

CARGO E-CHARTBOOK

Q3 2010

KEY POINTS

- Uncertainties are rising about the economic outlook with talk of a 'double-dip', but current conditions in cargo markets remain positive. Air freight has entered a slower phase of expansion but the pace of growth in both volumes and yields remains above trend. Revenues have been growing strongly and, in many regions, cargo profitability is back to pre-recession levels. The environment will get more difficult. Even without a 'double dip', demand will slow and new capacity will put pressure on load factors and yields.

HEADLINES BY SECTION

Economic Outlook (page 2)

- Economic growth is likely to continue to be very unbalanced. Monetary policy remains loose in Europe and the US but fiscal policy will constrain growth. The emerging economies outlook still remains positive.

Demand Environment (page 4)

- All the key indicators for air freight demand are now pointing to slower growth in the rest of this year and 2011. Purchasing managers are less optimistic, the inventory cycle is over. Final sales become key now.

Revenue and Yields (page 6)

- Cargo yields have rebounded faster than passenger yields, due to tighter supply-demand conditions, but only on some trade lanes and remain below pre-recession levels. Revenues up but not yet recovered.

Capacity (page 8)

- Capacity is now coming back into the market, partly as a result of the expanding passenger fleet but also as the existing freighter fleet is better utilized. So far load factors remain high but new deliveries are set to rise sharply.

Profitability (page 10)

- Cargo profitability returned to pre-recession levels for US cargo airlines in 2009Q4 and 2010Q1. Asia likely to be even more positive. More airlines creating shareholder value. Business confidence remains strong.

Traffic Growth (page 3)

- International air freight markets rose in July to a point 4% higher than the previous peak of early 2008. Growth has now moved into a slower phase, more evenly spread across markets, but remains above trend.

Demand Drivers (page 5)

- Consumer demand remains patchy with confidence stalling in the West but growing in Asia. Business capital spending is positive due to record profits. This picture of demand confirmed by world trade slowing to 6-7% pa trend.

Costs (page 7)

- Jet fuel prices have fluctuated in a US\$15/b range for the past year with little obvious reason to break out on the horizon. Currency fluctuations have increased costs for Europeans. Labour cost issues developing.

Competition (page 9)

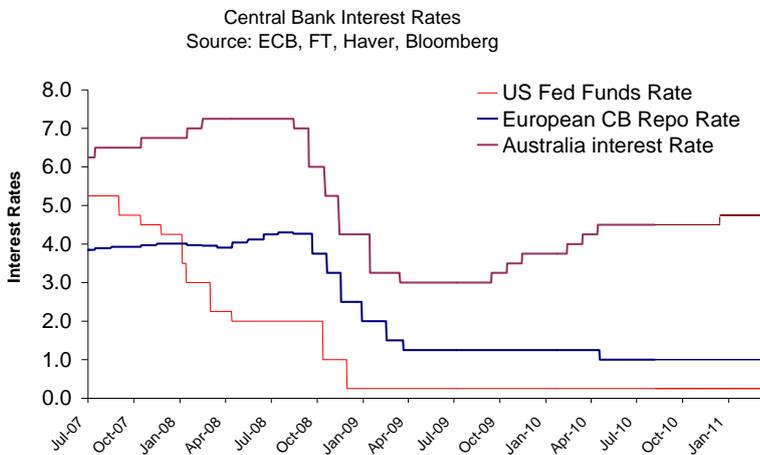
- Ocean freight volumes and rates point to continued strong world trade growth and a more even distribution of shipping demand. The recent fall in the Baltic Index reflects excess capacity not falling demand.

Economic Outlook

Key Issue:

➤ Economic growth is likely to continue to be very unbalanced. Monetary policy remains loose in Europe and the US but fiscal policy will constrain growth. The emerging economies outlook still remains positive.

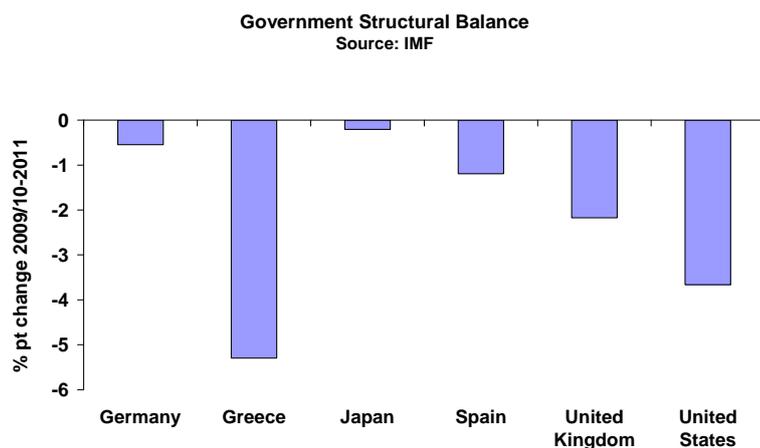
Monetary policy remains a stimulus in Europe and US but tightening in Asia-Pacific



➤ Central banks in Europe and the US are expected to continue to keep interest rates exceptionally low into next year, and to continue to print money in an effort to kick-start private sector credit expansion. Policy-makers remain worried that these economies could slip back into recession.

➤ However, inflation risks have revived in many of the economies of Asia-Pacific and South America. Here central banks are already raising interest rates and further increases are expected.

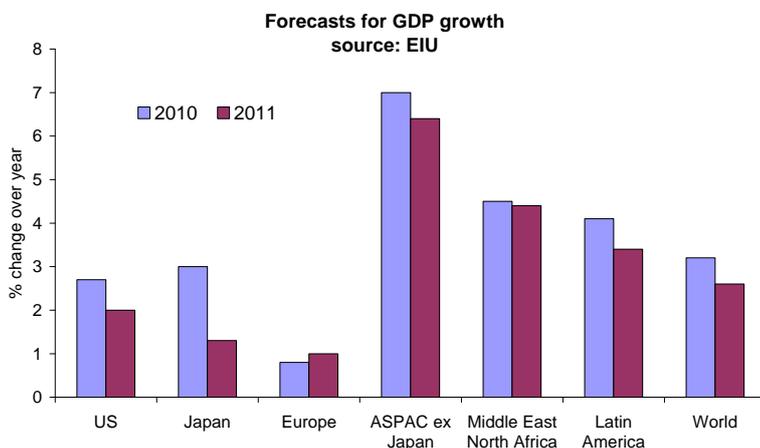
Fiscal policy stimulus has shifted into reverse, particularly in Europe



➤ Governments, particularly in Europe, are taking the punchbowl away from the party by tightening fiscal policy.

➤ This impact on economies is best shown by the change in the 'structural' budget deficit, which excludes non-discretionary items like unemployment benefits and debt interest. Clearly the Greek economy will suffer a very large fiscal tightening in the next two years. The UK is also tightening its belt hard. Even the US, due to existing tax and spending laws, will see a very significant stimulus reversal.

'Double-dip' not expected but big growth differences continue and 2011 slower



➤ Despite the concern of commentators and bond markets of 'double-dip' recessions, most economic forecasts point to economic growth through 2011. However, there is much variation between regions.

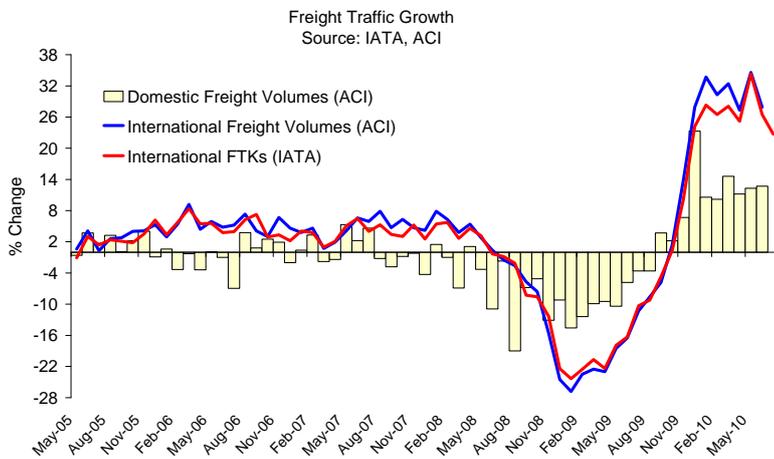
➤ At the weak end is Europe with continued sub-trend growth. At the buoyant end are the emerging economies in Asia, Middle East and S America. After reasonable rebounds this year the US and Japanese economies are expected to slow significantly in 2011.

Traffic Growth

Key Changes in the data this quarter:

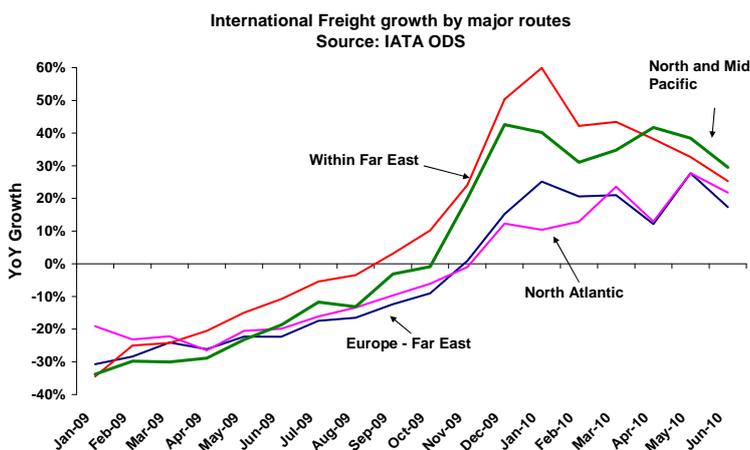
- International air freight markets rose in July to a point 4% higher than the previous peak of early 2008. Growth has now moved into a slower phase, more evenly spread across markets, but remains above trend.

Air freight volume expansion moving into slower growth phase but still above trend



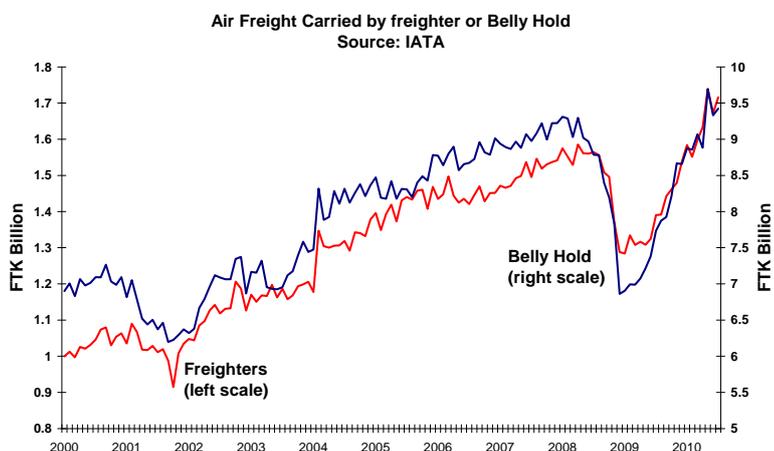
- Year-on-year growth rates are difficult to interpret now. The arithmetic of comparisons against the strong recovery in 2009H2 will reduce these growth rates. However, it is still true that air freight growth is slowing from the very rapid post-recession rebound.
- International freight markets were rebounding at an annualized rate of over 20% in 2009H1 and 2010Q1. Since then annualized growth has halved to 11% by July. Nevertheless, this remains well above the 6% trend.

Regional trade lanes starting to narrow earlier large divergence in growth



- Differences in the performance of economies remain but the widely divergent freight demand seen across different trade lanes appears to be narrowing.
- The surge of air freight in Asia and S America is now slowing, while trade across the Atlantic and from Europe to Asia is now catching up. Although domestic spending remains weak in Europe, exports have started to accelerate due to business capital spending and the Euro's weakness.

Biggest cycle seen for freight carried in passenger aircraft bellies



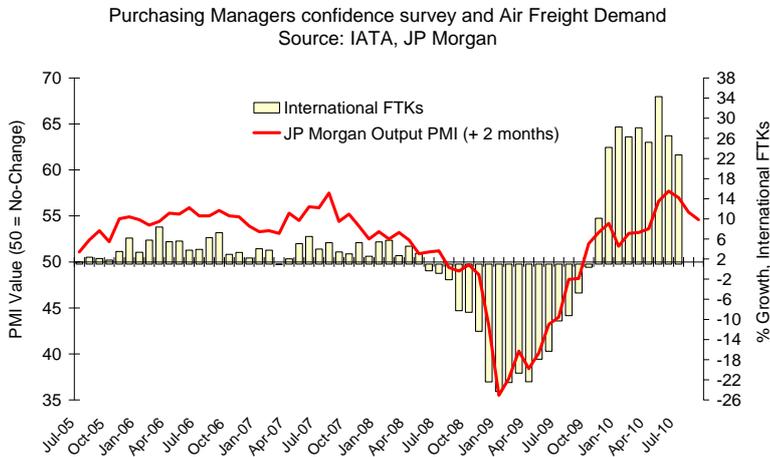
- The very sharp recovery in air freight volumes from the lows of end-2008 has been fairly equally spread between using the capacity of freighters and passenger aircraft. The cycle was a little more dramatic for freight carried in passenger aircraft, largely due to the marginal nature of that capacity. Both are now above the previous early-2008 highs, with FTKs carried by freighters up 8% and for that carried in the bellies of passenger aircraft up 1%.

Demand Environment

Key Changes in the data this quarter:

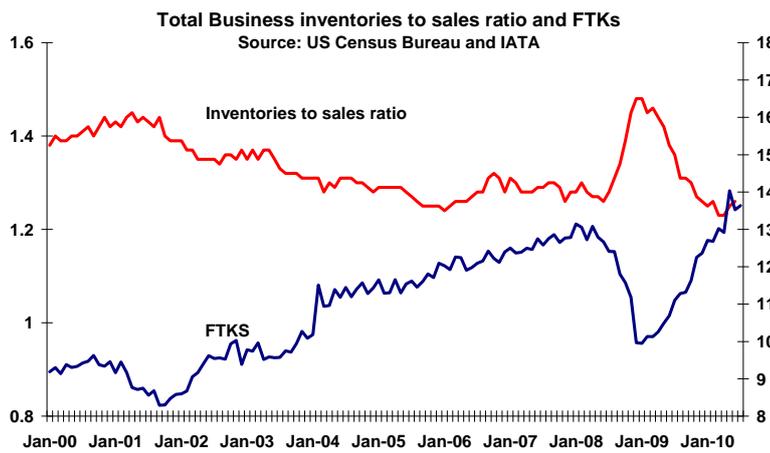
- All the key indicators for air freight demand are now pointing to slower growth in the rest of this year and 2011. Purchasing managers are less optimistic, the inventory cycle is over. Final sales become key now.

Purchasing managers' confidence still high but is now slipping lower



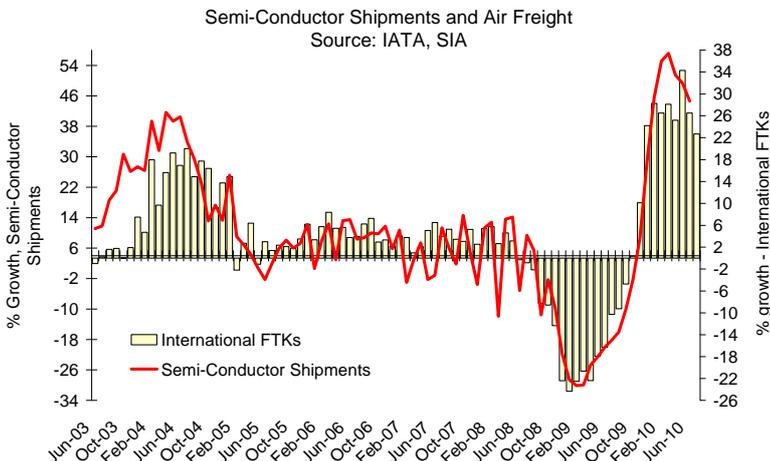
- The confidence of purchasing managers in the major economies – an excellent leading indicator for air freight – peaked several months ahead of the May peak in air freight growth. Since then both have been slowing.
- Although confidence is slipping it remains consistent with continued strong freight growth in the near term. Evidence suggests purchasing managers are expecting a slower phase of growth ahead not recession.

Now that the business inventory cycle is over shipments by air are likely to slow



- The business inventory cycle has been the driving force behind the collapse and revival of air freight demand. Peak reductions in inventories came at the end of 2008, when the recession caused a surge in the inventory-sales ratio. After that business slowed the pace of destocking and, from mid-2009, started to rebuild inventory, which caused the surge in air freight. Now that the inventory-sales overhang has disappeared, business will only add inventory at the pace of final sales. As a result air freight growth will slow to the single figure growth of final sales.

Semi-conductors remain positive boost but will slow without a consumer recovery



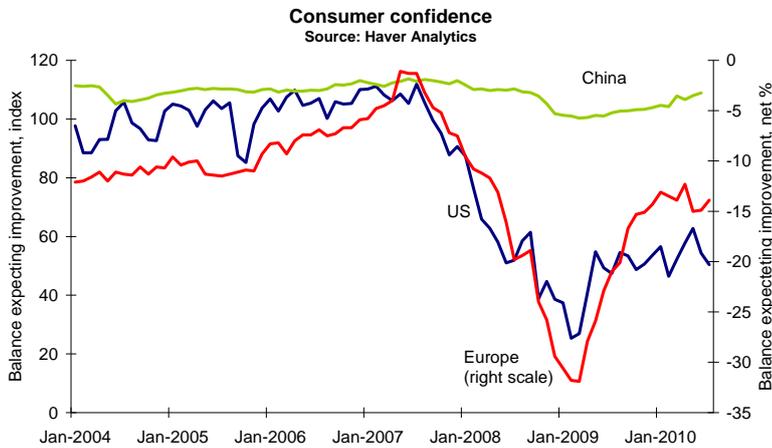
- It is certainly the case that as the unit values fell for high-tech products such as laptops, integrated circuits and LCD products they have increasingly been shipped by ocean not air. That was certainly contributing to a trend loss in world trade share before the recession.
- But these products are still key to shaping the air freight cycle. Semi-conductors have boomed as inventories and production picked up. But without western consumers spending again this boost is likely to slow from now on.

Demand Drivers

Key Changes in the data this quarter:

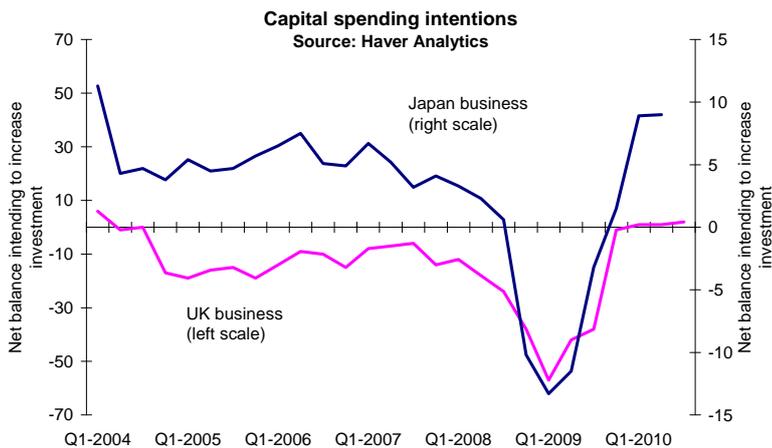
- Consumer demand remains patchy with confidence stalling in the West but growing in Asia. Business capital spending is positive due to record profits. Picture supported by world trade slowing to 6-7% pa trend.

Consumer confidence stalls in western economies but robust and rising in Asia



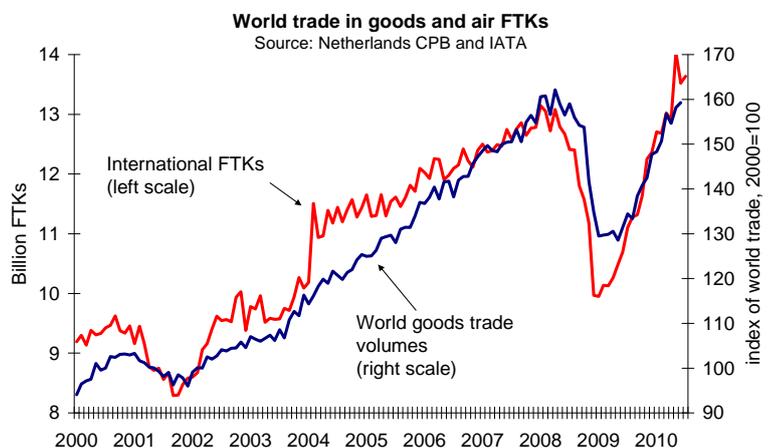
- Consumer confidence improvements have stalled in both Europe and the US, as unemployment stays high and economic uncertainties grow. Consumer demand for electronics and other air freighted products has not recovered as a result in these regions.
- However, consumers in China and other emerging economies continue to grow in confidence, unburdened by the debts and unemployment of western economies. These are smaller markets but faster growing and more robust.

Business profits rise back to high levels helping to stimulate demand for capital goods



- US corporate profits are close to previous cycle peaks at 11% of GDP, having fallen to 8% at the end of 2008, when air freight hit bottom. Strong profits in the US and elsewhere are boosting business investment, particularly on ICT capital goods, many of which are shipped by air.
- Although western consumers remain cautious, business demand for capital goods, together with Asian consumers, may keep final sales growth robust.

World trade continues to expand but pace of growth slows close to trend of 6-7% in Q2



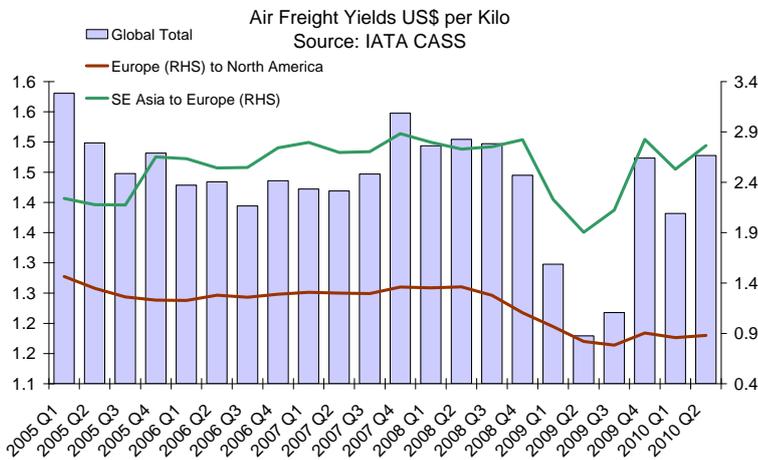
- The business inventory cycle and the need for speedy shipment at the start of the economic recovery meant air freight took a much larger share of the rise in world trade during 2009 and early 2010 than other modes. That process appears to be coming to an end. But there are also signs that overall world trade is slowing too.
- Having grown at annualized rates of 12-13% at the end of 2009/ early 2010 world trade slowed to growth close to trend of 6-7% in the second quarter. Air freight growth is likely to slow to this pace later this year and in 2011.

Revenues and Yields

Key Changes in the data this quarter:

- ↗ Cargo yields have rebounded faster than passenger yields, due to tighter supply-demand conditions, but only on some trade lanes and remain below pre-recession levels. Revenues up but not yet recovered.

Cargo yields in 2010Q2 are up 25% on last year and are up 45% on flows out of Asia



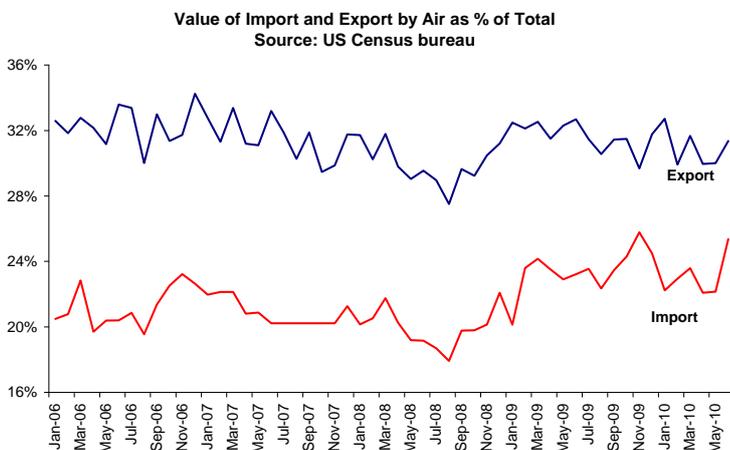
- ↗ Cargo yields have not recovered to pre-recession peaks, unlike air freight volumes. In real terms (adjusted by the PPI) the cost of air freight is still 10% down on 2006-07 levels. Nevertheless, there has been a 25% rise in net cargo yields from the 2009 low point to 2010Q2. 45% up out from Asia.
- ↗ Load factors and aircraft utilization – freighters in particular – have improved substantially and have created the conditions for the rebound of yields.

Cargo revenues bouncing back in 2010 but still have not recovered 2008 highs



- ↗ Cargo revenues are expected to be up over a quarter this year as both volumes and load factors rise sharply.
- ↗ Having slumped back to 2005 levels of revenue in 2009, the improvement this year is welcome and significant. The volume of business has rebounded faster than expected. However, yields have not to the same extent. With freight volumes yielding more than 10% less than in 2008 there is still some way to go before revenues have recovered.

Air freight share in trade rising during economic upturn but trend decline may remain



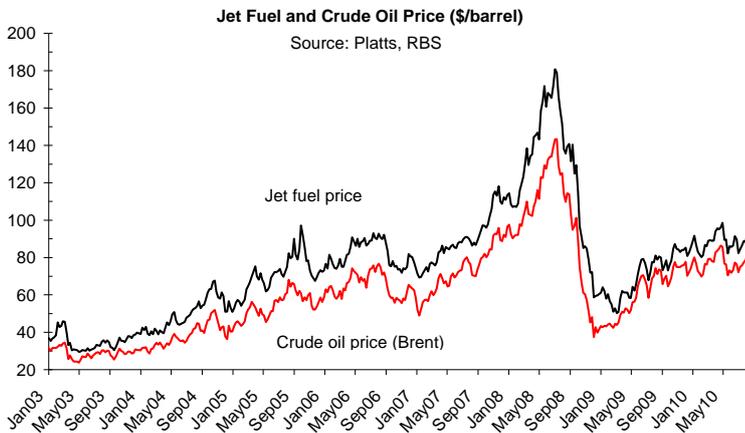
- ↗ Air freight always gains market share at the start of economic upswings, because of the need for speed and scarce working capital. However, in the past decade there has been a trend decline in air freight's share of both value and weight in world trade.
- ↗ The trend decline is partly due to a shift to ocean in the shipment of some high-tech goods as their unit values decline.
- ↗ The past two years have seen a minor upturn in air freight's value share. Some 32% of US exports by value are shipped by air and 25% of imports.

Costs

Key Changes in the data this quarter:

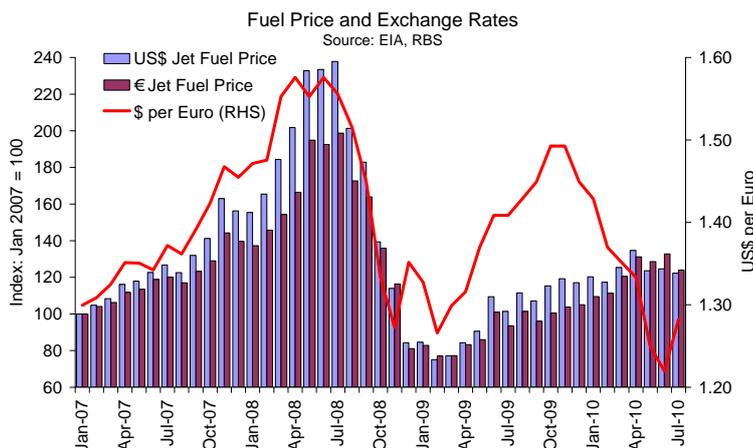
- Jet fuel prices have fluctuated in a US\$15/b range for the past year with little obvious reason to break out on the horizon. Currency fluctuations have increased costs for Europeans. Labour cost issues developing.

No clear factor ahead that would cause fuel prices to break from US\$80-95/b range



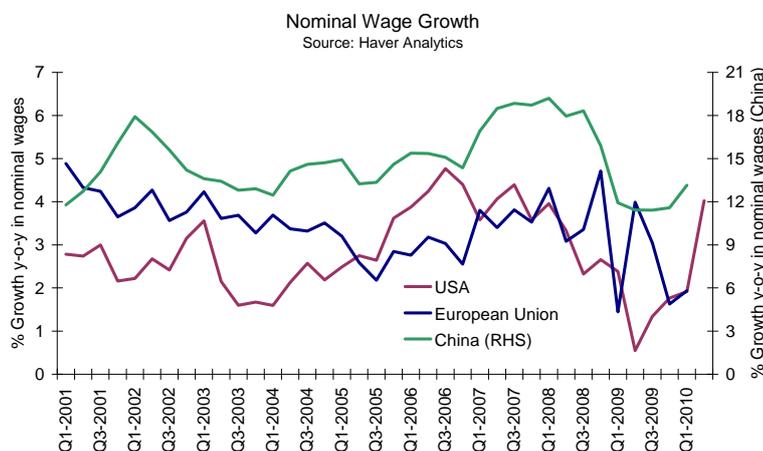
- Having risen sharply from their low point in the first half of 2009, jet fuel prices have since fluctuated in a US\$15 range around US\$88 a barrel. Refinery capacity is still loose so the 'crack spread' is narrow at 15%, down from its normal 25%. Crude oil prices have been trending sideways at an average of US\$77 a barrel.
- With subdued demand growth and adequate oil supply there is no obvious factor ahead to cause jet prices to break out of their recent range.

Asian FX stronger against the US\$ but the Euro weak raising fuel costs for Europeans



- Currency exchange rates have been volatile in the past year. The Euro has weakened significantly against the US dollar as a result of the financial crisis and the Greek sovereign debt crisis. But the Yen and the Renmimbi have strengthened against the US dollar.
- In terms of dollar-denominated jet fuel costs these moves have benefited many Asian airlines but disadvantaged European airlines in the past year.

High unemployment in West but signs of rising wages and some labour unrest



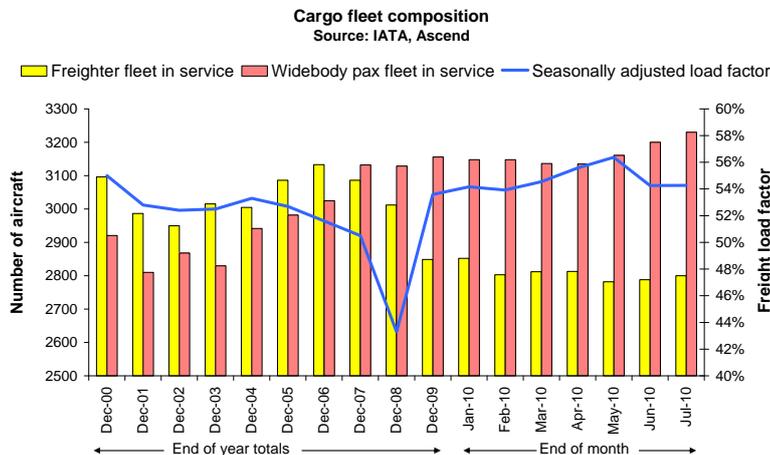
- Unemployment has shown no sign of turning down yet in the US and Europe, with little jobs growth so far. Unemployment remains around 10%. The situation is different in the fast growing emerging economies where jobs are being created.
- Despite these differences wage pressure and labour unrest seem to be on the increase. Productivity gains should still be strong which will be reducing unit labour costs, but there are potential upward cost pressures developing in the pipeline.

Capacity

Key Changes in the data this quarter:

- Capacity is now coming back into the market, partly as a result of the expanding passenger fleet but also as the existing freighter fleet is better utilized. So far load factors remain high but new deliveries are set to rise.

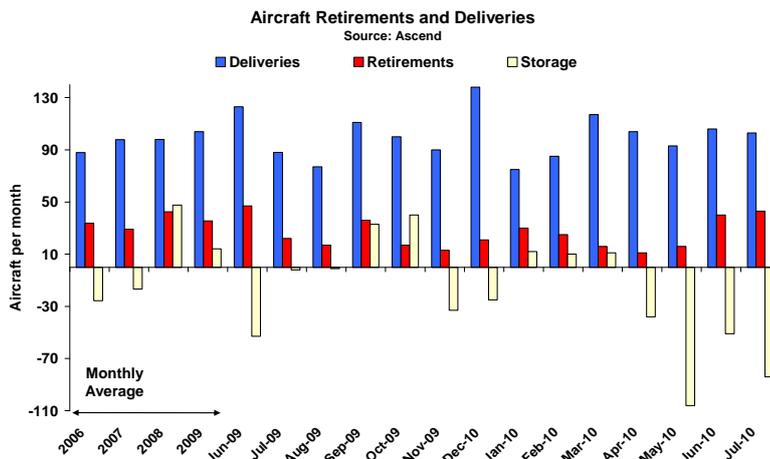
Load factors now back to pre-9/11 levels and aircraft numbers stabilizing



- Utilization for cargo is looking much better than a year ago. Load factors are at historically high levels and freighter utilization is back to pre-recession levels and only 5% below 2004 peaks. The freighter fleet remains 6-7% smaller.

- However, the utilization of wide bodied passenger aircraft remains over 8% down. Moreover additions to the widebody fleet have boosted its size by 4% in the past year.

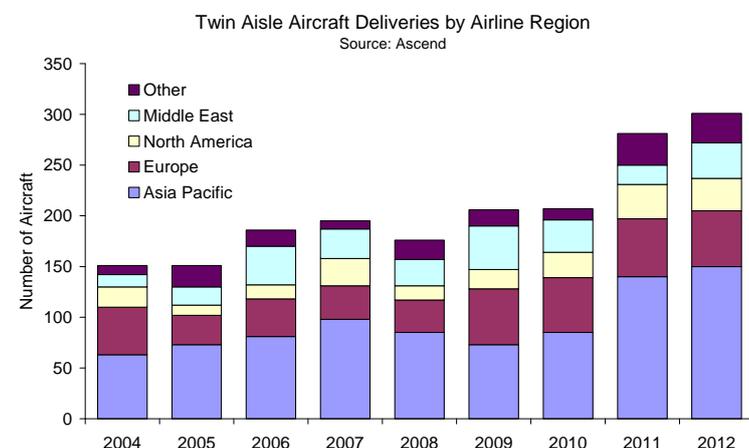
Older aircraft being taken from storage into the in-service fleet



- One clear change in the second quarter was the start of significant numbers of aircraft returning to service from storage. Some of the aircraft coming out of storage were retired but the majority re-entered service.

- In addition to these aircraft new deliveries continued at a rate of around 100 aircraft a month.

Twin aisle aircraft deliveries set to increase sharply driven by passenger demand



- Twin aisle deliveries have picked up in Europe, Asia-Pacific and the Middle East since 2009 but total deliveries have not grown much.

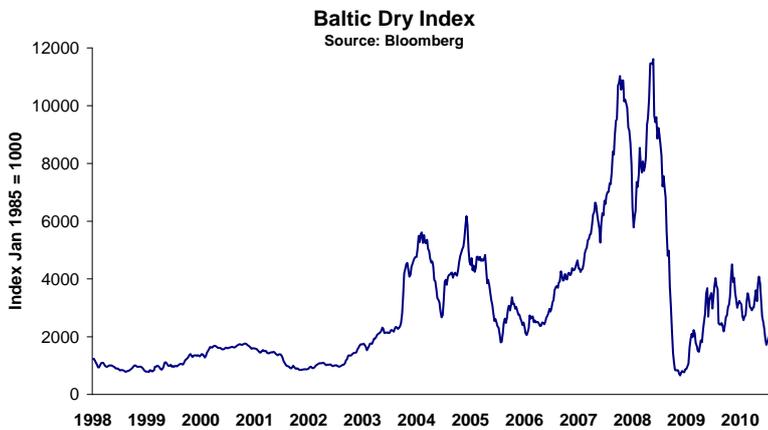
- Next year that is due to change with a large rise in deliveries to the Asia-Pacific region and increases in both North America and Europe. Should air freight demand growth slow as expected the new capacity arriving is likely to put downward pressure on load factors and aircraft utilization.

Competition

Key Changes in the data this quarter:

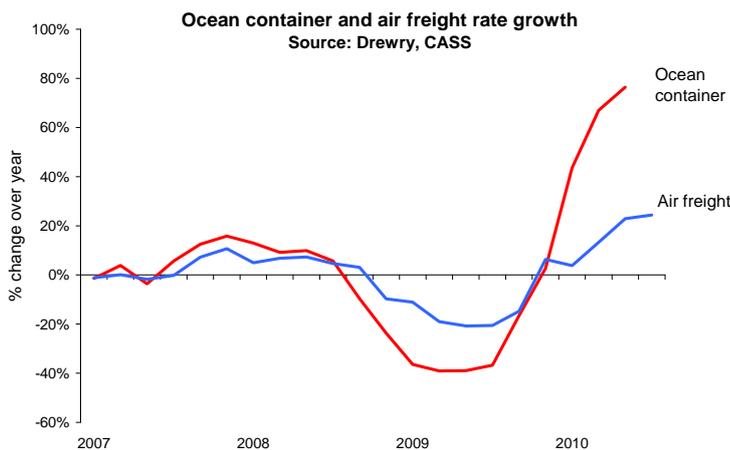
- Ocean freight volumes and rates point to still strong world trade growth and a more even distribution of shipping demand. The recent fall in the Baltic Index reflects excess capacity not falling demand.

Sharp fall in Baltic Index due to increase in shipping capacity not a fall in world trade



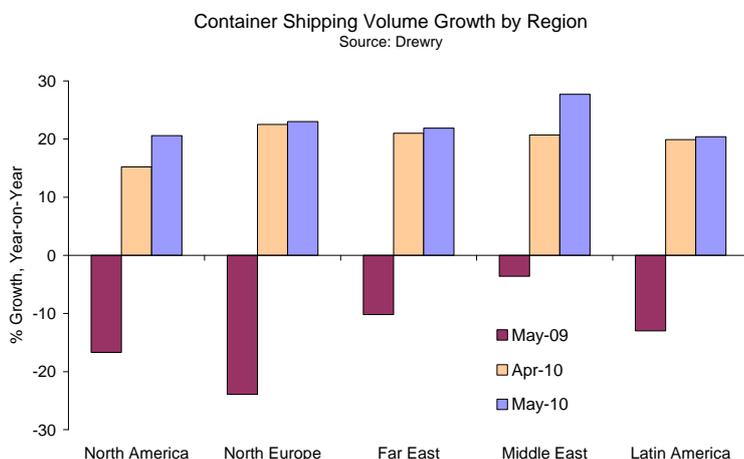
- A sharp 50% fall in the Baltic Dry Index – a measure of ocean transport costs for bulk commodities – in June caused some to question the strength of world trade. The first point is that this is an extremely volatile index as the chart shows. Second the downward pressure on transport costs was likely caused by an influx of new shipping capacity, and not a fall in demand for bulk commodities.

Ocean container freight rates up 80%+ while air freight yields rise 25%



- Containerized ocean shipping is now getting more expensive at a faster rate than air freight. Less flexible capacity has meant there was a bigger cycle in ocean rates than air. Nonetheless, the 80% year-on-year increases in the cost of shipping by ocean containers may help, at the margin, the market share of air freight, whose rates are currently rising at a rate of 25%.

Container demand is also now showing a more even distribution of world trade



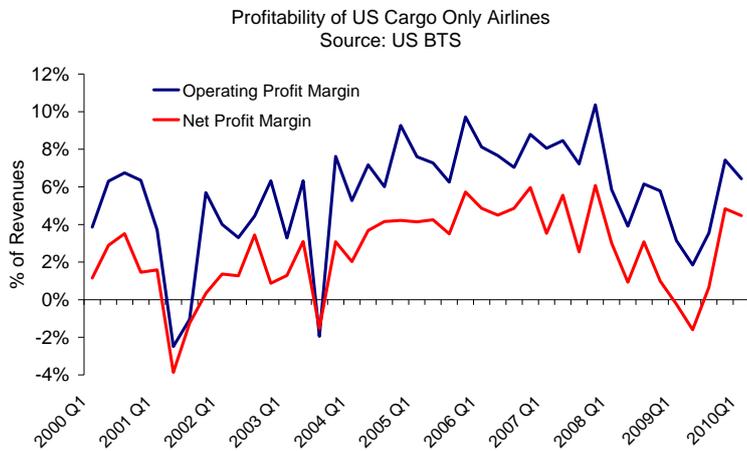
- Ocean going containerized freight was slower to pick up than air freight, since the speediness of air overcame the cheapness of sea at the start of the economic upturn. Since the start of this year ocean freight has been expanding at a rate of around 20% a year.
- We noted above that growth in air freight trade lanes is now converging, having been dominated by Asia and S America in 2009. The same convergence is apparent in ocean freight with a much more even geographical distribution of demand.

Profitability

Key Changes in the data this quarter:

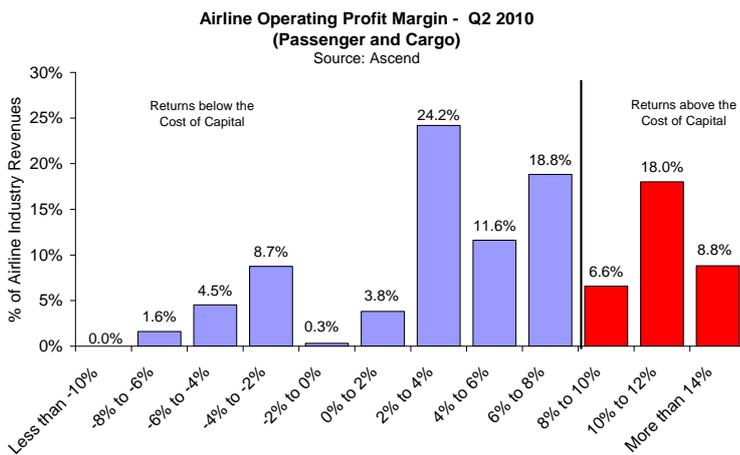
- Cargo profitability returned to pre-recession levels for US cargo airlines in 2009Q4 and 2010Q1. Asia likely to be even more positive. More airlines creating shareholder value. Business confidence remains strong.

Cargo profitability back to pre-recession levels during 2009Q4 and 2010Q1 in the US



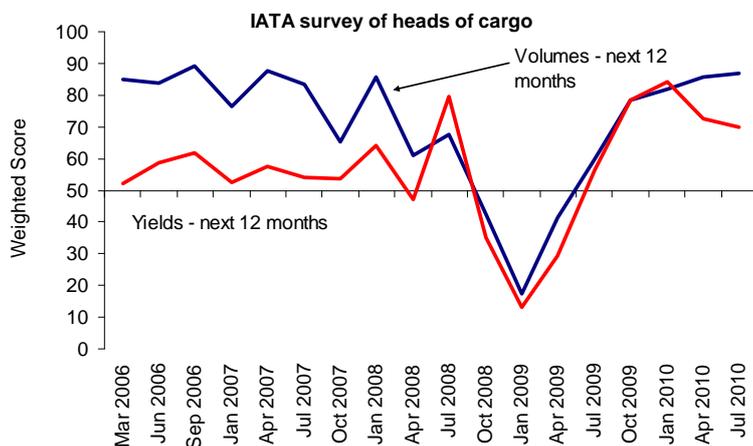
- First quarter data shows cargo profitability – among the US cargo airlines – remaining close to the high levels of 2009Q4. Net profit margins of around 4% and operating margins of 6% are close to pre-recession levels in 2006 and 2007.
- Asian airlines are likely to have seen a sharper improvement in profitability since this is the region where volumes, load factors and yields have risen the most in the past year.

Operating profits improve significantly in the second quarter



- Airlines need to make an operating margin of at least 8% to generate the return on capital most investors would expect. In the past three quarters there has been a sharp increase in the number of airlines achieving this. In 2009Q4 only 9% did, by 2010Q1 this had risen to 15%. By the second quarter one third of reporting airlines were generating shareholder value. Only 15% reported operating losses compared with 60% in Q1. There is always a large seasonal improvement in Q2 but the trend is also up.

Business confidence over future cargo revenues remained high in July survey



- IATA's quarterly survey of heads of cargo in July revealed that confidence over future revenues was still high.
- Expectations for volumes over the next 12 months showed an even higher proportion of airlines expecting further growth. However, the outlook for yields although still positive was not as optimistic as it was earlier this year – probably reflecting the potential for capacity to enter the market during the next 12 months.

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 10	Feb 10	Mar 10	Apr 10	May 10	Jun 10
Africa - Middle East	13.4%	19.3%	9.9%	10.7%	24.3%	16.3%
Europe - Far East	25.1%	20.6%	21.0%	12.2%	27.7%	17.3%
Europe - Middle East	19.7%	20.7%	19.2%	3.7%	26.5%	19.1%
Within Far East	59.9%	42.2%	43.4%	38.2%	32.7%	25.3%
Within Middle East	7.4%	11.5%	8.4%	10.5%	10.2%	3.7%
Within South America	35.7%	25.1%	27.1%	23.4%	30.5%	31.9%
Mid Atlantic	30.5%	25.5%	35.0%	15.1%	42.7%	39.3%
Middle East - Far East	31.7%	32.8%	30.3%	26.7%	37.1%	25.6%
North Atlantic	10.4%	12.8%	23.6%	13.0%	27.7%	21.7%
North America-Central America	0.3%	8.6%	14.1%	0.9%	8.5%	-1.8%
Europe - Africa	-2.8%	0.3%	0.9%	-9.4%	1.9%	-9.5%
North America- South America	40.7%	63.4%	68.7%	88.2%	72.4%	50.7%
Far East - Southwest Pacific	11.3%	8.0%	-0.2%	7.5%	21.1%	15.3%
North and Mid Pacific	40.2%	31.1%	34.8%	41.7%	38.4%	29.5%
South Atlantic	35.4%	27.5%	37.0%	33.0%	36.9%	33.7%
Within Europe	9.8%	5.8%	9.5%	-13.6%	0.6%	-0.9%

Outbound CASS Market Revenues

Origin Region	US\$m Q1 2010	% Growth in Air Freight Revenues, Year-on- Year					
		Q1 2009	Q2 2009	Q3 2009	Q4 2009	Q1 2010	Q2 2010
Africa	53.8	-8.0	-18.2	-18.4	-1.5	-12.4	55.4
Caribbean	4.8	-7.3	-4.2	-11.3	1.6	-18.4	7.0
Central America	66.8	-15.8	-17.5	-8.5	28.3	32.7	65.6
Europe	1207.0	-37.0	-39.9	-30.4	0.8	24.0	33.9
Japan & Korea	1021.9	-55.6	-39.5	-12.9	45.0	110.1	100.2
Middle East	101.6	49.4	19.4	-1.5	26.7	4.3	89.1
North America	766.3	-23.7	-32.2	-25.2	6.2	30.2	56.1
South America	229.7	-20.8	-30.0	-20.1	-2.8	1.2	67.2
South East Asia	1358.6	-27.2	-30.3	-22.3	29.0	82.7	130.3
South West Pacific	129.3	-30.0	-29.9	-13.1	26.8	32.2	20.3

Inbound CASS Market Revenues

Destination Region	US\$m Q2 2010	% Growth in Air Freight Revenues, year-on-year					
		Q1 2009	Q2 2009	Q3 2009	Q4 2009	Q1 2010	Q2 2010
Africa	307.5	-12.5	-19.5	-13.5	9.8	14.6	29.4
Caribbean	28.6	-27.9	-22.1	-22.9	-1.1	32.8	5.1
Central America	98.7	-37.1	-42.3	-34.0	9.4	43.1	73.5
Europe	1443.7	-33.6	-35.8	-25.6	21.5	53.8	82.6
Japan & Korea	304.3	-41.2	-35.3	-23.9	17.4	58.4	74.2
Middle East	283.3	-12.3	-16.3	-13.3	10.1	15.2	18.1
North America	1020.0	-45.6	-43.9	-28.7	29.9	71.2	108.6
South America	387.9	-33.9	-38.7	-29.8	17.1	54.7	85.7
South Asia	174.8	-16.0	-23.6	-11.5	24.3	65.7	67.6
South East Asia	657.3	-42.4	-33.5	-15.0	29.2	76.7	71.1
South West Pacific	235.8	-34.9	-39.4	-24.7	17.3	31.7	46.5

Glossary

- ↗ ACI: Airport Council International
- ↗ AFTK: Available Freight Tonne Kilometers
- ↗ European CB: European Central Bank
- ↗ EIU: Economist Intelligence Unit
- ↗ CASS: Cargo Accounts Settlement System
- ↗ FT: Financial Times
- ↗ FTK: Freight Tonne Kilometers
- ↗ PMI: Purchasing Managers Index
- ↗ Netherlands CPB: Netherlands Bureau for Economic Policy Analysis
- ↗ ODS: Origin-Destination Statistics
- ↗ SIA: Semiconductors Industry Association
- ↗ US BTS: US Bureau of Transportation Statistics
- ↗ M-o-m Month over month percentage change
- ↗ Y-o-y Year over year percentage change

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