6	10.4	9.4	5.9	2.2	-8.0	-18.2
Caribbean	4.5	20.7	8.9	7.3	-6.8	-7.3	-4.2
Central America	40.4	12.0	9.1	9.2	-19.9	-15.8	-17.5
Europe	901.3	8.2	9.2	-1.1	-23.9	-37.0	-39.9
Japan & Korea	510.5	6.3	-4.1	-23.5	-41.6	-55.6	-39.5
Middle East	53.7	65.9	15.2	26.7	23.2	49.4	19.4
North America	490.8	13.8	13.8	7.3	-15.1	-23.7	-32.2
South America	137.4	9.5	12.8	11.0	-6.1	-20.8	-30.0
South East Asia	590.0	30.6	27.2	27.2	-2.3	-27.2	-30.3
South West Pacific	107.5	10.7	10.8	-0.3	-27.2	-30.0	-29.9

Inbound CASS Market Revenues

Destination Region	US\$m Q2 2009	% Growth in Air Freight Revenues, year-on-year					
		Q1 2008	Q2 2008	Q3 2008	Q4 2008	Q1 2009	Q2 2009
Africa	237.7	16.2	17.2	10.8	-5.9	-12.5	-19.5
Caribbean	27.2	10.6	11.2	6.3	-10.2	-27.9	-22.1
Central America	56.9	9.9	14.7	-6.2	-25.4	-37.1	-42.3
Europe	790.5	15.6	8.4	2.3	-17.3	-33.6	-35.8
Japan & Korea	174.7	0.7	-2.0	-13.2	-31.8	-41.2	-35.3
Middle East	239.9	19.8	17.8	18.7	-2.4	-12.3	-16.3
North America	488.9	4.1	2.2	-7.9	-31.0	-45.6	-43.9
South America	208.9	30.8	28.7	24.7	-14.1	-33.9	-38.7
South Asia	104.3	17.8	30.2	18.4	-3.9	-16.0	-23.6
South East Asia	384.2	8.6	6.8	-5.5	-26.7	-42.4	-33.5
South West Pacific	161.0	29.2	26.2	4.9	-25.1	-34.9	-39.4