

CARGO E-CHARTBOOK

Q4 2011

OVERVIEW

- The business environment for air cargo has continued to decline in the last quarter of 2011. Although profits so far have not been too bad, the outlook is pessimistic. With competition from declining sea freight rates and flat trade indicators, there is no sign of growth. Declining business confidence will keep downward pressure on volumes and yields.

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Economic Outlook (page 2)

- Banks have started to reign in their lending propensity as lack of debt resolution in the Eurozone continues. As is to be expected, governments made further cuts to expenditures, despite suboptimal growth levels.

Demand Environment (page 4)

- Customers of the air freight industry have continued their pessimistic outlook and cut cargo further. Although there is no obvious inventory overhang, pessimistic expectations are driving the need for air freight down, with purchasing managers confidence index indicating no growth prospects.

Revenue and Yields (page 6)

- Cargo rates have continued their decline in an unsupportive economic climate. Downward pressures on revenues have persisted, with some regions suffering more than others. The revenue outlook looks weak.

Capacity (page 8)

- Freighter aircraft are being reduced, but the increase in twin aisle aircrafts in more than offsetting that reduction, keeping cargo capacity high. Large deliveries planned for 2012 will exacerbate that condition.

Profitability (page 10)

- Cargo profitability began to fall in the second half of 2010 and declined further this year. Although about 50% of airlines are meeting and exceeding their cost of capital, the results are passenger and seasonality driven, as heads of cargo indicate a much less confident outlook.

Traffic Growth (page 3)

- Air cargo growth rates started to fall in the middle of 2011, after a period of insignificant growth. The last quarter has been no different, with all major routes declining further. Freighters have continued to pick up the larger share of traffic.

Demand Drivers (page 5)

- Consumers in Europe have become more pessimistic as the year has progressed, but American consumers have managed to regain some confidence. World trade is flat, while international air FTKs are dropping sharply, indicating that cargo is now being moved by other transport modes.

Costs (page 7)

- Jet fuel prices have stayed high over the last several months, despite the weak economic climate. The latest data indicate some relief to cost pressures, with a drop in prices in December. Labour costs have also dropped in Q3.

Competition (page 9)

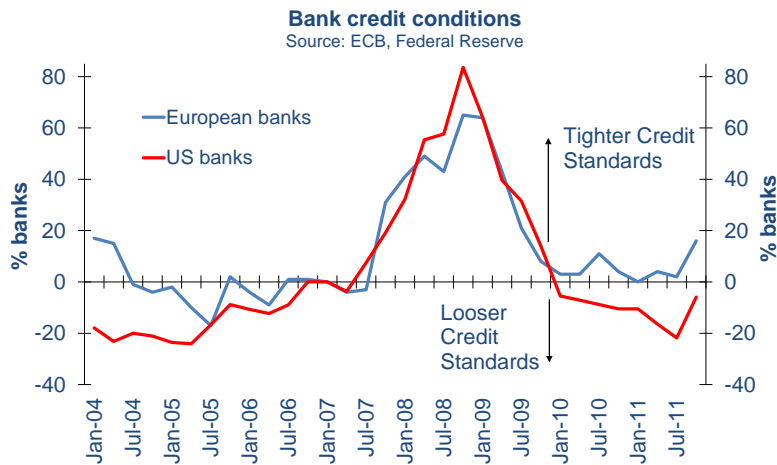
- Freight rates of other modes have been falling, partly due to capacity increases and also the pessimistic outlook for trade. Lower competitor rates are supporting substitution away air freight, but business expectations are also driving the shift.

Economic Outlook

Key points:

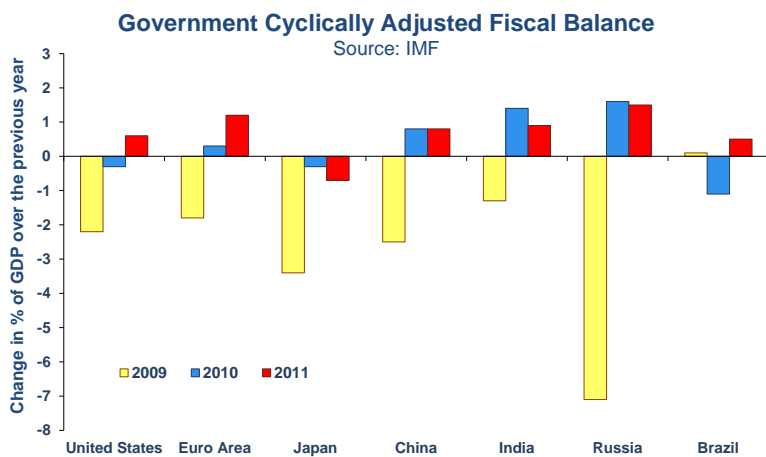
- Banks have started to reign in their lending propensity as lack of debt resolution in the Eurozone continues. As is to be expected, governments made further cuts to expenditures, despite suboptimal growth levels.

Further instability in the Eurozone is indicating the approach of another credit squeeze



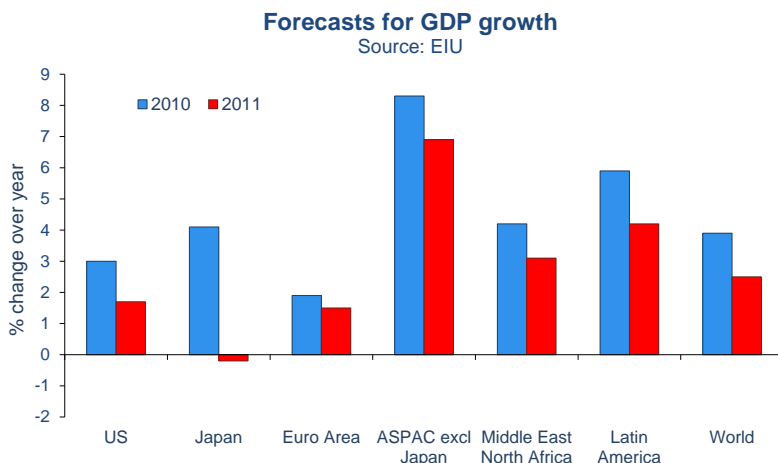
- European sovereign debt problems have begun to affect the banking sector, with lending standards starting to tighten. Percentage of European banks that had tighter credit conditions in October was higher than any point prior to the global financial crisis.
- Banks tighten lending standards when the risk of markets not meeting debt obligations increases. This, however, also puts a dampener of private investment.

Governments have tightened spending further, fearing further fiscal turmoil



- Government spending has been even more constrained. The governments of Russia, Brazil, and the US have tightened notably compared to the previous quarter, in response to the European financial market developments.
- China also reduced its government spending, likely due to inflationary pressures. Nevertheless, China and India have more scope than the developed countries for loosening their fiscal position, in case there is a need to stimulate growth.

With major economies turning over at slow rates of growth



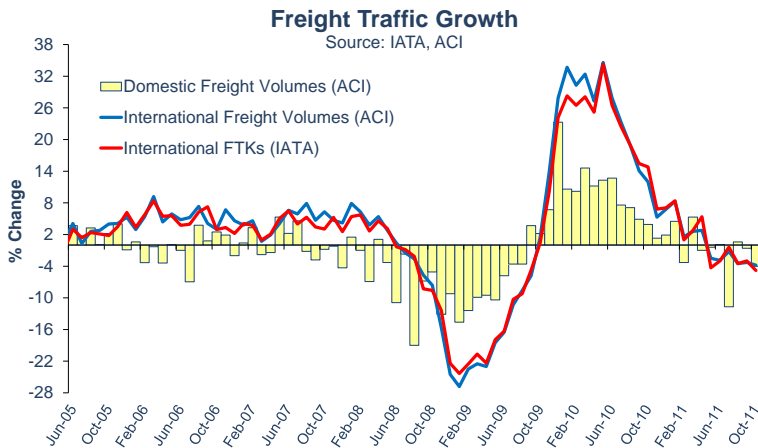
- Economic growth rates projected for 2011 continue to be a portion of the previous year, with 2-speed economic growth describing the year's performance. In Asia Pacific and Latin America, estimates for 2011 have been revised up as those economies' domestic demand remains strong and is expected to contain the impact of weaker external demand on growth for 2011, and into 2012. Expectations for Europe, on the other hand, are slightly slower this quarter, with resurging fears of another credit squeeze.

Traffic Growth

Key points:

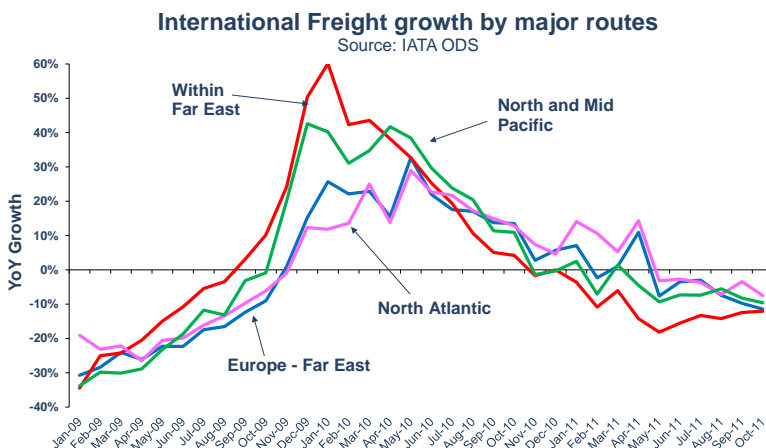
- Air cargo growth rates started to fall in the middle of 2011, after a period of insignificant growth. The last quarter has been no different, with all major routes declining further. Freighters have continued to pick up the larger share of traffic.

Air freight volumes started to shrink in the middle of 2011 and have continued to do so



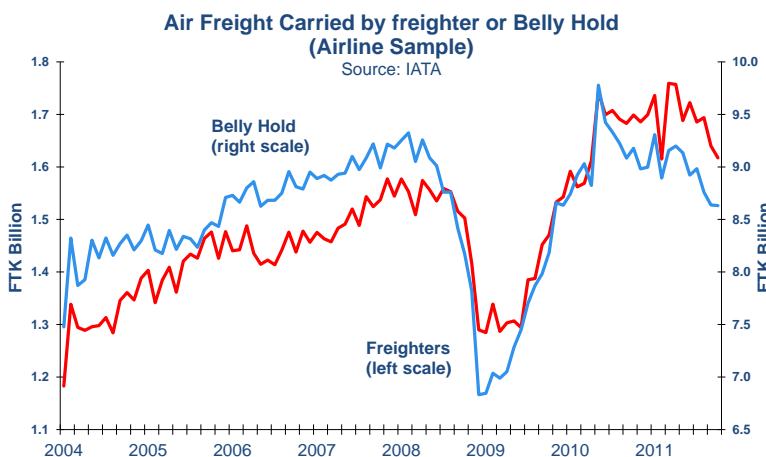
- The mid-year turning point for air freight markets has continued into the back end of 2011, with international freight volumes falling 3.8% in October. Domestic freight fell sharply in October, -4.0% year-on-year, a notable drop from the previous month. International FTKs continued a similar degree of decline, at -4.8%.

All trade lanes have showed marked decline



- Declining trade volumes and business confidence have had a severe impact on air freight, with year on year growth for all routes well in negative territory.
- The Far East market has been more sensitive than other routes, having the largest decline this year, while also experiencing strongest performance back in 2010. This is likely due to falling demand in the US and Europe for the manufacturing goods from the Far East.

Freighter capacity continues to take up the largest portion of cargo traffic



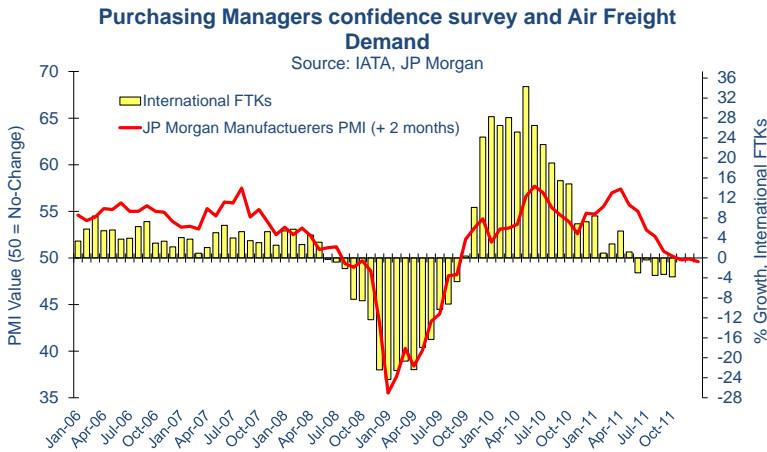
- The divergence between the volume of freight carried in freighters and in the belly hold of passenger aircraft has shrunk since the last quarter. This indicates that cargo declines are now affecting all carriers. Moreover, it implies demand for moving goods in a timely manner, as would be done by freighters, has become less important.
- Cargo-only carriers still maintain a larger portion of freight, despite declines from their peak in Q1 2011 by 8%. Belly-hold freight volumes have also fallen by the same amount, from highs reached in Q2 2010.

Demand Environment

Key points:

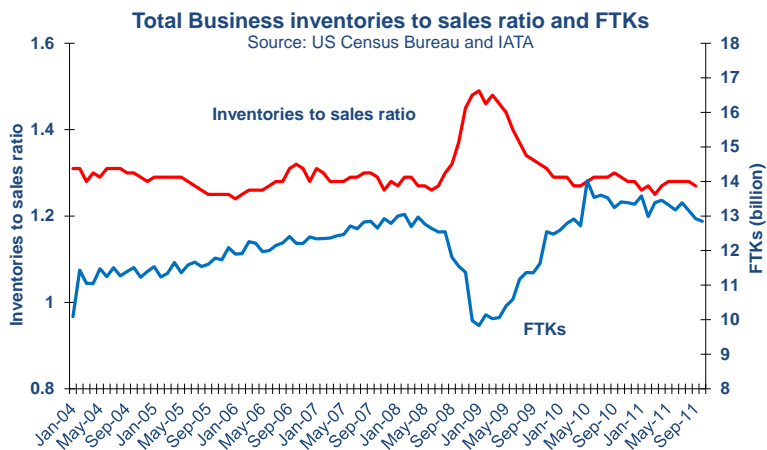
- Customers of the air freight industry have continued their pessimistic outlook and cut cargo further. Although there is no obvious inventory overhang, pessimistic expectations are driving the need for air freight down, with purchasing managers confidence index indicating no growth prospects.

Air freight weakens further as purchasing managers confidence remains low



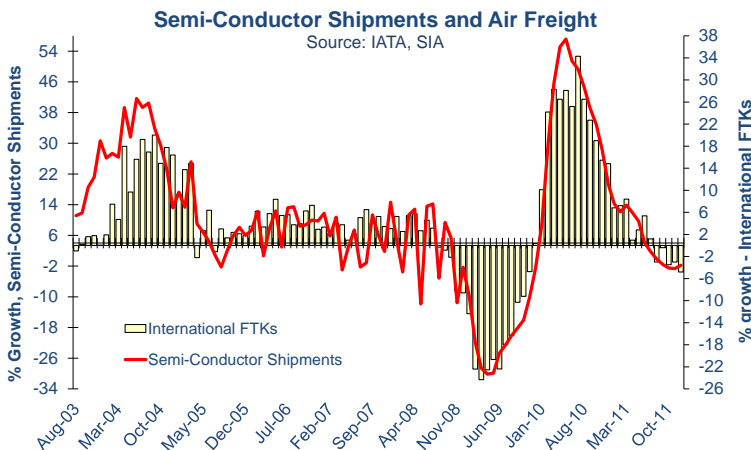
- International FTKs continued their downward trend, which started earlier in the year, a few months after the purchasing manager's index showed signs of weakness.
- With the index persisting below the expansion/contraction threshold for several months now, there is no sign of trade growth ahead.

Inventories to actual sales stable but inventories expectations are falling



- It is clear that changes in business inventories are a major driver of turning points in the air freight market. For example, the 2009 upswing in air freight demand was matched with businesses restocking inventories.
- At present, air freight is showing decline, even though actual inventory to sales ratios are stable. It is likely the case that expected inventory to sales ratios (not observable) are declining as a result of weak business confidence, resulting in a reduction in air freight transport and a fall in FTKs.

Semiconductor shipments rebounded slightly, while air freight continued its decline



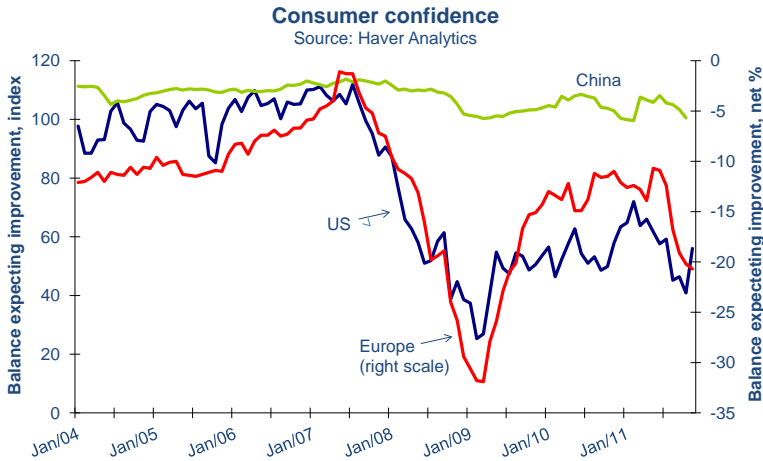
- Products with high value – low volume characteristics are typically carried by air freight. Semi-conductors are one such product and they are good indicator of air freight volume movement (also being a good proxy for shipments of other electronic goods). The most recent data continues to show declines in the shipment of semi-conductors, coupled with falling rates of international FTKs.

Demand Drivers

Key points:

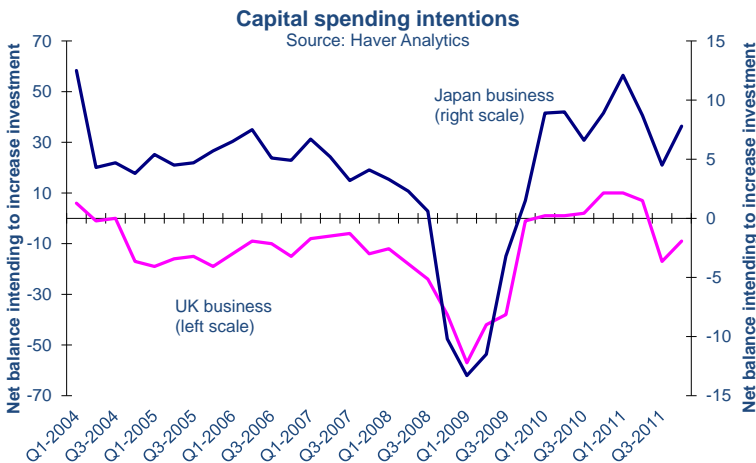
- Consumers in Europe have become more pessimistic as the year has progressed, but American consumers have managed to regain some confidence. World trade is flat, while international air FTKs are dropping sharply, indicating that cargo is now being moved by other transport modes.

Consumer confidence is down in Europe, while stable to rebounding in China and US



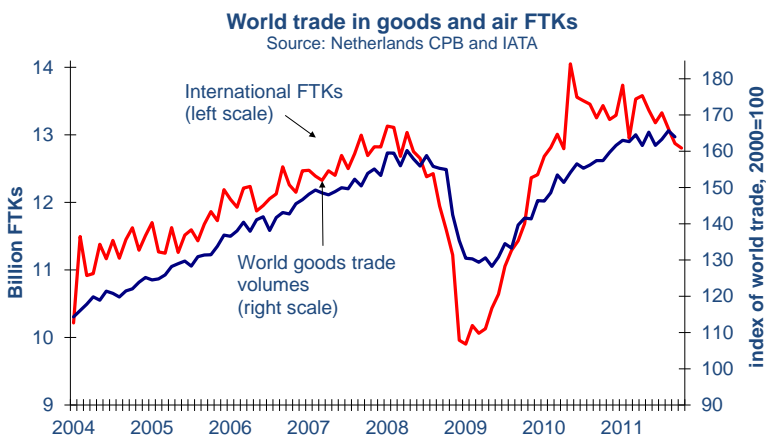
- European consumer confidence has continued to decline as fears for job security and general economic stability are remaining under question.
- The Chinese consumers have continued to be relatively stable in their outlook, although some decline in the latest data is evident. US consumer confidence has risen sharply recently, reflecting falling gasoline prices, increased employment and better stock market performance.

The corporate sector shown some activity in the last quarter



- Capital investments are an indicator of future air freight activity as capital goods of high value and low weight also get moved by air. The corporate sector spent some of its cash wealth in 2010 on investment, but with economic uncertainty in more recent times, that trend has been somewhat suppressed. Latest data shows an increase in capital spending, however this is not necessarily indicative of a trend change.

World trade has continued in no-growth band of volatility, with FTKs declining further



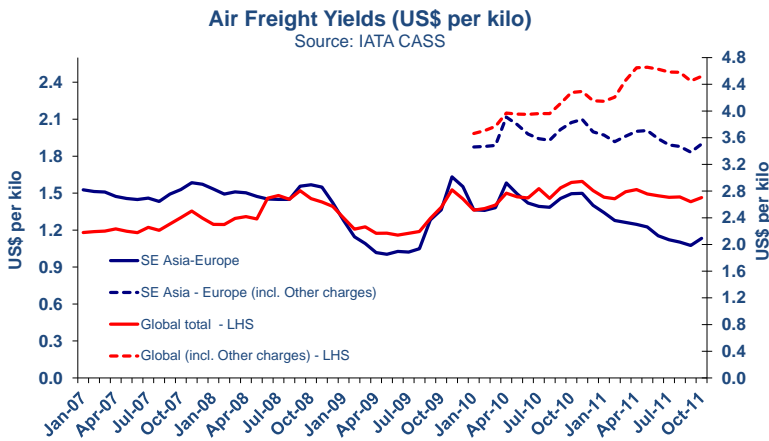
- Changes in international trade can be an indicator of international cargo movement, by providing a proxy of manufacturing activity. Since 2010, trade growth has been both volatile and flat.
- International FTKs reached a peak in 2010 and have gradually been declining since. The fall has continued in the last quarter of 2011, indicating that goods which continue to be traded are now being carried on other modes.

Revenues and Yields

Key points:

- ↗ Cargo rates have continued their decline in an unsupportive economic climate. Downward pressure on revenues has persisted, with some regions suffering more than others. The revenue outlook looks weak.

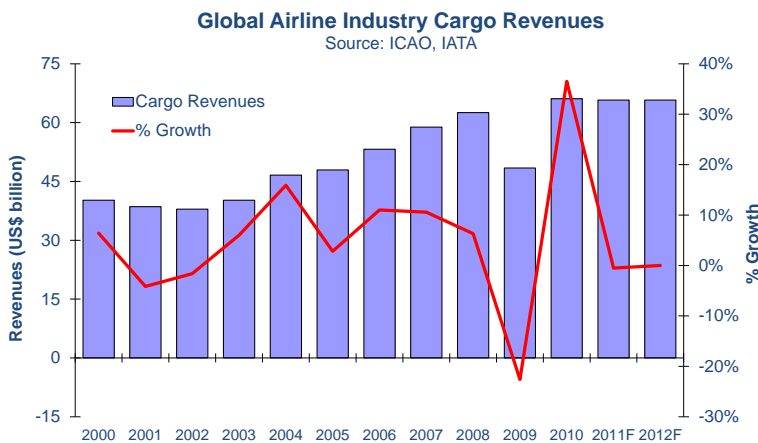
Cargo rates are down year on year, global surcharges have increased



Note: Other charges include handling charges, dangerous good fees, special charges, fuel surcharges, security etc

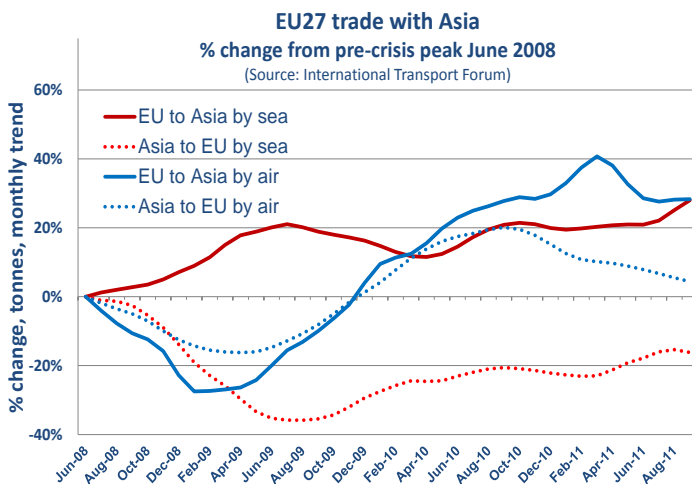
- ↗ Simple cargo rates have been declining since 2010, with a slight rebound in the latest month of data, October. Global rates have fallen almost 8% year on year, and SE Asia to Europe has taken a drop of 24%.
- ↗ Surcharges have not moved in the same direction, likely because high jet fuel prices have persisted, despite weak economic conditions.

Revenues have remained suppressed



- ↗ Downward pressure on cargo revenue growth rates has persisted. Although actual global revenues are holding in spite of economic conditions, some regions are not performing. A lack of US and European demand for Asian manufacturing, coupled with increased capacity from growing passenger fleets, has kept downward pressure on yields.

Sea transport is picking up the declining air cargo task



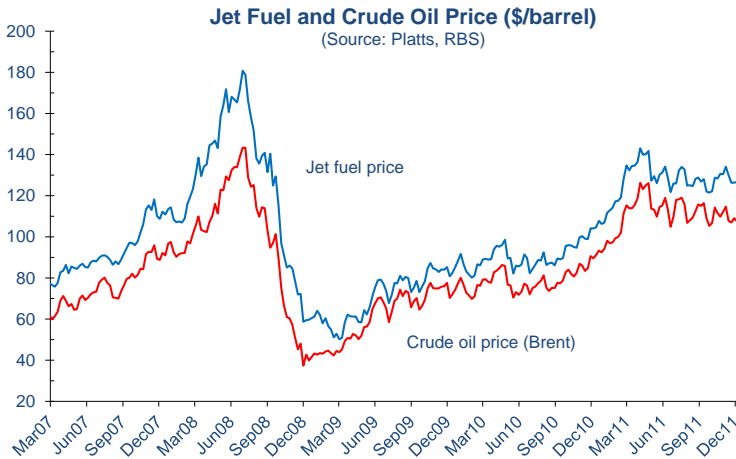
- ↗ Looking more closely at transport between Asia and Europe, we can see that declines in air cargo have been paired with increases in sea cargo, a less expensive mode of transport.
- ↗ Both export and import growth rates for air and sea are tending to converge – indicating that at least in part, the fall in air freight is being mirrored by an upswing in sea transport. So a result of the reduced demand in Asian manufactured goods is not necessarily a fall in total shipping, at least for now, but rather a movement toward sea transport, the cheaper mode.

Costs

Key points:

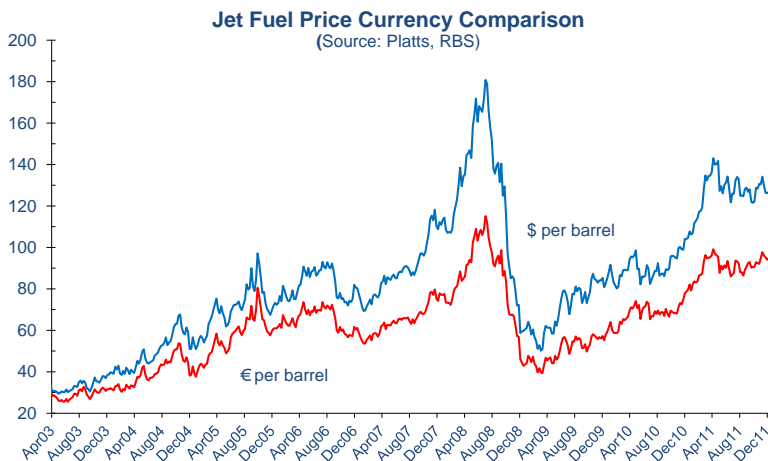
- Jet fuel prices have stayed high over the last several months, despite the weak economic climate. The latest data indicate some relief to cost pressures, with a drop in prices in December. Labour costs have also dropped Q3.

Fuel prices have fallen a little but persist well above 2010 levels



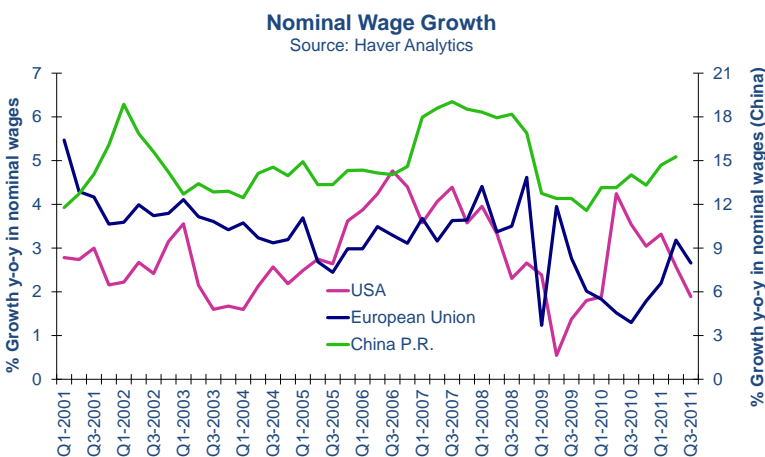
- After a peak earlier this year in March, jet fuel prices have been declining at a slow and volatile rate. Aside from a recent fall in jet fuel prices, there has been little relief with price levels well above those recorded at the same time last year.
- The most reasonable explanation for such high prices is tight supply, counteracting the economic gloom. The recent price cut has come as a result of softening in commodity's international market.

US \$ and Euro oil prices have both given way at year end



- Over the last several months, weakness in the Euro against the US \$ meant that Euro-based airlines could not take advantage of any fall in oil prices, which are US\$ based. In recent data, US\$ and Euro jet fuel prices both gave way. However, within the last week the Euro dropped against the US \$ to the lowest levels since January – European airlines could only realise a portion of the decline in fuel costs.

Wage rate decline providing some relief



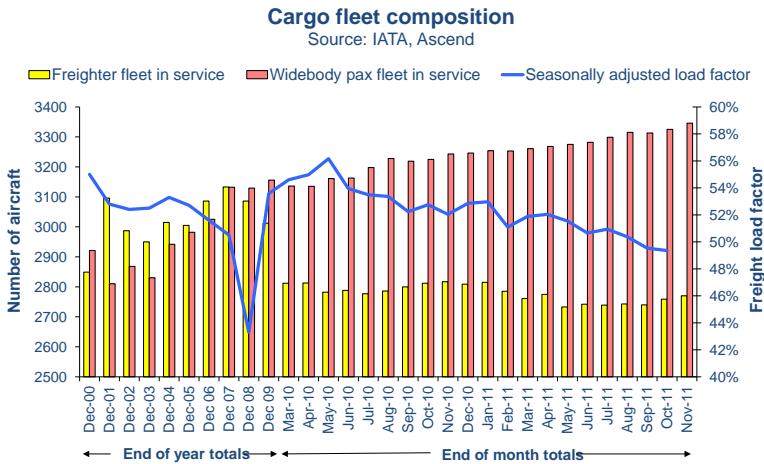
- Given that non-fuel inputs are largely fixed for certain periods, the main cost driver in difficult times is poor utilization. Nevertheless, labour costs have shown decline in both the USA and in Europe, bringing some relief. Although the latest data is not available for China, the recent trend has been wage inflation in this developing economy, where economic growth support tighter labour markets.

Capacity

Key points:

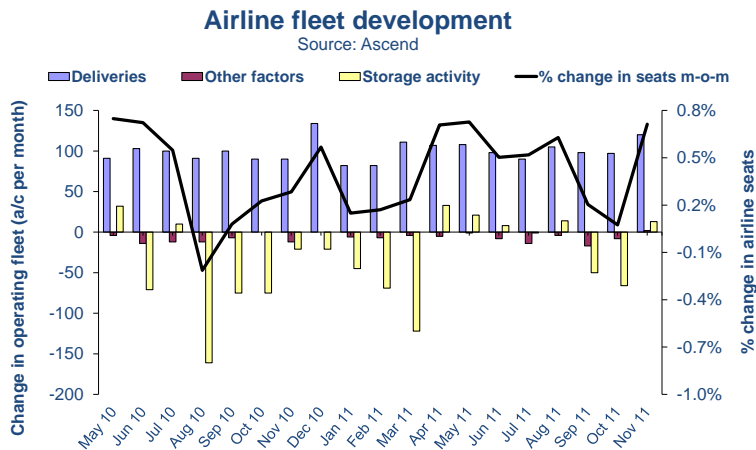
- Freighter aircraft are being reduced, but the increase in twin aisle aircrafts in more than offsetting that reduction, keeping cargo capacity high. Large deliveries planned for 2012 will exacerbate that condition.

Passenger aircraft continue to increase while freighters fall by 47 over the year



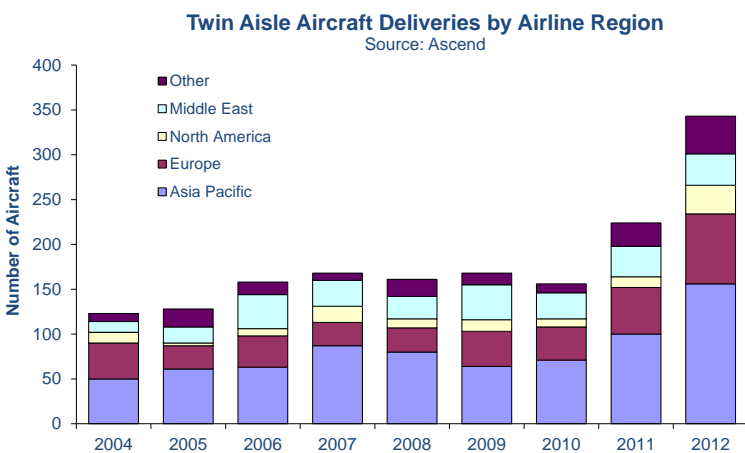
- Passenger aircraft have continued to take a greater share of the air freight market, the number of passenger aircraft has increased by 103 year on year. Conversely, the number of freighters has been reduced by 47 in November, year on year.
- However, the freight load factor is about 6% lower compared to its peak in 2010, implying that the reduction in freighter capacity has been more than offset by the increase in passenger aircraft having belly capacity.

New aircraft deliveries are adding to cargo capacity



- Recent months have seen weak economic conditions and high fuel price push aircraft into storage and retirement. However, those actions have been dominated by the increase in aircraft deliveries, and now also aircraft being taken out of storage.
- Airlines have managed the freighter fleet with aircraft reductions, but the increase in passenger aircraft has brought on new cargo capacity in any case.

Twin aisle deliveries to rise significantly this year and next



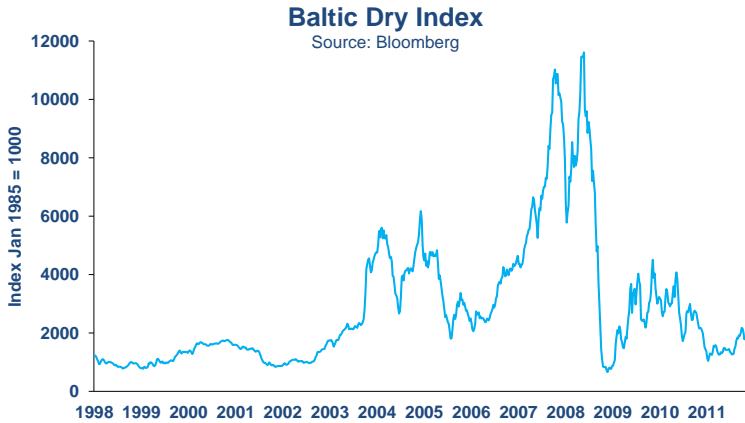
- The lower levels of twin aisle aircraft delivery seen in 2010 are not reflective of current and future indications. Deliveries taking place in 2011 increase sharply, by 68 aircraft or 44%. The expected deliveries in 2012 will increase at an even greater rate, 53%, relative to 2011. The expected twin aisle fleet will be about 340 aircraft.
- These deliveries, ordered in more favourable conditions, will add to capacity challenges in the present difficult climate.

Competition

Key points:

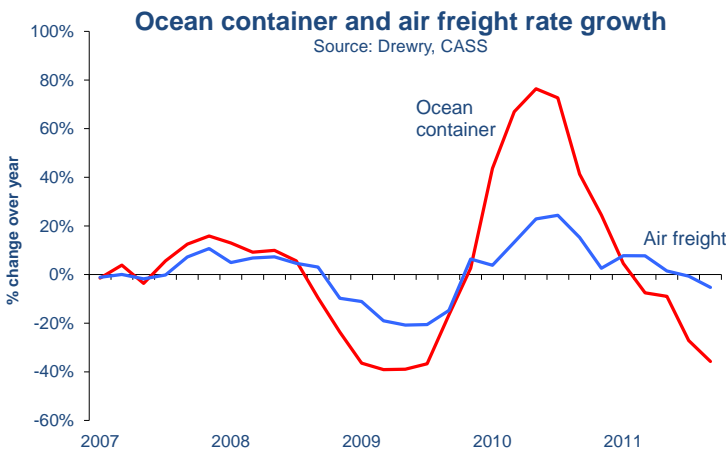
- Freight rates of other modes have been falling, partly due to capacity increases and also the pessimistic outlook for trade. Lower competitor rates are supporting substitution away air freight, but business expectations are also driving the shift.

Bulk shipping costs have fallen slightly, reflecting a gloomy trade outlook



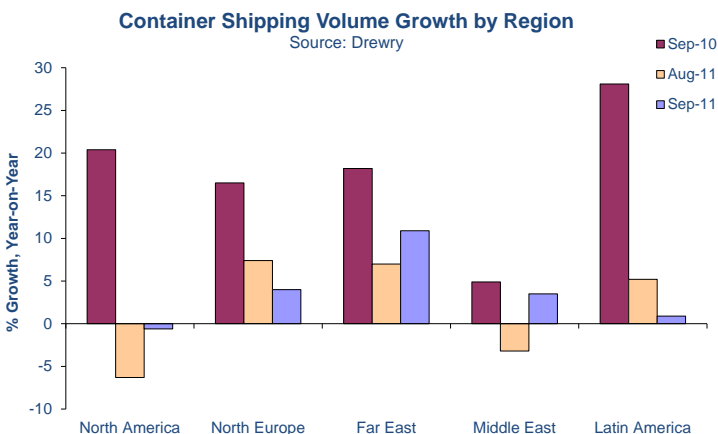
- In the last quarter a surge in the cost of bulk transport by ocean indicated, despite an increase in capacity, that underlying demand for movement of bulk transport was showing some strength. The latest data has shown a slight decline in costs; however that is in many ways to be expected given the weak outlook for trade.

Ocean container rates continue their rapid downward trend to year end



- In the past year ocean containers rates have seen drastic declines. They have gone from highs of over 75% growth in 2010 to declines in the order of 35% to October 2011, year on year. This may account for some of the recent decline in air cargo volumes, with pessimistic business conditions also being a factor.
- Air freight rates have also declined. In terms of lower prices inducing quantity demanded however, the fall would have to be great for substitution from ocean to air transport, which is about 15 times more expensive.

Shipping volume growth has been widely mixed



- Despite financial and economic instability European, shipping from Northern Europe has managed to increase, likely due to the strong trade links across the North Atlantic. The Far East region, which has the weakest air freight market, is strongest by sea. Rates as well as varying economic condition globally could explain this. The need for air freight to western consumers of light weight-high value items has diminished, while the developed world is still growing and needing transport of bulk commodities.

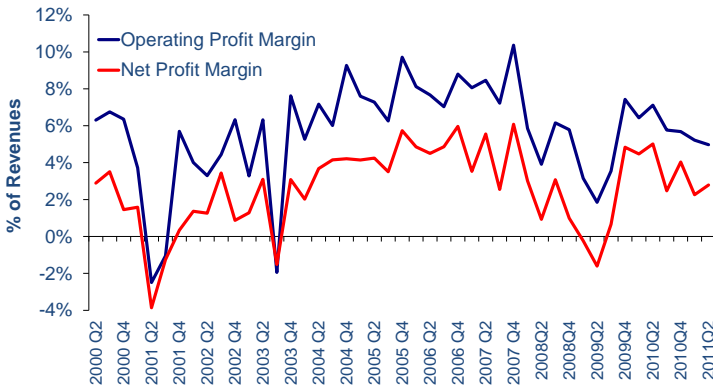
Profitability

Key points:

- Cargo profitability began to fall in the second half of 2010 and declined further this year. Although about 50% of airlines are meeting and exceeding their cost of capital, the results are passenger and seasonality driven, as heads of cargo indicate a much less confident outlook.

Profit margins continue to be squeezed by capacity challenges and fuel prices

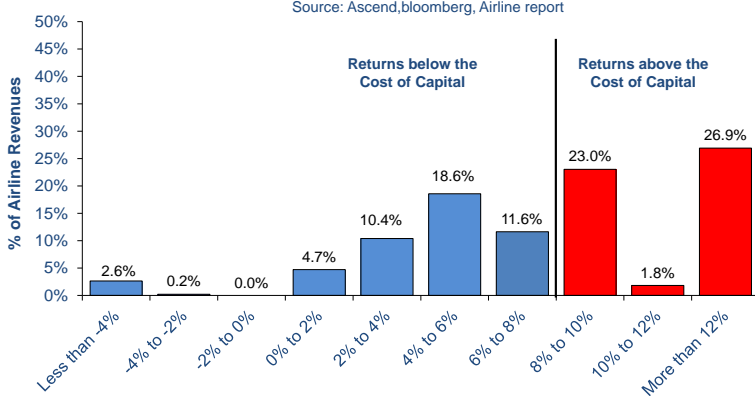
Profitability of US Cargo Only Airlines
Source: US BTS



- US cargo only airlines have been experiencing squeezed profit margins for some time now, and the 2011 year end has not been any different. Nevertheless, the airlines have been performing relatively well, in spite of significant falls in cargo revenue and diminishing load factors.
- Cargo operations elsewhere in the world are not as promising. Singapore airlines cargo posted operating losses (US\$31 million) in their Q3 financials.

Profitability is strong, supported by seasonal factors

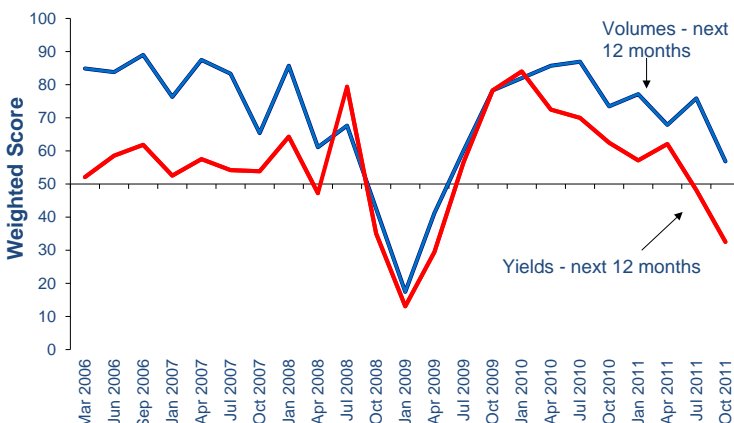
Airline Operating Profit Margin - Q3 2011
(Passenger and Cargo)
Source: Ascend, bloomberg, Airline report



- The Q3 assessment of profitability is good, showing that about 50% of airlines are generating returns that meet and exceed their cost of capital. However, this performance has been driven mostly by passengers, and not cargo. Furthermore, the seasonal impact of year end travel is also having a positive impact on these results.

Revenue growth expectations are clearly negative

IATA survey of heads of cargo



- Although Q3 data on heads of cargo expectations is not available yet, the previous negative outlook is consistent with findings so far.
- The view for air freight volumes is substantial decline, and the outlook for yields is also pessimistic.

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					
	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11
Africa - Middle East	-0.2%	-0.3%	11.4%	7.2%	6.2%	4.3%
Europe - Far East	-7.6%	-3.5%	-3.0%	-7.4%	-9.7%	-11.5%
Europe - Middle East	-11.1%	-9.3%	-7.2%	-14.4%	-12.2%	-7.8%
Within Far East	-18.2%	-15.5%	-13.3%	-14.2%	-12.4%	-12.0%
Within Middle East	-1.2%	6.6%	9.0%	1.3%	3.6%	7.9%
Within South America	-3.4%	-19.8%	-19.4%	-20.3%	-12.9%	-3.3%
Mid Atlantic	5.6%	5.1%	10.2%	5.3%	9.3%	8.2%
Middle East - Far East	-4.2%	-1.5%	-4.2%	-5.4%	-6.7%	-8.4%
North Atlantic	-3.2%	-2.7%	-3.6%	-7.2%	-3.4%	-7.5%
North America-Central America	28.2%	5.7%	-1.6%	-14.6%	-5.2%	-6.4%
Europe - Africa	0.8%	-0.4%	0.6%	0.0%	4.3%	2.3%
North America-South America	-2.4%	-4.3%	0.6%	-10.3%	2.3%	4.3%
Far East - Southwest Pacific	-5.5%	-0.5%	1.2%	0.5%	8.1%	1.2%
North and Mid Pacific	-9.3%	-7.3%	-7.4%	-5.5%	-8.3%	-9.6%
South Atlantic	-26.5%	-13.5%	-3.6%	-13.3%	10.6%	6.8%
Within Europe	2.0%	0.9%	-1.8%	-3.3%	4.0%	-4.0%

Outbound CASS Market Revenues (excl. fuel surcharges)

Origin Region	US\$m Q3 2011	% Growth in Air Freight Revenues, Year-on-Year					
		2010 Q2	2010 Q3	2010 Q4	2011Q1	2011Q2	2011Q3
Africa	51.7	55.4	58.2	48.4	26.6	10.9	3.6
Caribbean	5.2	7.0	23.3	25.8	11.2	22.8	-2.1
Central America	60.9	65.6	44.1	42.2	26.4	-3.0	-2.5
Europe	1595.6	33.9	41.0	28.5	32.5	32.4	14.7
Japan & Korea	785.5	100.2	55.4	13.0	-0.1	-13.2	-16.9
Middle East	62.7	89.1	69.3	2.6	-29.4	-33.9	-28.3
North America	845.3	56.1	42.1	31.9	21.0	11.7	10.6
South America	254.8	67.2	49.4	48.9	22.2	16.3	15.8
South East Asia	1177.3	130.3	87.1	32.9	13.5	-8.2	-18.6
South West Pacific	157.7	20.3	10.3	12.5	6.5	20.7	19.8

Inbound CASS Market Revenues (excl. fuel surcharges)

Destination Region	US\$m Q3 2011	% Growth in Air Freight Revenues, year-on-year					
		2010 Q2	2010 Q3	2010 Q4	2011Q1	2011Q2	2011Q3
Africa	380.1	29.4	24.6	20.6	22.2	15.8	18.0
Caribbean	32.2	5.1	10.6	17.1	-3.2	15.4	16.3
Central America	125.8	73.5	65.7	45.6	39.5	25.1	19.1
Europe	1145.4	82.6	54.8	18.0	2.8	-11.3	-16.8
Japan & Korea	333.7	76.5	71.2	52.8	29.8	16.0	6.2
Middle East	332.2	18.1	14.6	15.7	12.3	17.7	11.6
North America	930.6	108.6	83.7	26.9	15.6	1.1	-15.1
South America	476.1	85.7	60.5	38.7	36.4	18.2	12.3
South Asia	170.3	67.6	49.6	27.5	6.2	2.4	-1.9
South East Asia	750.8	71.1	56.1	39.6	29.0	17.7	5.7
South West Pacific	319.5	46.5	33.6	30.3	22.6	22.7	25.5

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

IATA Economics
22th December 2011