

CARGO E-CHARTBOOK

Q4 2008

KEY POINTS

- The business environment for air cargo had deteriorated dramatically in the middle of the year when the last eChartbook was written, with an unprecedented rise in fuel costs and a fall in freight volumes. Spot fuel prices have since fallen back, though hedging is delaying the cost benefits. However, following the near collapse of the banking sector, the worst recession since the early 1980s is now expected for 2009. Costs may be significantly lower next year but cargo airlines now face the most difficult revenue environment for many years.

HEADLINES BY SECTION

Economic Outlook (page 2)

- Recession is now the main threat to the air cargo industry over the next 1-2 years. Europe and Japan and the US were already in recession from the second quarter but there are now additional recessionary pressures from the near-collapse of the banking sector in September.

Demand Environment (page 4)

- All the forward-looking indicators for air freight volumes turned sharply negative in recent months. Business confidence amongst manufacturers hit a new low, the semiconductor industry reported new falls in shipments and a gloomy forecast for 2009.

Costs (page 6)

- The cost crisis of the middle of the year has abated, almost. Spot prices for jet fuel have fallen back but the benefit of lower costs is being offset to some extent by the stronger US dollar and the impact of hedging.

Competition (page 8)

- Weakness in the bulk commodities markets, reflecting the depth of recession, is shown by the incredible 92% decline in the Baltic Dry Index. Containerised markets are shrinking in North America. Container freight rates fell 10% in September.

Traffic Growth (page 3)

- Large falls of air freight volumes continued during the past three months, on both domestic and international markets. Looking ahead world trade in goods is forecast to shrink in 2009. Another year of significantly declining air freight volumes should be expected in 2009.

Revenue and Yields (page 5)

- Historical data for the third quarter show rising yields, but that reflects yesterday's business environment not today's. Fuel costs have fallen on spot markets though hedging is delaying the benefits, while recession and falling load factors are now putting downward pressure on yields.

Capacity (page 7)

- Load factors fell sharply as the slump in air freight volumes has been well in excess of any capacity cuts. Aircraft deliveries have fallen this year and more are being delayed until 2010-11 and increasing numbers of aircraft are being parked.

Profitability (page 9)

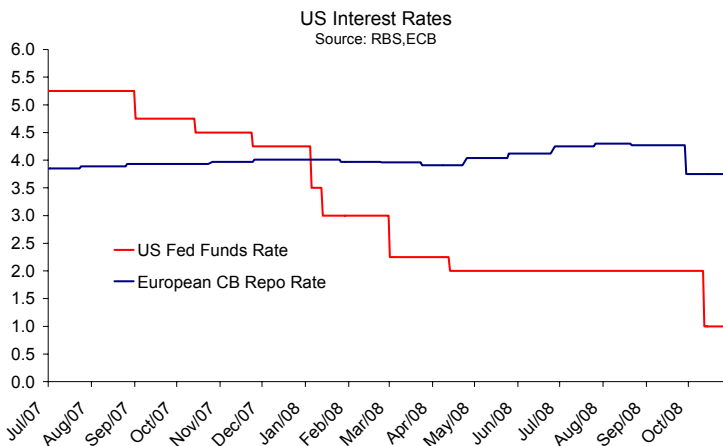
- The mid-year spike in fuel prices has caused significant losses for many airlines during Q3. The confidence of heads of cargo in future profitability fell further in September, with almost half expecting a decline.

Economic Outlook

Key Issue:

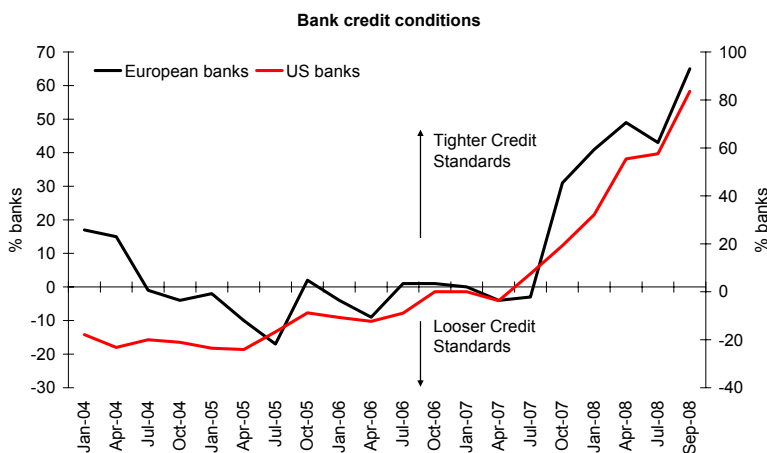
➤ Recession is now the main threat to the air cargo industry over the next 1-2 years. Europe and Japan were already in recession from the second quarter but there are now additional recessionary pressures from the near-collapse of the banking sector in September. There has been a very large response through interest rate cuts and fiscal measures to stimulate spending. This will bring about recovery, eventually, but cargo volumes may continue to fall for another year before the market turns around.

Interest rates have been cut in response to recession



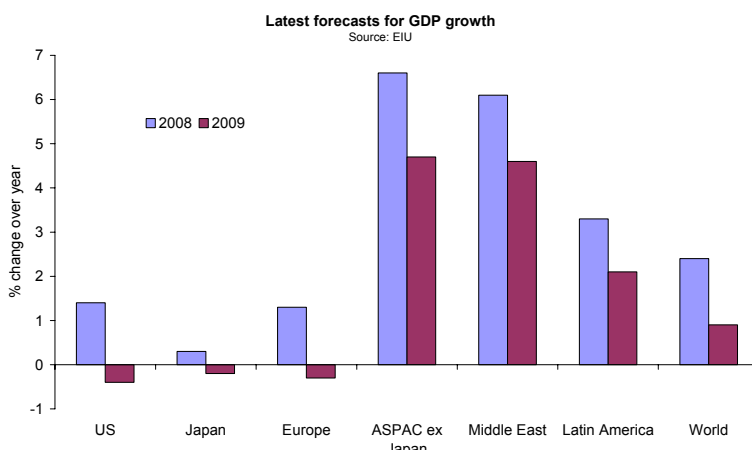
- Having actually raised interest rates during the middle of the year, the ECB has now started to cut interest rates as European economies slipped into recession.
- The US Federal Reserve Bank also cut rates further in response to the financial turmoil following the bankruptcy of Lehman Brothers.
- However, spreads and yield curves have risen limiting the benefit of cheap credit to airlines and their customers.

The credit crunch worsened through September in the US and Europe



- Cheap credit is no help if it is not available. Credit conditions tightened once more in US and European credit markets in September.
- The extraordinary government policy moves following the turmoil in the banking sector in September has led to many measures being put in place to try to end the 'credit crunch'.
- Recent asset price falls will further damage bank balance sheets and reduce their willingness to lend.

The recession is now expected to be the worst since the early-1980s



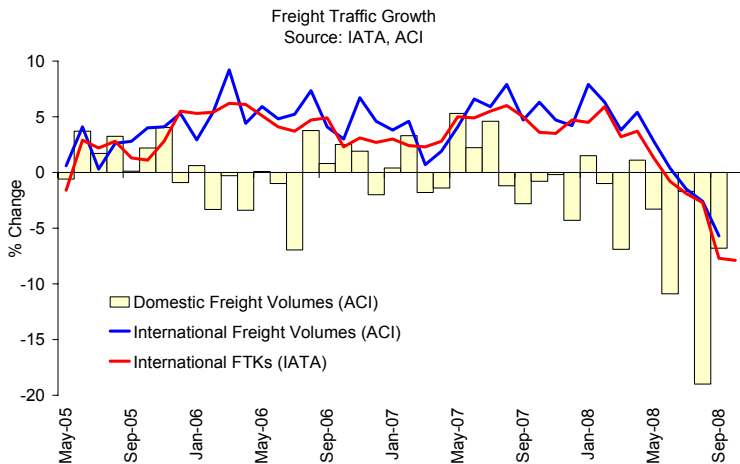
- Mainstream economic forecasts are not optimistic that bank credit will flow soon enough to avert a major recession in 2009.
- The major economies of the US, Europe and Japan are all now in 2009 expected to be in the worst recession since the early 1980s.
- Even the emerging markets are now expected to see much weaker growth during 2009.

Traffic Growth

Key Changes in the data this quarter:

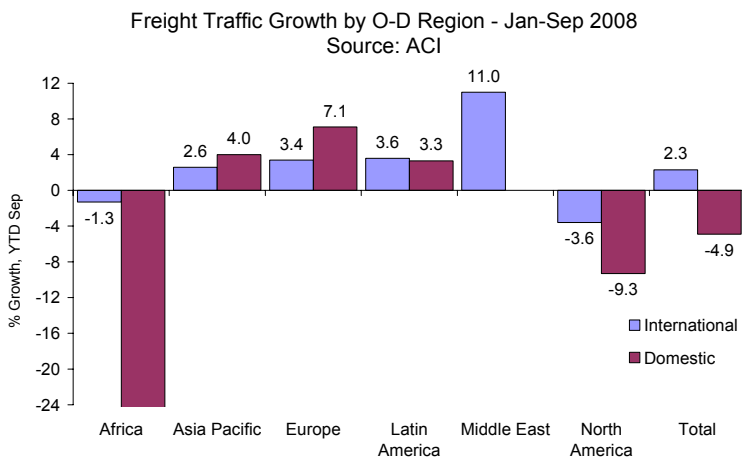
- Large falls of air freight volumes continued during the past three months, on both domestic and international markets. Only the Middle East region generated significant growth and much of that was in earlier months.
- Looking ahead world trade in goods is forecast to shrink in 2009 for the first time since the 2001 recession. Another year of significantly declining air freight volumes should be expected in 2009.

Air freight volumes now shrinking rapidly on domestic and international markets



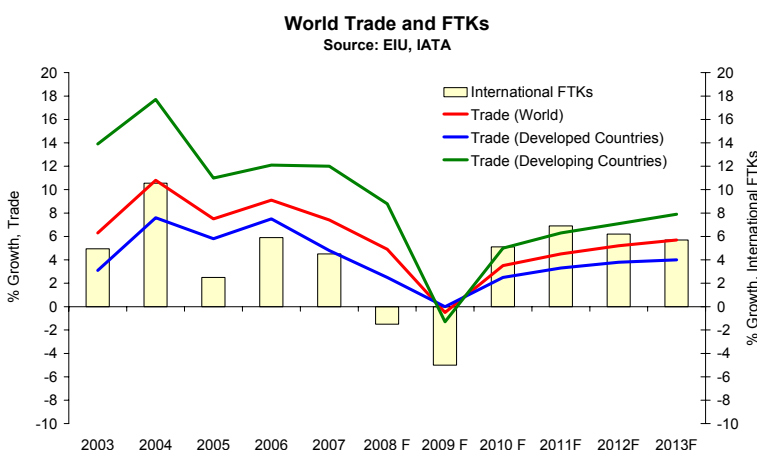
- Air freight volumes fell further and at a faster rate during the past three months, on both domestic and international markets.
- We now know that Europe and Japan were in recession during the second quarter, and the Chinese economy slowed significantly. That drove air freight volumes down sharply from May.
- October data showed a further deterioration on international markets.

Emerging markets no longer supporting growth, except in the Middle East



- The year-to-date figures shown in this chart are held up by the reasonable growth experienced during the first quarter. By the end of this year they will be much lower.
- However, the regional pattern of this origin-destination data remains valid. Only the Middle East stands out as providing growth, largely because of the stimulus from strong oil revenues.
- Reasonable growth in Europe is likely to fall as the recession reduces trade.

World trade is now forecast to shrink in 2009 leading to a sharp fall in air freight



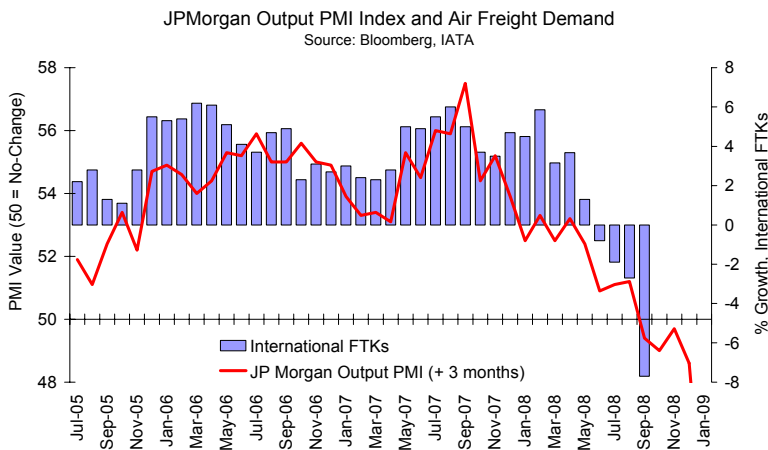
- World trade is now expected to shrink in 2009 for the first time since the 2001 recession.
- The sharp decline of trade flows is already expected to produce a decline in air freight volumes in 2008. A further and larger decline is now forecast in 2009 as a result of shrinking trade.
- Recovery in 2010 is expected to produce more buoyant trade in the developing countries, to the benefit of air freight volumes.

Demand Environment

Key Changes in the data this quarter:

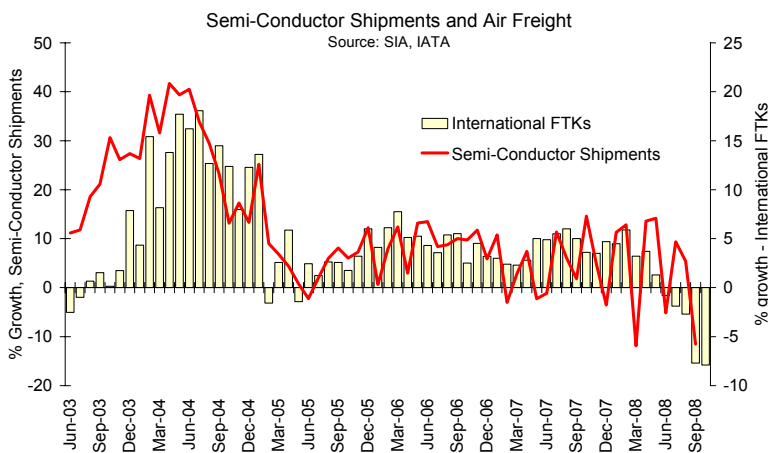
- All the forward-looking indicators for air freight volumes turned sharply negative in recent months. Business confidence amongst manufacturers hit a new low, the semiconductor industry reported new falls in shipments and a gloomy forecast for 2009. Finally a large inventory overhang has developed in the manufacturing sector, which could cut the shipment of intermediate goods as output is cut.

PMI global manufacturing indicator is pointing towards further falls in air freight



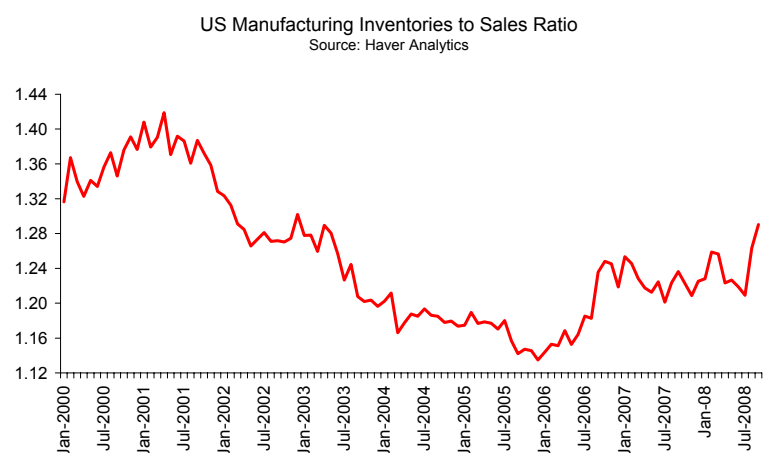
- Business confidence amongst manufacturers around the world fell significantly further in October, following the near collapse of the banking sector in September.
- The red line in the chart shows that business confidence, advanced 3 months, is a good lead indicator of air freight growth. The continued downward trend in confidence points to further declines in air freight volumes in the next few months.

Semi-conductor shipment growth has also fallen sharply in recent months



- With the semi-conductor industry being such an important shipper of air freight, there is a clear, if volatile, correlation between semi-conductor shipments and air freight volume growth.
- During the last couple of months shipments of semi-conductors have fallen sharply.
- Looking ahead the Semi-conductors Industry Association are forecasting a 5% decline of shipments in 2009. A similar decline in air freight may result.

The rise in inventories relative to sales points to lower output and shipments ahead



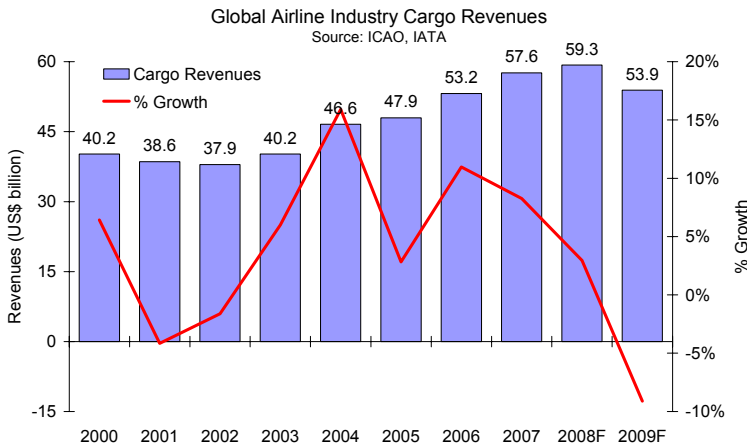
- The very sharp rise in inventories relative to the level of sales during August and September reflects the onset of recession.
- The reaction to such a large overhang in inventories, the largest since 2003, will be for production to be cut. Shipments of components and other intermediate products are likely to be reduced as a result.

Revenues and Yields

Key Changes in the data this quarter:

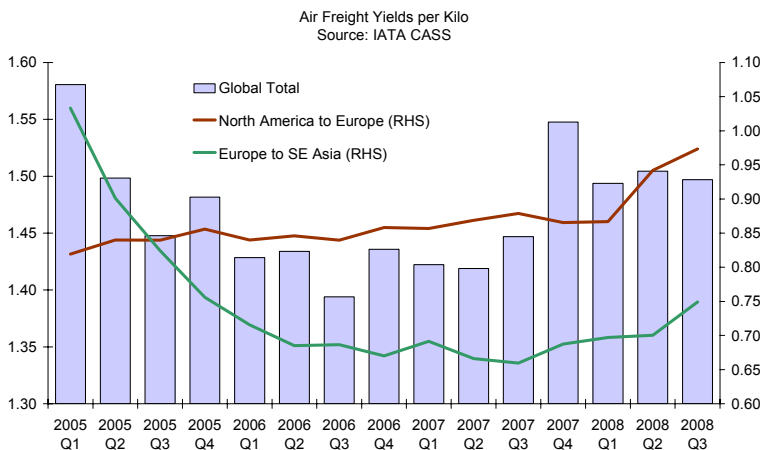
- Historical data for the third quarter show rising yields, but that reflects yesterday's business environment not today's. Fuel costs have fallen on spot markets but hedging is delaying the benefits, and the impact on yields, while recession and falling load factors are now putting downward pressure on yields and revenues.

Cargo revenues slowed this year and are forecast to fall sharply in 2009



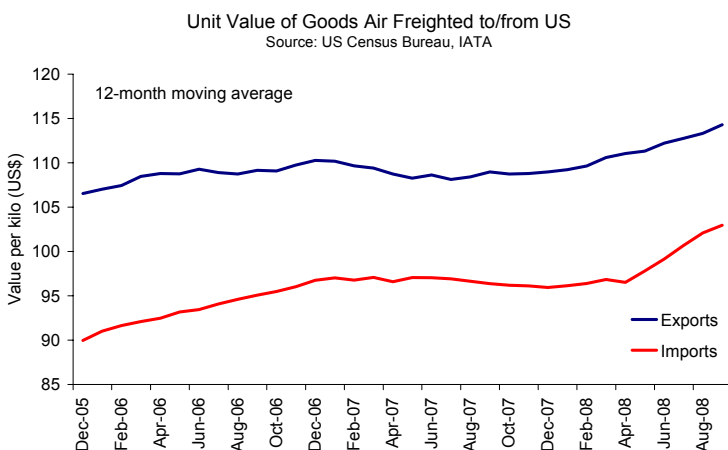
- Cargo revenues are forecast to rise a little further to peak in 2008, as fuel surcharges offset the expected decline in volumes.
- However, prospective revenue growth in 2009 looks worse than the downturn in 2001. Next year recession is expected to lead to a sharp downturn in volumes, added to which yields are likely to decline in an environment of falling fuel costs and declining load factors.

Rise in yields since late-2007 reflects fuel costs which have now fallen sharply



- The rise in air freight yields seen since late-2007 reflect the rise of fuel costs over that period, which peaked at all time highs during the third quarter.
- The world has changed dramatically since then with a sharp fall in the spot price of fuel. However, hedging may keep actual price paid high for another quarter or two.
- Recession will have a more immediate impact with the fall in load factors already seen putting downward pressure on yields.

Rising value of goods shipped by air freight



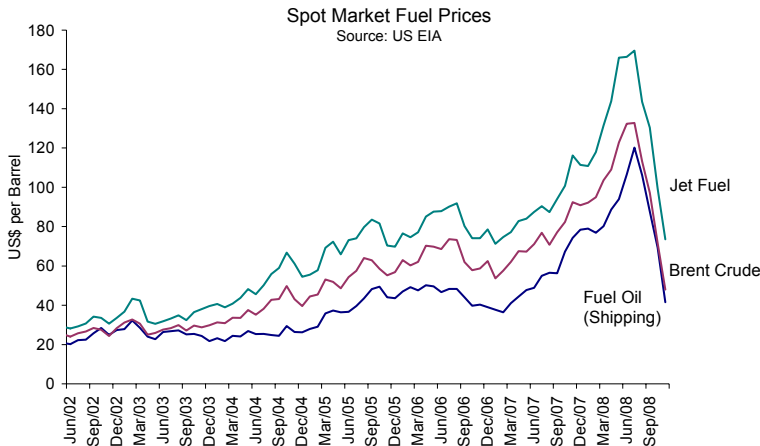
- This chart shows that the goods shipped by air freight are high value for their weight. Exported goods from the US by air freight had an average value of \$114 per kilo and imports \$103 per kilo.
- By comparison jet fuel has a current value of \$0.6 a kilo, which is why 35% of world trade by value is shipped by air, but only 0.5% by weight.

Costs

Key Changes in the data this quarter:

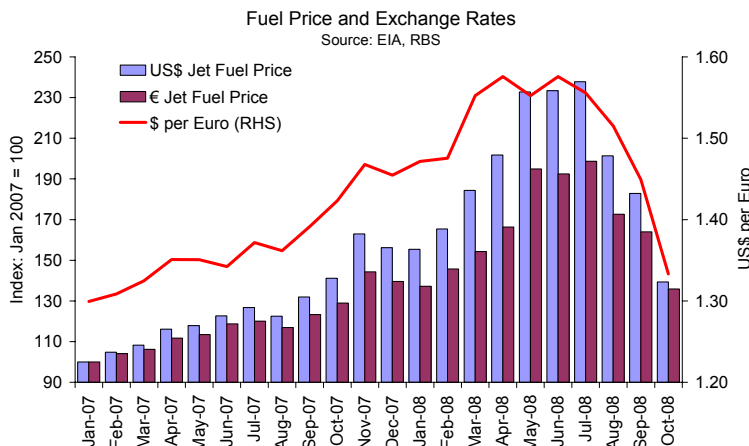
- ↗ The cost crisis of the middle of the year has abated, almost. Spot prices for jet fuel have fallen back but the benefit of lower costs is being offset to some extent by the stronger US dollar and the impact of hedging..

Oil and jet fuel prices now back to 2005-2006 levels



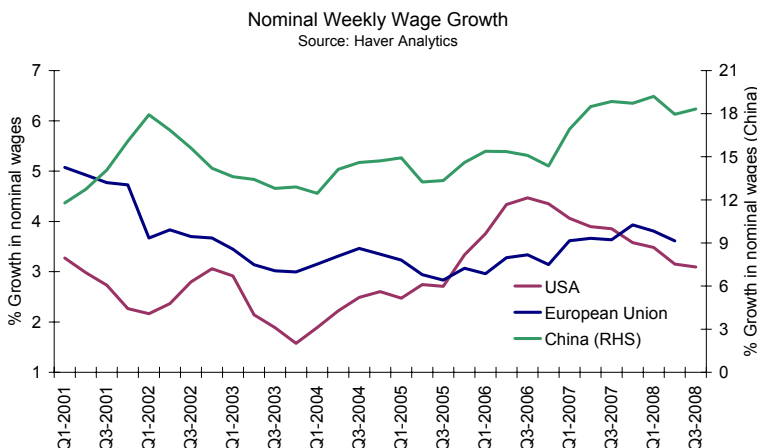
- ↗ What a difference a quarter makes! Having hit record highs in July fuel prices are now back down to levels prevailing in 2005 and 2006.
- ↗ By late November oil prices had slipped below \$50 a barrel. Jet fuel prices did not fall quite so far, raising their normal spread over crude from 25% to 45% and reducing the scope for lower airline fuel costs.
- ↗ On top of the widening 'crack spread' hedging is also delaying cost benefits.

But the appreciation of the dollar has offset some of the benefits for other currencies



- ↗ The falling US dollar provided some limited offset to rising jet fuel prices for Euro-based airlines until the peak in fuel prices in July. Since then the US dollar has appreciated sharply limiting the benefit of lower fuel costs to non US dollar-based airlines.
- ↗ US airlines have seen spot fuel prices fall 57% from average July levels, whereas European airlines have seen only a 48% decline in euro jet fuel prices

Labour markets are getting looser but unit costs suffer from lower productivity



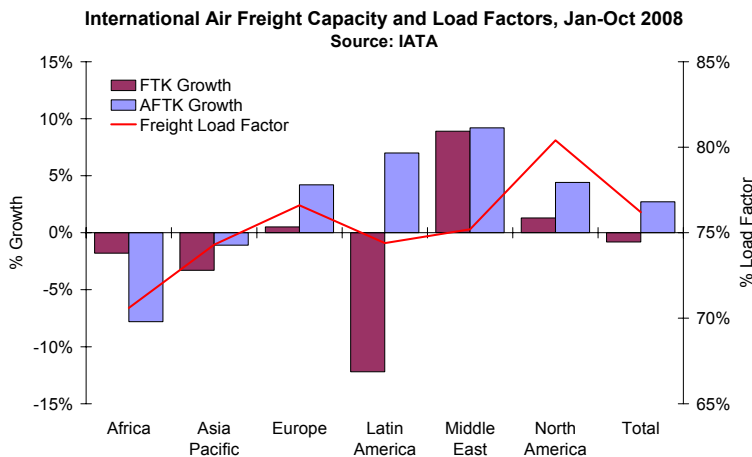
- ↗ Earlier upward pressure on pay from tight labour markets around the world and specific shortages such as for pilots, have now eased. Recession will cut wage pressure further over the coming year.
- ↗ However, the main challenge to keeping labour costs under control during a downturn is the cyclical effect of recession on labour productivity. Substantial job losses have been announced by many airlines, especially in the US, but in most cases these cuts will lag behind forecast falls in demand.

Capacity

Key Changes in the data this quarter:

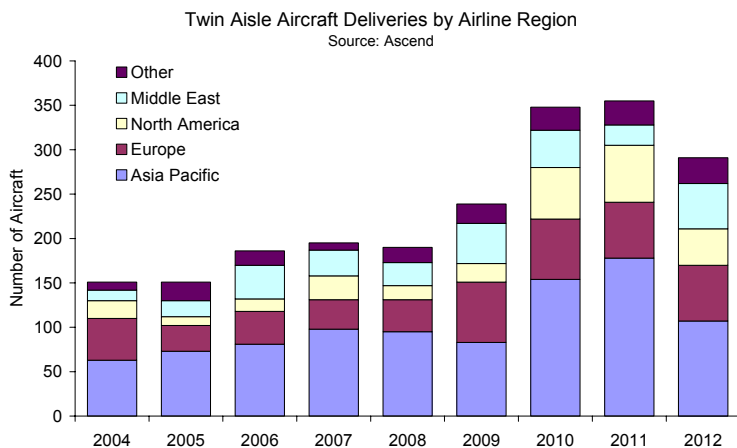
- Load factors fell sharply as the slump in air freight volumes in the past few months has been well in excess of any capacity cuts. Aircraft deliveries have fallen this year and more are being delayed until 2010-11. In the past couple of months capacity has been cut as increasing numbers of aircraft are parked.

Freight capacity has fallen behind the slump in freight volumes, reducing load factors



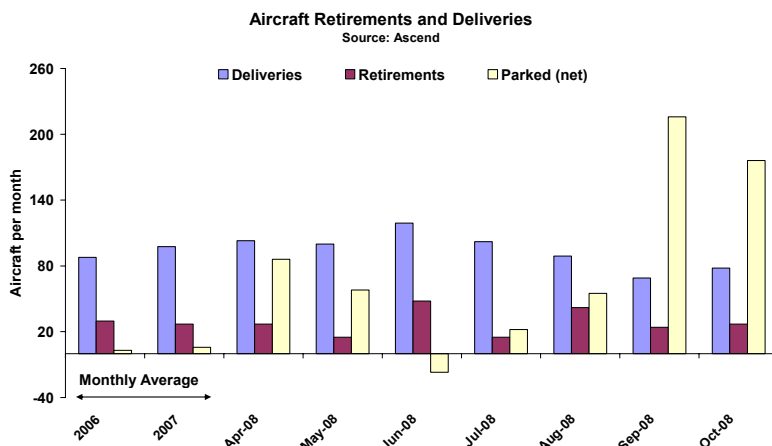
- During the first quarter air freight capacity was kept in line with growth of freight volumes. However, since Q2 and in particular since the middle of the year, air freight volumes have fallen much faster than airline efforts to cut capacity.
- For the year as a whole through to October, air freight volumes are down 0.8% but capacity is up 2.7%. Load factors have dropped sharply as a result.

New widebody aircraft deliveries are now being delayed or cancelled



- In the past three months 34 or 15% of the wide-bodied aircraft that were scheduled for delivery this year have been cancelled or postponed. Deliveries this year are now expected to be lower than in 2007, whereas a 14% rise had been expected 3 months ago.
- Deliveries for 2009 are down by 24 aircraft but an increase in new capacity is still expected. Many of these aircraft have been pushed back for delivery in 2010 and 2011.

Deliveries are now declining while aircraft are being parked at around 200 a month



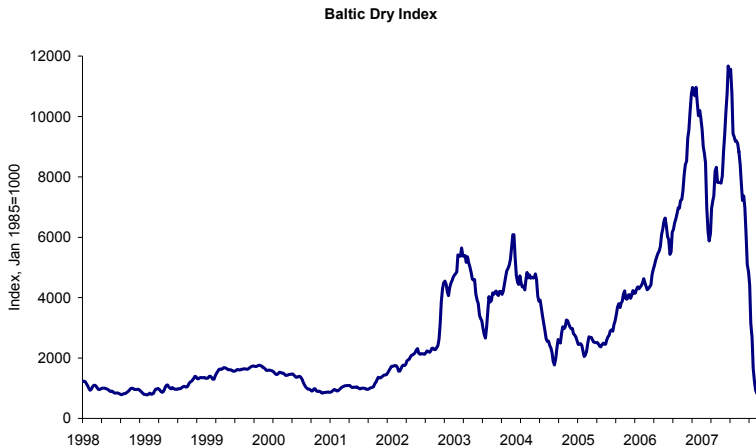
- Monthly data shows that deliveries of new aircraft started slowing from July as expectations of recession and financing difficulties grew.
- The dramatic change has been in the number of aircraft being parked in September and October, which soared to an average of around 200 a month (turboprop, narrow and wide-bodies).
- For the fleet this will both reduce capacity and boost fuel efficiency.

Competition

Key Changes in the data this quarter:

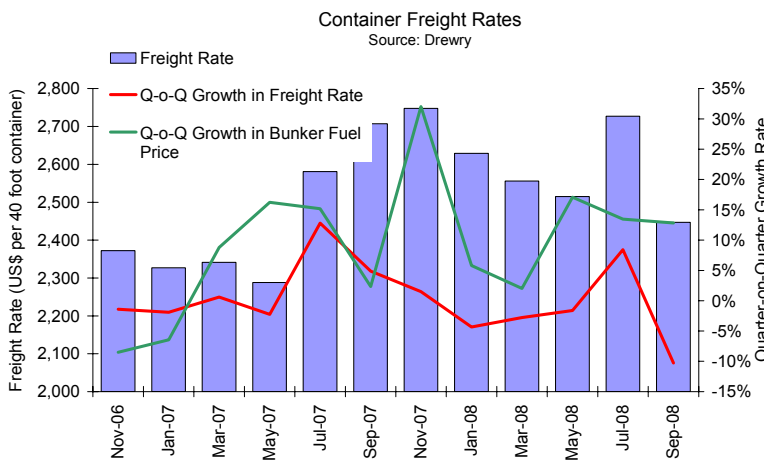
- Weakness in the bulk commodities markets, reflecting the depth of recession, is shown by the incredible 92% decline in the Baltic Dry Index. Containerised markets are shrinking in North America and have slowed sharply in Europe and the Far East. Container freight rates fell 10% in September.

The cost of shipping bulk commodities has slumped with the recession



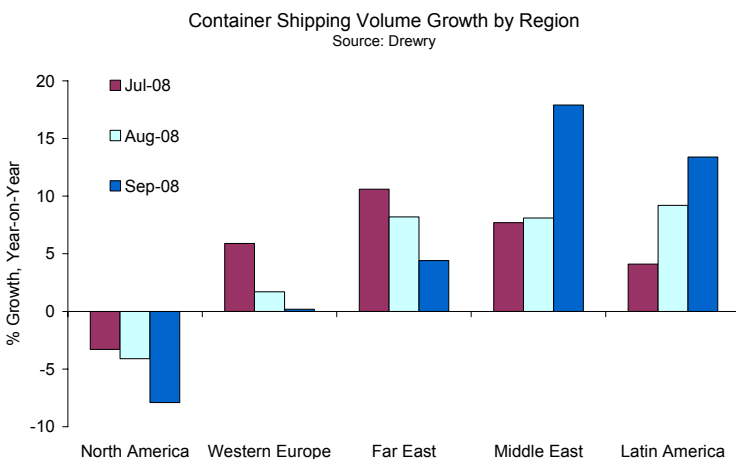
- Airlines do not compete with ocean shipping for bulk commodities, such as oil, iron ore and agricultural goods. However, the collapse in the Baltic Dry Index, which is down an incredible 92% from its peak earlier this year, indicates the severity of the recession.
- Construction and energy-intensive manufacturing are the first sectors to slump in a recession. This has cut the demand for key bulk commodity inputs leading to the Baltic Dry Index decline.

Container freight rates have fallen significantly at the end of Q3



- The sharp 10% fall in container freight rates in September, despite the further rise in bunker fuel costs, exaggerates the comparison against Q3 air freight rates which rose. The more appropriate comparison is the average of July and September, which also rose for ocean freight, reflecting the mid-year spike in fuel costs.
- The steep fall in ocean freight yields in September is likely to be reflected in air freight in the coming months.

Commodity-rich regions still expanding freight but slowdown or decline elsewhere



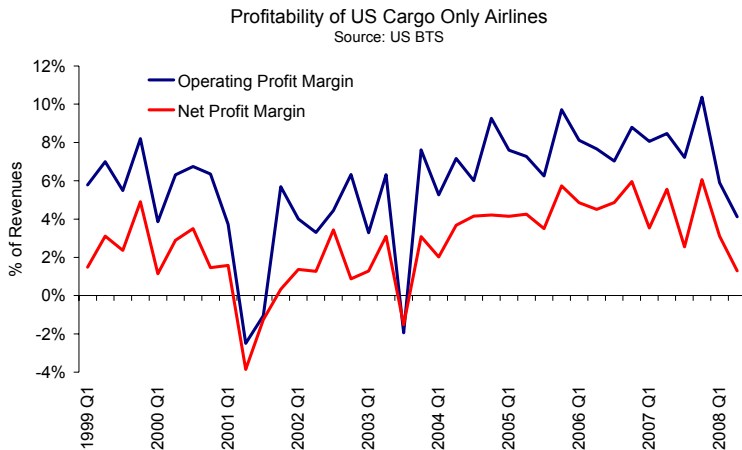
- Container shipping volumes are down sharply on North American markets but overall do not mirror the collapse in bulk shipping as indicated by the Baltic Dry Index.
- Expanding container shipments in the Middle East and Latin America likely reflects the momentum of previous strong economic growth in these regions. However, in both Europe and the Far East growth has slowed sharply reflecting deepening economic problems.

Profitability

Key Changes in the data this quarter:

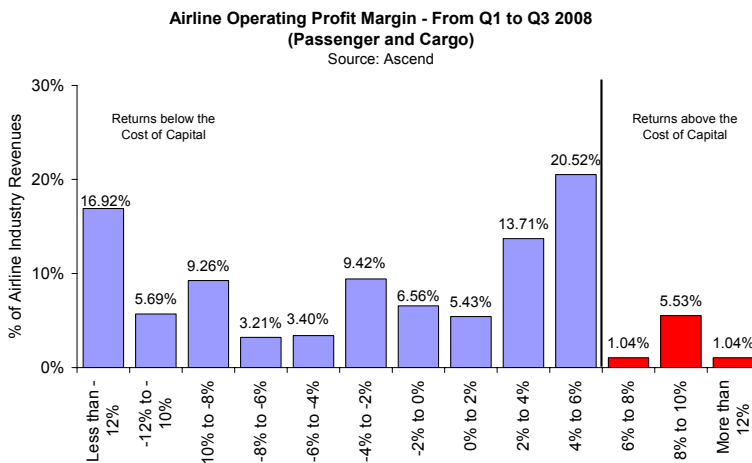
- The mid-year spike in fuel prices has caused significant losses for many airlines during Q3. Already profitability had been falling sharply in Q2, as measured by US cargo-only airlines. The confidence of heads of cargo in future profitability fell further in September, with almost half expecting a decline.

Cargo profitability had fallen sharply by Q2 and losses are now likely



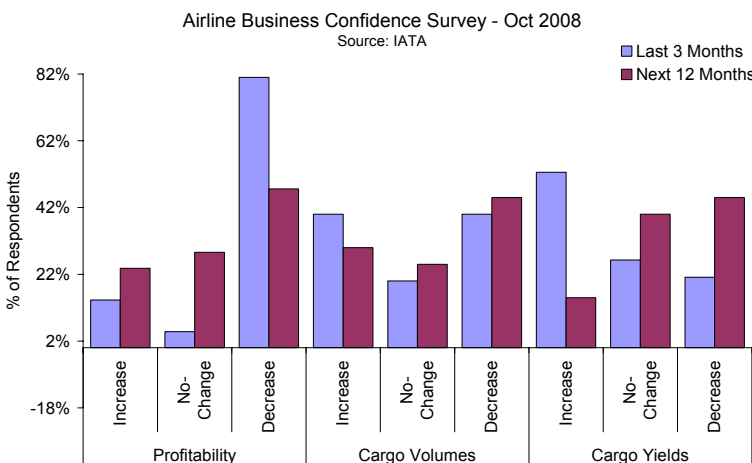
- Cargo profitability, as indicated by US cargo-only airlines, fell away sharply in Q1 and Q2 but still remained positive.
- This is in stark contrast to Q1-Q3 results for the airline industry as a whole which has seen losses of \$3.6 billion in the US, losses of \$0.6 billion in Asia and losses in Europe.
- Given the falls in cargo volumes seen with combination carriers it is likely that the cargo business is currently in loss.

At the operating level the majority of airlines were in loss during 2008Q1-Q3



- There is a wider than normal distribution of airline financial performance so far this year. The median airline is still making 4-6% EBIT margins, though this is insufficient to cover the cost of capital.
- However, there is a second peak of airlines making substantial losses of over 12%. Moreover, the performance distribution is skewed towards losses.
- Q4 is normally a loss-making quarter in many regions; further losses are likely.

Business confidence among heads of cargo slumped further at the end of September



- The confidence of heads of cargo in profitability over the next twelve months fell further in IATA's late-September survey, with almost half respondents expecting a decline and less than a quarter an improvement.
- More now expect falls in cargo volumes next year but the biggest change was for yields. A net balance of 30% reported rising cargo yields during the previous 3 months but for the coming year a net balance of 30% expect yields to fall.

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					
	Apr 2008	May 2008	Jun 2008	Jul 2008	Aug 2008	Sep 2008
Africa - Middle East	17.1%	6.4%	9.4%	17.5%	15.0%	16.2%
Europe - Far East	3.2%	5.1%	1.6%	-1.9%	-4.6%	-9.9%
Europe - Middle East	16.4%	14.3%	21.2%	4.5%	6.9%	-2.6%
Within Far East	10.2%	11.0%	7.7%	1.2%	-3.3%	-8.5%
Within Middle East	25.2%	19.2%	27.3%	30.7%	30.8%	13.0%
Within South America	12.2%	25.1%	15.4%	1.7%	-10.7%	-4.7%
Mid Atlantic	1.2%	16.8%	3.9%	-4.5%	-3.1%	-14.6%
Middle East - Far East	13.3%	12.9%	14.9%	3.3%	3.5%	3.5%
North Atlantic	10.2%	5.2%	2.8%	-2.5%	-1.2%	-7.5%
N America-C America	-10.3%	-9.7%	0.7%	-1.5%	-14.8%	-25.4%
Europe - Africa	4.7%	2.6%	2.0%	-5.8%	-7.7%	-10.8%
N America – S America	-3.3%	11.9%	8.6%	0.1%	-10.8%	-9.1%
Far East - SW Pacific	4.5%	0.3%	2.1%	-1.6%	-5.7%	-5.9%
North and Mid Pacific	9.5%	6.6%	1.4%	-3.0%	-6.3%	-14.0%
South Atlantic	22.7%	11.7%	17.0%	-5.3%	-0.5%	-6.3%
Within Europe	11.9%	3.4%	9.3%	-2.9%	-2.4%	-7.5%

Outbound CASS Market Revenues

Origin Region	US\$m Q3 2008	% Growth in Air Freight Revenues, year-on-year					
		Q2 2007	Q3 2007	Q4 2007	Q1 2008	Q2 2008	Q3 2008
Africa	38.6	22.6	32.7	25.3	10.4	9.4	5.9
Caribbean	4.8	-7.7	3.4	8.4	20.7	8.9	7.3
Central America	47.4	3.5	2.8	6.4	12.0	9.1	9.2
Europe	1417.3	10.3	11.7	12.4	8.2	9.2	-1.1
Japan & Korea	698.5	-16.0	-3.9	6.3	6.3	-4.1	-23.5
Middle East	52.4	114.6	137.8	77.9	65.9	15.2	26.7
North America	719.1	13.4	15.3	15.0	13.8	13.8	7.3
South America	184.4	4.6	0.3	7.6	9.5	12.8	11.0
South East Asia	994.8	131.0	153.3	151.9	30.6	27.2	27.2
South West Pacific	137.5	20.5	16.7	15.8	10.7	10.8	-0.3

Inbound CASS Market Revenues

Destination Region	US\$m Q3 2008	% Growth in Air Freight Revenues, year-on-year					
		Q2 2007	Q3 2007	Q4 2007	Q1 2008	Q2 2008	Q3 2008
Africa	299.0	17.5	21.7	22.6	16.2	17.2	10.8
Caribbean	32.5	3.6	6.4	12.2	10.6	11.2	6.3
Central America	96.5	11.4	25.3	17.5	9.9	14.7	-6.2
Europe	96.5	11.4	25.3	17.5	9.9	14.7	-6.2
Japan & Korea	244.2	6.8	9.2	15.4	0.7	-2.0	-13.2
Middle East	300.7	21.0	22.1	18.6	19.8	17.8	18.7
North America	833.2	7.7	15.1	21.8	4.1	2.2	-7.9
South America	376.6	23.1	30.5	33.3	30.8	28.7	24.7
South Asia	132.8	13.8	21.7	30.8	17.8	30.2	18.4
South East Asia	534.6	4.8	9.6	16.7	8.6	6.8	-5.5
South West Pacific	251.3	17.4	19.8	30.3	29.2	26.2	4.9