

CARGO E-CHARTBOOK

Q1 2009

KEY POINTS

- The air cargo industry now faces an unprecedented fall in demand and revenues. Forecasts made in December predicting a 5% fall in volumes and 9% revenue decline during 2009 now look highly optimistic given January FTK levels of minus 23.2%. Economic forecasts are now predicting the deepest recession since the 1930s. Capacity is being cut and fuel prices have fallen but efforts to shrink the industry's cost base are struggling to keep pace with the contraction in revenues. Recovery is not yet in sight.

HEADLINES BY SECTION

Economic Outlook (page 2)

- With bank losses estimated at \$3.6 trillion the new US bailout of \$2 trillion has yet to start bank credit flowing again. Moreover, the 5% of GDP US fiscal stimulus is only half the size required to offset the fall in private spending. Deep recession is forecast in the major economies. World GDP is expected to fall -1.9% in 2009.

Demand Environment (page 4)

- An astonishing 20% rise in inventory overhang led to output and air freight being slashed, as shown in the semi-conductor industry. Forward-looking indicators suggest may have reached bottom but recovery from that weak level requires elimination of the inventory overhang, which will take time.

Costs (page 6)

- Costs are now starting to fall significantly but unevenly across the industry. Dollar appreciation and some hedging contracts are limiting the large fall in fuel costs. Aircraft and labour costs are falling but Infrastructure providers are, counter-cyclically, raising their charges.

Competition (page 8)

- The collapse of bulk commodity shipping seems to have reached a floor, but no recovery is in sight as yet. Containerised shipping rates are now down 24% on the year, significantly more than air freight rates. Containerised volumes are also falling, but not as fast as air freight.

Traffic Growth (page 3)

- Air freight volumes collapsed at the end of last year to a level in January just three-quarters of their size a year ago. Weakness is widespread, even across emerging markets. The key question for the outlook is the extent to which this is cyclical or a structural change, due to what some are calling 'de-globalisation'.

Revenue and Yields (page 5)

- Cargo yields fell sharply during the fourth quarter of last year to a level 7% below a year earlier. Coupled with the slump in volumes this means a very significant fall in revenues. December forecasts for a 9% fall in 2009 cargo revenues now look optimistic.

Capacity (page 7)

- Airlines are cutting freight capacity in all regions, with the exception of the Middle East. However, demand is collapsing faster than airlines can shrink and so load factors have taken a big hit.

Profitability (page 9)

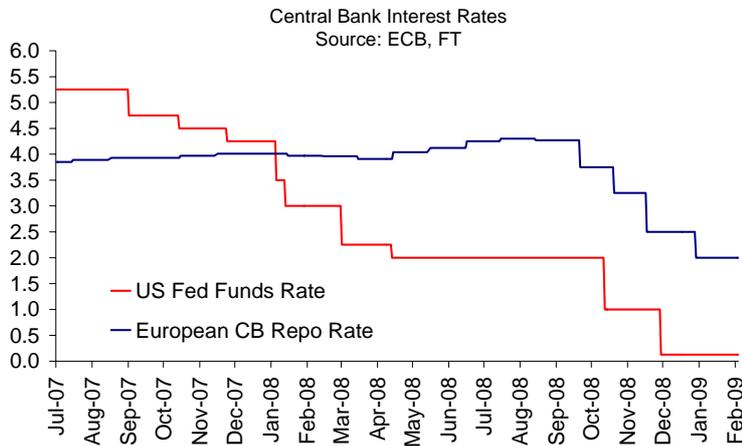
- Cargo profitability, at least in the US, held up surprisingly well during 2008 but with revenues collapsing the outlook is very poor. Heads of cargo expect substantial falls ahead for both freight tonnes and yields.

Economic Outlook

Key Issue:

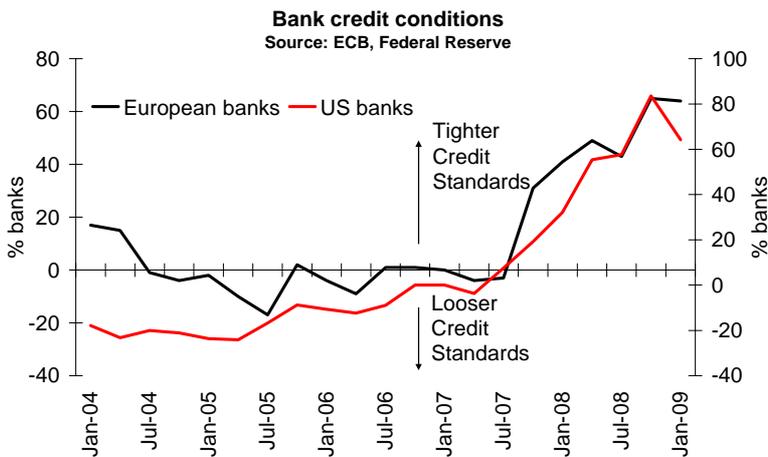
- With bank losses estimated at \$3.6 trillion the new US bailout of \$2 trillion has yet to start bank credit flowing again. Moreover, the 5% of GDP US fiscal stimulus is only half the size required to offset the fall in private spending. Deep recession is forecast in the major economies. World GDP is expected to fall -1.9% in 2009.

Official interest rates cut to emergency levels in response to widespread recession



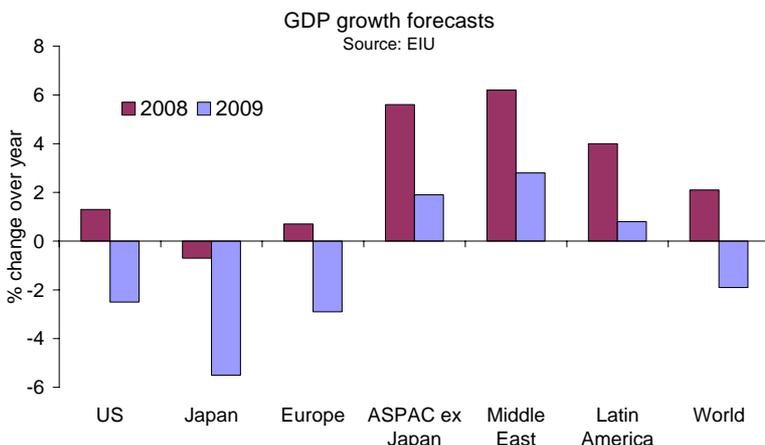
- Official central bank interest rates have been cut almost to zero in the US, the UK and Japan. In other major economies the rates at which central banks lend to the commercial banks have also been cut substantially, in response to widespread recession.
- Unfortunately, this is proving ineffective in stimulating bank credit growth because the commercial banks are unable or unwilling to lend. As a result central banks are exploring ways of lending directly to the private sector.

Banks still unwilling to lend despite huge rescue packages



- Governments around the world have responded to the financial crisis by injecting very large quantities of finance into the banking system. The new US package provide \$2 trillion, while Germany recently added €0.5 trillion of support to its banks.
- However, estimates suggest the banks have lost \$3.6 trillion, with US banks accounting for \$1.8 trillion. As the chart shows, these rescue packages have stopped the deterioration in credit but not reversed it yet.

The deepest recession since the 1930s is now forecast for this year



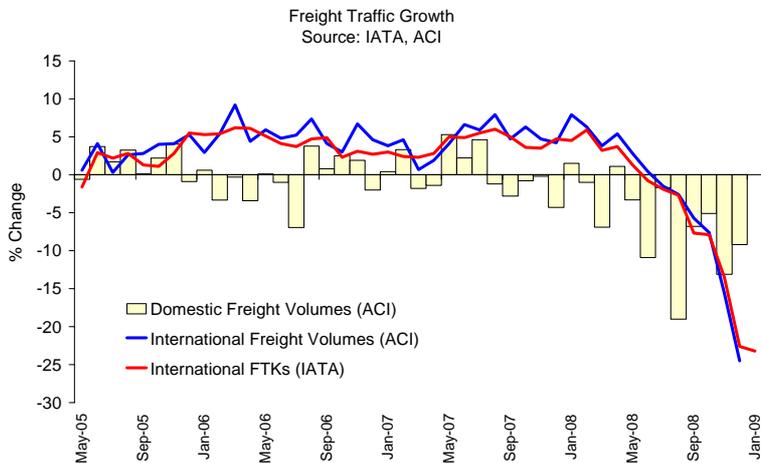
- Bank bailout packages have proved insufficient to start bank credit flowing again. In addition fiscal stimulus has not been large enough.
- The \$787 billion US package injects a stimulus worth 5% of US GDP for the next 2 years, but analysts suggest 10% is needed to offset the decline in private spending.
- As a result, economic forecasts have worsened substantially. In December world GDP in 2009 was forecast to slow to 0.9% growth. Now a fall of 1.9% is forecast, last seen in the 30s.

Traffic Growth

Key Changes in the data this quarter:

↗ Air freight volumes collapsed at the end of last year to a level in January just three-quarters of their size a year ago. Weakness is widespread, even across emerging markets. The key question for the outlook is the extent to which this is cyclical or a structural change, due to what some are calling ‘de-globalisation’.

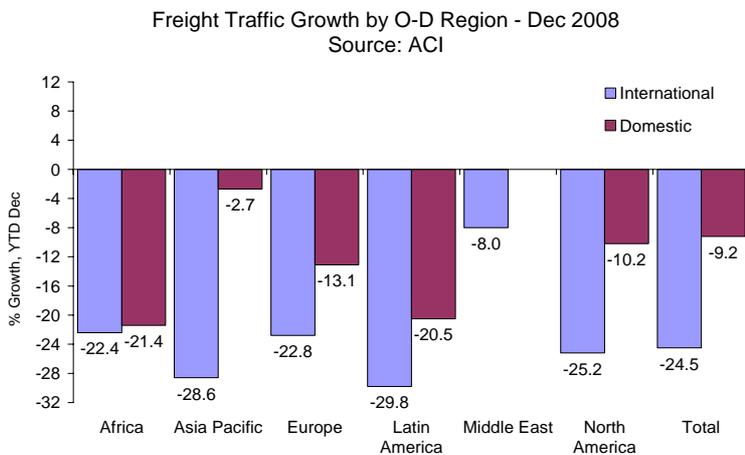
Air freight volumes collapse as recession and ‘deglobalisation’ hits



↗ International air freight volumes – measured by freight tonne kilometres – are now just three-quarters of their size a year ago.

↗ The fall in the third quarter of last year, following the deepening of financial crisis, was steep. However, the air freight market appeared to go into freefall at the end of last year as manufacturers abruptly started to de-stock. Trade flows are plummeting as what is described as ‘deglobalisation’ spreads. Japan’s exports were down over 45% in January.

Emerging markets no longer provide any support to air freight growth

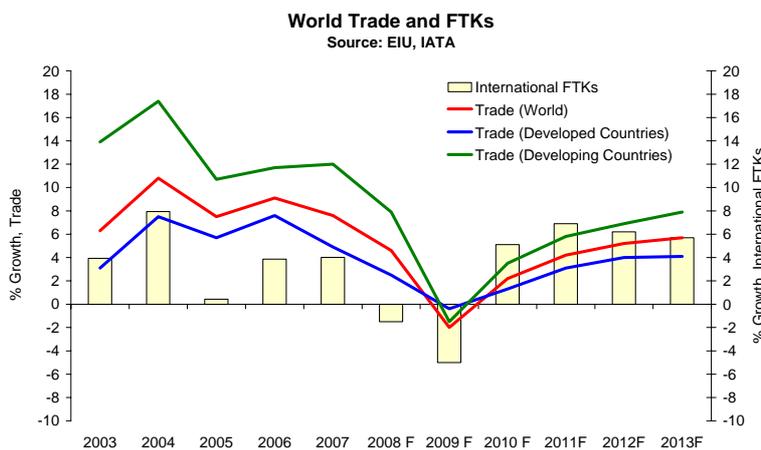


↗ There are no longer any significant growth markets for air freight.

↗ The startling development late last year was the complete disappearance of emerging market air freight growth, which had previously been providing some offsetting expansion to the recession-hit Western economies.

↗ By December air freight volumes on international markets were falling in excess of 20%, with the exception of the Middle East.

International trade shrinks as ‘de-globalisation’ gathers pace



↗ Globalisation of economies, offshoring of production and the establishment of global supply chains led to the boom in world trade and air freight in past decades. In addition air freight has been highly sensitive to the economic cycle, providing timely but not the cheapest transportation mode.

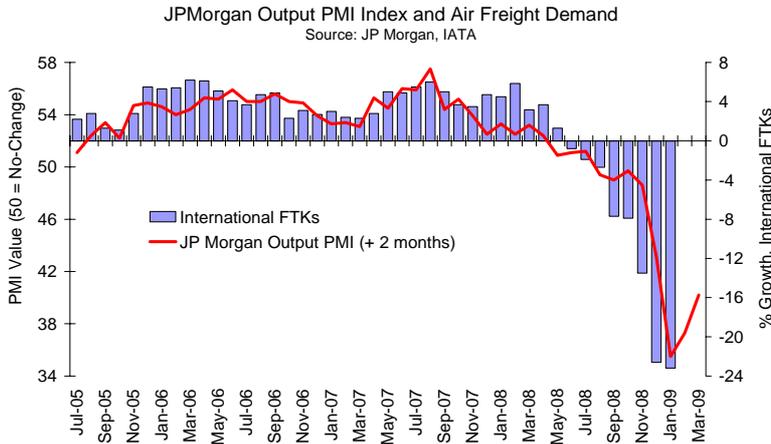
↗ The key question for the outlook is whether the recent slump in air freight is cyclical, to be reversed in time, or structural as a result of what some are calling ‘de-globalisation’.

Demand Environment

Key Changes in the data this quarter:

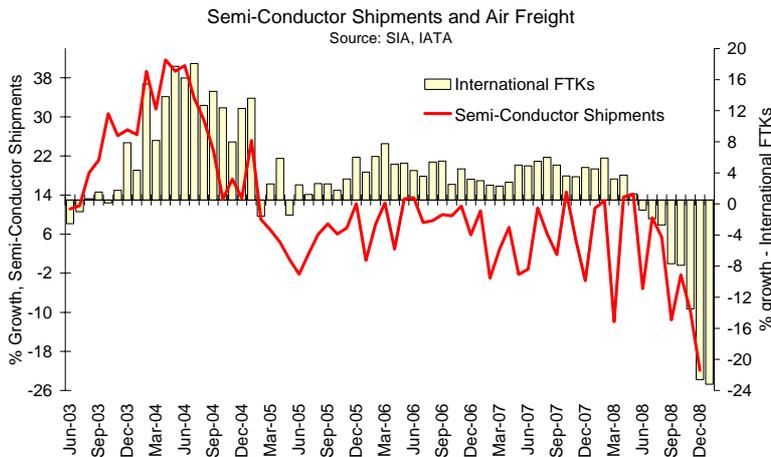
- An astonishing 20% rise in inventory overhang unsurprisingly led to output and the use of air freight being slashed, as shown in the semi-conductor industry. Forward-looking indicators suggest we may have reached bottom but recovery from that weak level requires elimination of inventory overhang, which will take time.

PMI global manufacturing indicator suggests air freight may have reached bottom



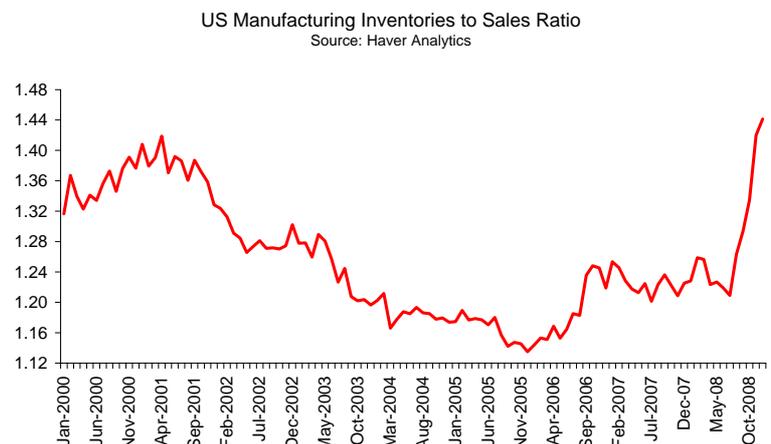
- There are some tentative signs in forward-looking indicators that the slump in air freight volumes may have reached bottom. The confidence of manufacturers in the US and Europe has turned up in the past two months, which usually points to a similar move in air freight 2-3 months later.
- Of course this means air freight shrinking by 'only' 15-20% rather than the 20-25% recently experienced. Even so this would be an improvement.

Semi-conductor shipments have also fallen by a quarter in recent months



- The performance of air freight has been clearly linked to the recent troubles of one of its key customers, the semi-conductor industry, whose shipments in December were also down by around one-quarter.
- In November the Semiconductor Industry Association predicted a 5-6% fall in sales this year. But with Japan's exports of semi-conductors down 53% in January (car parts were also down 52%) the outlook for the industry, and its use of air freight, looks much worse.

Astonishing rise in inventory overhang as recession causes collapse in sales



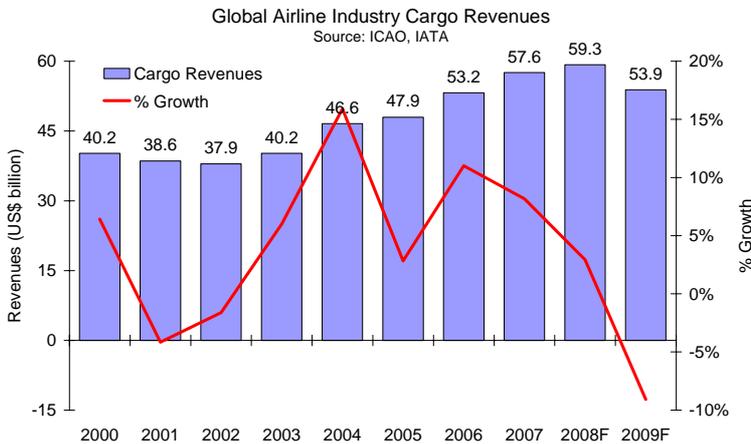
- The slump in air freight was mirrored by an astonishing 20% 2008Q4 rise in manufacturers' inventory-to-sales ratio.
- Such a rise was unexpected given just-in-time inventory management techniques and reflects the severity of the sales recession. Given this it was unsurprising that manufacturers slashed new production and their use of air freight to ship components.
- Until this inventory overhang is eliminated through sales, output and therefore air freight will remain weak.

Revenues and Yields

Key Changes in the data this quarter:

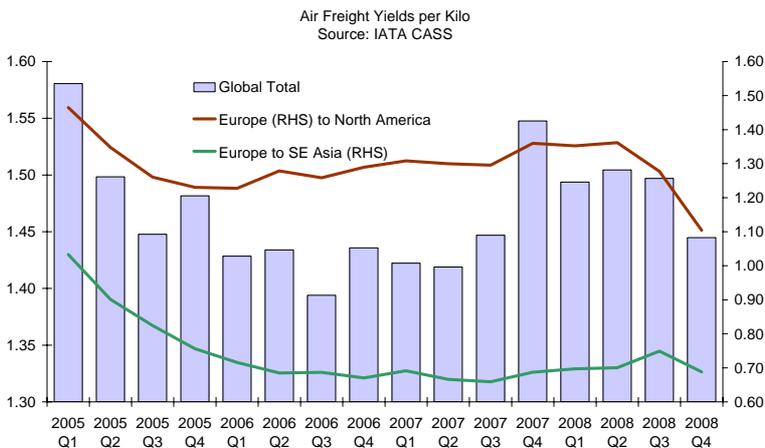
- ↗ Cargo yields fell sharply during the fourth quarter of last year to a level 7% below a year earlier. Coupled with the slump in volumes this means a significant fall in revenues. December forecasts for a 9% fall in 2009 cargo revenues now look optimistic.

Cargo revenues set to fall substantially this year



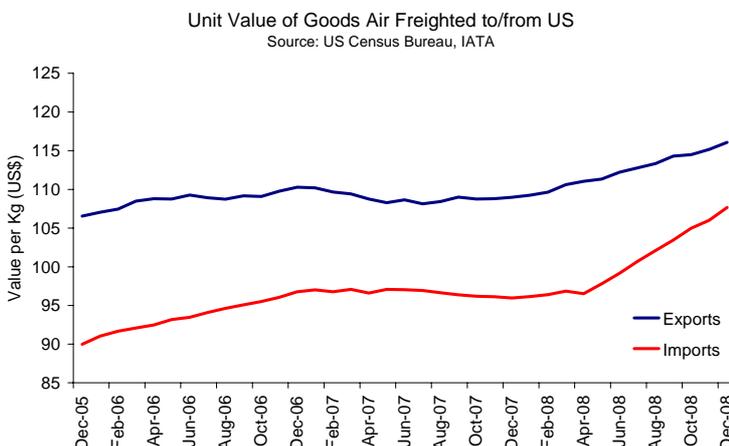
- ↗ Overall cargo revenues increased marginally during 2008, but that was a result of first half strength. The second half of last year saw a dramatic weakening in the revenue environment, particularly in the Asia-Pacific region.
- ↗ When we put our last forecast together in early December we anticipated that 2009 would see a 5% fall in cargo volumes and a similar decline in yields.
- ↗ However, this looks optimistic given the level of freight at the start of 2009.

Cargo yields now falling sharply in the face of deep recession



- ↗ By the fourth quarter of last year global cargo yields had fallen 4% from third quarter levels, and by 7% from levels a year earlier.
- ↗ This sharp fall in the cost of shipping goods by air was largely due to the impact of recession and the emergence of substantial excess capacity. It was also helped by the sharp fall in fuel prices, to the extent airlines were not locked into higher prices, through hedging contracts. Further declines are likely.

A significant shift towards higher value air freighted goods into the US during 2008



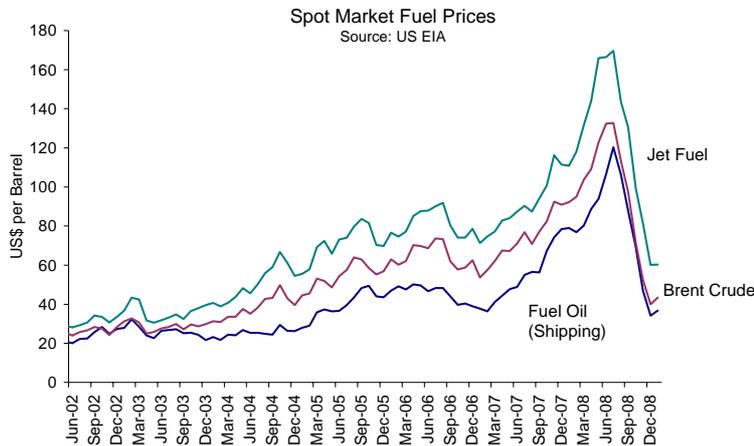
- ↗ There were some interesting shifts in the value of goods exported and imported by air to and from the US. The sharp rise in the value of the US dollar in the second half of the year reduced the dollar price of imported manufactured goods, yet their value per kg, as shown in the chart, rose more than 10%.
- ↗ This suggests a significant shift in the composition of air freighted imports towards higher value per kg commodities.

Costs

Key Changes in the data this quarter:

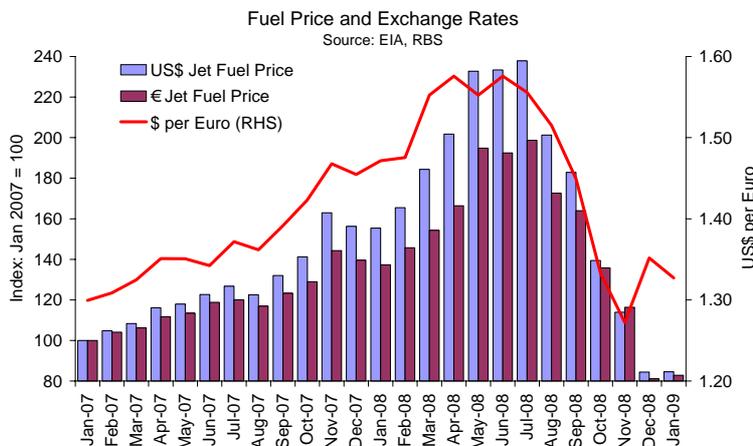
- Costs are now starting to fall significantly but unevenly across the industry. Dollar appreciation and some hedging contracts are limiting the large fall in fuel costs. Aircraft and labour costs are falling but Infrastructure providers are, counter-cyclically, raising their charges.

Oil price finds at least a temporary bottom around \$40 a barrel



- Over the past month oil and fuel prices have appeared to find, albeit perhaps temporarily, a floor. No doubt the impact of several trillion dollars worth of banking and economic stimulus packages helped.
- Crude oil prices have hovered around \$40 a barrel, while the 'crack spread' has narrowed; jet fuel prices falling to around \$51 a barrel. Residual fuel oil, used by ocean shipping competitors, is now being sold at less of a discount, reducing any competitive advantage.

But the near 10-15% dollar appreciation has offset some benefit in other currencies



- During the long upswing in fuel costs US dollar depreciation provided some shelter for airlines with largely non-dollar revenues. However, the dollar effect has swung into reverse in the past six months.
- The appreciation in the US dollar since the middle of last year has reduced the 70% fall in dollar oil prices to a 60% benefit for Euro-denominated airlines.
- In addition fuel hedges taken out earlier in 2008 have temporarily locked many airlines into higher prices.

Unit labour costs pressures are abating as unemployment loosens labour markets



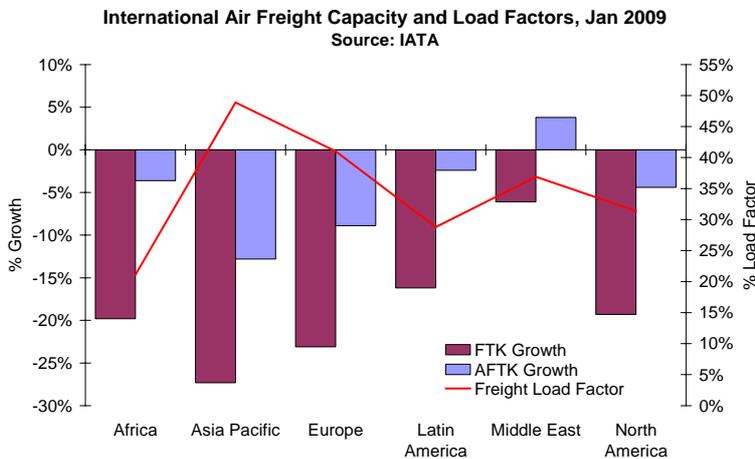
- The silver lining in the recession is that most costs will fall. Wages and labour costs had been under upward pressure during the 2007. There are now signs, particularly in the US of a slowdown in wage growth.
- Aircraft leasing costs and purchase prices are likely to fall sharply as new aircraft production exceeds demand.
- However, infrastructure costs will be a challenge as the combination of fixed costs and falling traffic is leading to higher airport and ANSP charges.

Capacity

Key Changes in the data this quarter:

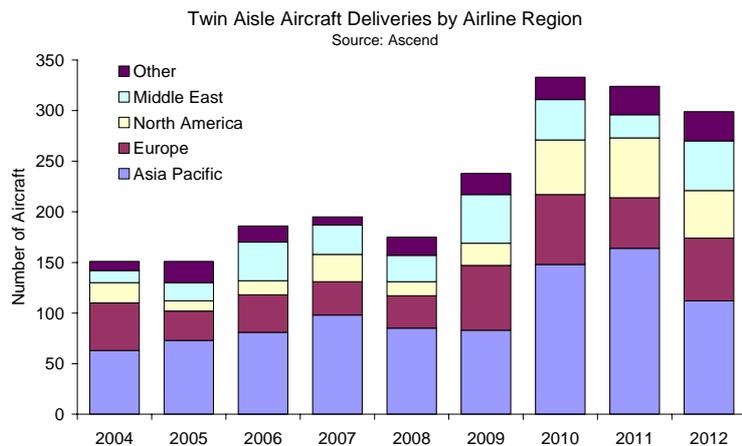
- Airlines are cutting freight capacity in all regions, with the exception of the Middle East. However, demand is collapsing faster than airlines can shrink and so load factors have taken a big hit.

Freight demand is collapsing faster than capacity is being cut



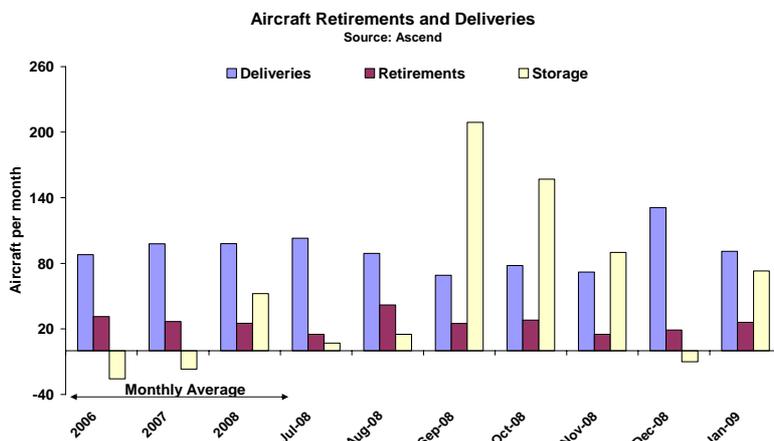
- The fall in freight yields at the end of last year is not surprising considering that freight tonne kilometres flown fell so much further than it was possible to cut capacity.
- Looking across the regions capacity cuts vary in size by the extent of the recession impact. Only in the Middle East are airlines still expanding capacity.
- The impact has been a very sharp fall in load factors and substantial damage to profitability.

Question mark now over future deliveries given recession and credit crunch



- There was a significant decline in wide-body deliveries during 2008, whereas a 14% increase had been expected as recently as the late summer. Much of this was due to the strike at Boeing, but there were also deferrals as recession struck.
- In the next two years scheduled deliveries show an 80-90% increase. The experience of the 1990s recession was that the two years following led to a 30%+ fall in new aircraft deliveries.

Fewer aircraft now being parked as fuel prices fall back



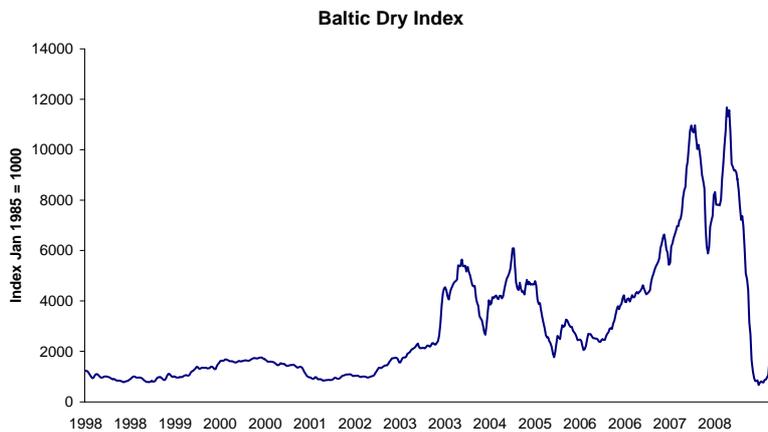
- Following the first half surge in fuel prices many airlines, particularly in the US, parked older aircraft in substantial numbers from September onwards.
- This new trend came to a virtual halt in December as the fall back of fuel prices made these aircraft once more economic. However, the issue now is a shortage of cargo and passengers and January saw more aircraft moved into storage.

Competition

Key Changes in the data this quarter:

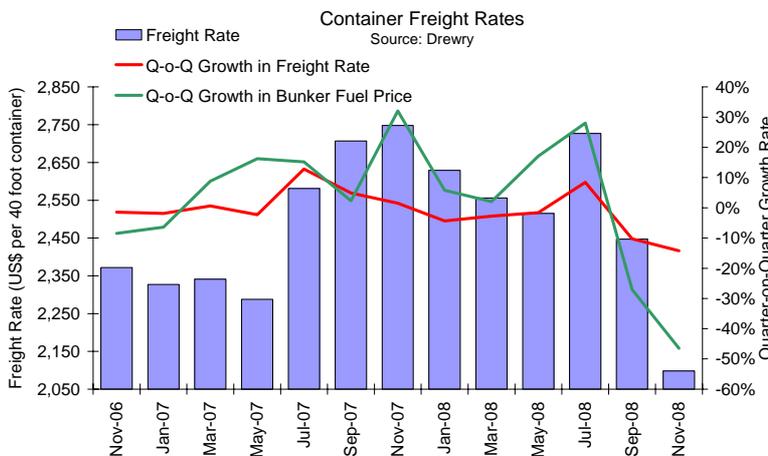
- Some stabilisation in the Baltic Dry Index suggests the collapse of bulk commodity shipping has reached a floor, but no recovery is in sight as yet. Containerised shipping rates are now down 24% on the year, significantly more than air freight rates. Containerised volumes are also falling, but not as fast as air freight.

The cost of shipping bulk commodity stabilises but at an extremely low level



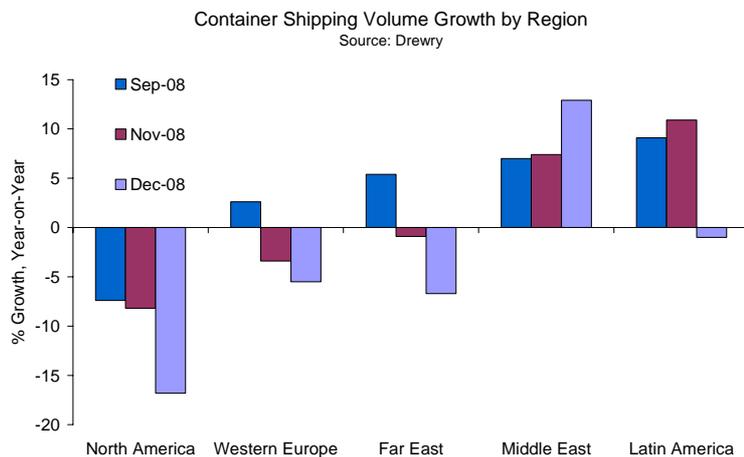
- The Baltic Dry Index has shown that the cost of transporting bulk commodities by ship appears to have reached a floor, following its incredible 92% fall late last year.
- The collapse in bulk commodity demand late last year reflects the same severe recession forces that led to the unprecedented inventory overhang in manufacturing and the slump in air freight. The stabilisation of the index suggests the recession might be close to a floor, but is no sign yet of recovery.

Container freight rates fell 24% in the 12 months to November 2008



- Bulk shipping does not compete with air freight but container shipping does, for many commodities. After higher bunker fuel prices pushed container rates up in the middle of last year, they fell sharply to the end of 2008.
- By November container shipping rates were 24% lower than a year earlier, a fall considerably in excess of air freight rates and potentially allowing some gains in market share.

Growth in container demand has slumped with the exception of the Middle East



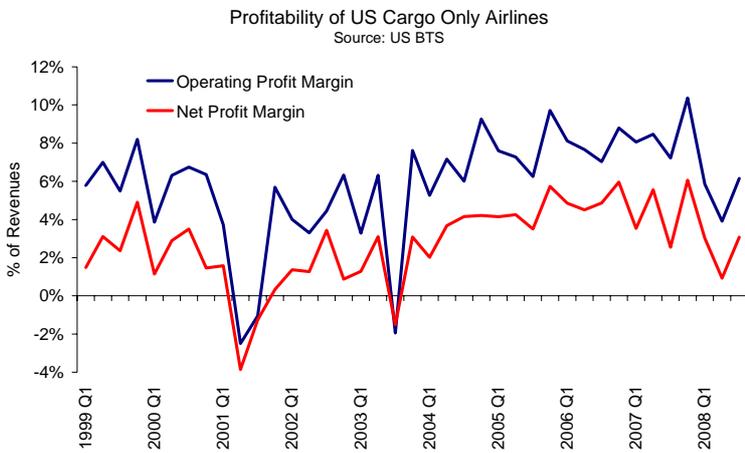
- The spreading ripples of recession from the US late last year are apparent from the decline in container shipping demand.
- Container shipping volumes to and from North America had been weak for some time, but the decline accelerated in December. Deepening recessions in Europe and the Far East were also clear from 5-10% declines in shipping.
- The region bucking this trend, as with air freight, was the Middle East which actually accelerating in December.

Profitability

Key Changes in the data this quarter:

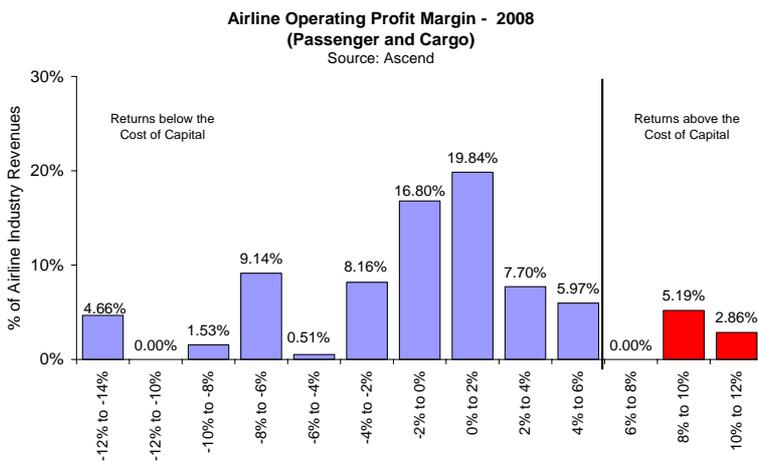
- Cargo profitability, at least in the US, held up surprisingly well during 2008 but with revenues collapsing the outlook is very poor. Heads of cargo expect substantial falls ahead for both freight tonnes and yields.

Cargo profitability falling in the US but, perhaps surprisingly, is positive



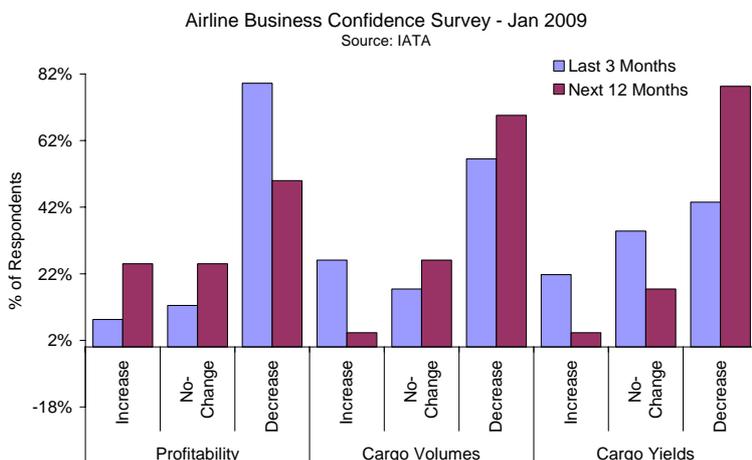
- The profitability of all-cargo airlines in the US is on a clear downward trend, but the surprise is that it remains positive, while the passenger airlines all reported large losses during the 2008 as a result of the spike in fuel prices.
- The improvement in 08Q3 profitability appears to be due to the timing of fuel surcharge changes and actual fuel costs. This is likely to be temporary and the Q4 and early 2009 falls in both volumes and yields will make sustaining profitability a challenge.

Average profit margins were barely positive last year for the average airline



- The median airline (passenger and cargo) barely made a positive operating profit in 2008. Around 20% of airlines made an operating margin of just 0-2%.
- Only 8% of airlines made enough to generate a return on capital equal to the 7-8% investors would expect in an industry with our risk profile.
- The outlook is for a further shift in the distribution to the left as revenues shrink faster than costs, at least at first.

Business confidence has slumped amongst airline heads of cargo



- IATA's latest quarterly survey of heads of cargo and airline CFOs in January shows a sharp fall in confidence.
- Profitability in the fourth quarter was clearly under extreme pressure. The outlook is not much better with a majority expecting further losses.
- Expectations for both cargo volumes and yields during the next twelve months are almost as negative as they can be.

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					
	Jul 2008	Aug 2008	Sep 2008	Oct 2008	Nov 2008	Dec 2008
Africa - Middle East	17.5%	15.0%	16.2%	-3.5%	1.3%	-3.0%
Europe - Far East (Except Polar)	-1.9%	-4.6%	-9.9%	-8.0%	-12.2%	-28.9%
Europe - Middle East	4.5%	6.9%	-2.6%	6.9%	-3.3%	-13.8%
Within Far East	1.2%	-3.3%	-8.5%	-10.6%	-20.5%	-33.4%
Within Middle East	30.7%	30.8%	13.0%	-5.9%	13.7%	2.2%
Within South America	1.7%	-10.7%	-4.7%	-7.6%	-7.1%	-20.2%
Mid Atlantic	-4.5%	-3.1%	-14.6%	-5.7%	-10.5%	-16.7%
Middle East - Far East	3.3%	3.5%	3.5%	14.9%	2.7%	-6.1%
North Atlantic	-2.5%	-1.2%	-7.5%	-6.7%	-9.4%	-20.7%
North America-Central America	-1.5%	-14.8%	-25.4%	-5.2%	-16.4%	-17.1%
Europe - Africa	-5.8%	-7.7%	-10.8%	0.2%	-5.5%	-6.3%
North America - South America	0.1%	-10.8%	-9.1%	-3.0%	-6.1%	-18.0%
Far East - Southwest Pacific	-1.6%	-5.7%	-5.9%	-4.8%	-11.0%	-13.1%
North and Mid Pacific	-3.0%	-6.3%	-14.0%	-13.0%	-24.6%	-35.5%
South Atlantic	-5.3%	-0.5%	-6.3%	-12.4%	-17.9%	-28.6%
Within Europe	-2.9%	-2.4%	-7.5%	-3.3%	-11.1%	-23.1%

Outbound CASS Market Revenues

Origin Region	US\$m Q4 2008	% Growth in Air Freight Revenues, year-on-year					
		Q3 2007	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008
Africa	42.5	32.7	25.3	10.4	9.4	5.9	2.2
Caribbean	4.2	3.4	8.4	20.7	8.9	7.3	-6.8
Central America	38.5	2.8	6.4	12.0	9.1	9.2	-19.9
Europe	1213.0	11.7	12.4	8.2	9.2	-1.1	-23.9
Japan & Korea	629.2	-3.9	6.3	6.3	-4.1	-23.5	-41.6
Middle East	57.2	137.8	77.9	65.9	15.2	26.7	23.2
North America	579.1	15.3	15.0	13.8	13.8	7.3	-15.1
South America	226.3	0.3	7.6	9.5	12.8	11.0	-6.1
South East Asia	918.2	153.3	151.9	30.6	27.2	27.2	-2.3
South West Pacific	110.3	16.7	15.8	10.7	10.8	-0.3	-27.2

Inbound CASS Market Revenues

Destination Region	US\$m Q4 2008	% Growth in Air Freight Revenues, year-on-year					
		Q3 2007	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008
Africa	288.7	21.7	22.6	16.2	17.2	10.8	-5.9
Caribbean	33.8	6.4	12.2	10.6	11.2	6.3	-10.2
Central America	80.0	25.3	17.5	9.9	14.7	-6.2	-25.4
Europe	1152.0	33.2	34.0	15.6	8.4	2.3	-17.3
Japan & Korea	219.3	9.2	15.4	0.7	-2.0	-13.2	-31.8
Middle East	268.3	22.1	18.6	19.8	17.8	18.7	-2.4
North America	735.7	15.1	21.8	4.1	2.2	-7.9	-31.0
South America	286.3	30.5	33.3	30.8	28.7	24.7	-14.1
South Asia	117.3	21.7	30.8	17.8	30.2	18.4	-3.9
South East Asia	438.7	9.6	16.7	8.6	6.8	-5.5	-26.7
South West Pacific	200.9	19.8	30.3	29.2	26.2	4.9	-25.1