

# CARGO eCHARTBOOK

## OVERVIEW

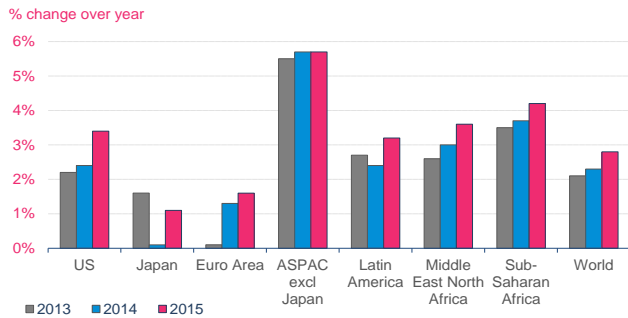
Q1 2015

- Financial performance in the cargo business remains poor and does not deliver adequate returns for investors. Overcapacity has resulted in lower load factors and has placed downward pressure on yields. Lower jet fuel prices may provide temporary relief to some carriers but are not expected to have a lasting impact on cargo business profitability as jet fuel price reductions will be passed on to consumers. If lower jet fuel prices persist it will help boost demand for air cargo services but favorable impact on financial performance on the cargo business will only be achieved if coupled with capacity discipline. Underlying economic demand drivers remain positive and business confidence continues to signal expansion in manufacturing activity but with dampened expectations. Risks remain high as deepening of the Russian-Ukraine crisis, uncertainty in oil price, turmoil in the Middle East and continued concerns around sovereign debt of EU member states weigh on confidence. However, continued positive demand for air-freighted commodities, as indicated by expansion in semi-conductor shipments, are a potential source of optimism for the year ahead.
  
- **Economic Situation** – The global economy is expected to grow faster in 2015 than at any point since 2010. However, the forecast growth rate of 2.8% is lower than was expected in mid-2014 (page 2).
- **Traffic Growth** – Air freight traffic in 2014 expanded by 4.5% compared to 2013, expansion in freight volumes continued in January 2015 compared to a year ago albeit at a more subdued pace of 3.2% (page 2).
- **Demand Environment** – Growth in global trade volumes has continued to expand, with mirrored increase in FTKs. Business confidence continues to signal expansion in manufacturing activity but with dampened expectations (page 3).
- **Demand Drivers** – Demand drivers for consumer confidence remain positive across key markets, although in Europe pessimism still prevails but there are signs of significant improvement in expectations (page 3).
- **Capacity** – Freight capacity addition in 2015 will be driven by delivery of wide body passenger aircraft, for every one tonne of hull capacity added by a wide body freighter three tonnes will be added by wide body passenger aircraft (page 4).
- **Competition** – The difference between sea and air freight rates has largely remained unchanged over the past year. A key development to watch in 2015 is how the new Silk Road rail link from China to Europe will impact modal choice and trade dynamics on this important trade lane (page 4).
- **Revenue and Yields** – the recent decline in yields are consistent with the continued weakness in load factors but may also partially be explained by a decreasing cost base with the drop in jet fuel prices (page 5).
- **Costs** – jet fuel prices experiencing a decline of 46% since their 2011 highs and 39% since their 2014 highs in USD terms (page 5).
- **Profitability outlook** – if lower fuel prices persist it will boost demand for air cargo services but favorable impact on financial performance of the cargo business will only be achieved if coupled with capacity discipline (page 5).

## Economic Outlook & Traffic Growth

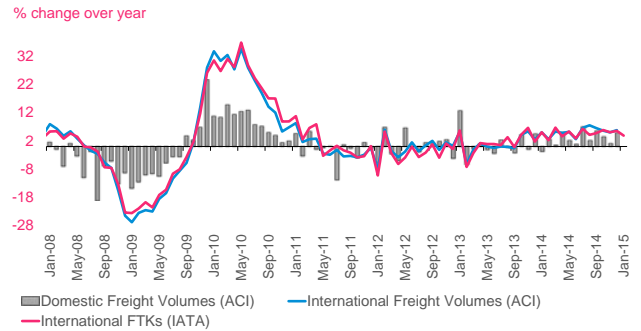
- ➔ The global economy is expected to grow faster in 2015 than at any point since 2010 (1). However, the forecast growth rate of 2.8% is lower than was expected by purchasing managers in mid-2014 and continues to be below long term trend. The growth in the global economy remains unbalanced.
- ➔ In advanced economies, the US continues to be a strong source of growth aided by patient monetary policy in no hurry to accelerate tightening. The UK continues to expand with rising PMI. The recovery in the Eurozone has broadened with every country in the block expected to grow in 2015, although on average at an anemic rate of 1.6%. The quantitative easing program announced by the ECB has helped growth prospects although further intervention may be needed to support the recovery through accommodative fiscal policy in the short term and in lockstep with long term structural reform (3).
- ➔ In emerging economies, Brazil is flirting with recession while Russia has contracted at the steepest rate since 2009 as sanctions begin to bite. India has strengthened prospects for growth, further aided by loosening of monetary policy made possible with inflationary pressures easing due to lower oil prices. China is targeting a “new normal” growth rate of 7% below its 30 year average of 10% but still over double the expected 2015 US growth rate of 3.4%.
- ➔ Air freight traffic in 2014 expanded by 4.5% compared to 2013, expansion in freight volumes continued in January 2015 compared to a year ago albeit at a more subdued pace of 3.2% (4 & 5). The lower growth rate in air freight markets is not explained by seasonal variability in the timing of the lunar New Year but rather continued challenges in the demand environment (6).

### 1. Forecast for GDP growth



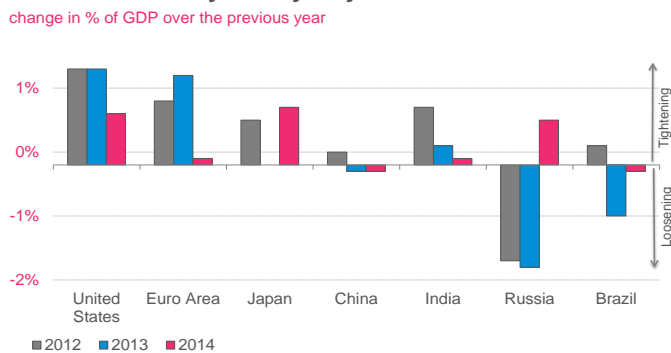
Source: EIU Viewswire

### 4. Freight Traffic Growth



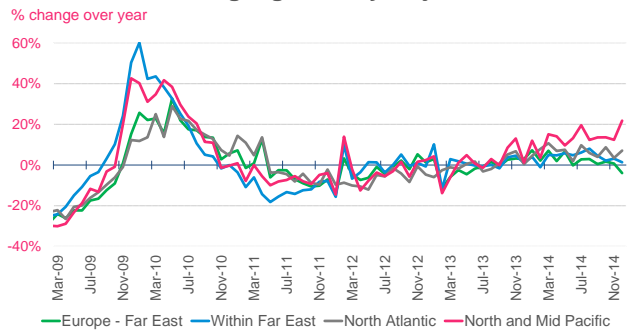
Source: IATA, ACI

### 2. Government Cyclically Adjusted Fiscal Balance



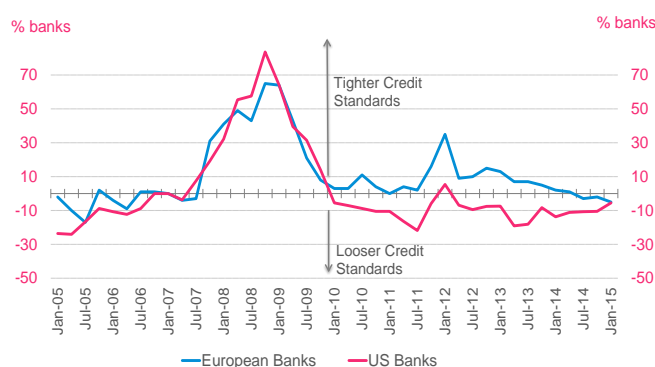
Source: IMF

### 5. International Freight growth by major routes



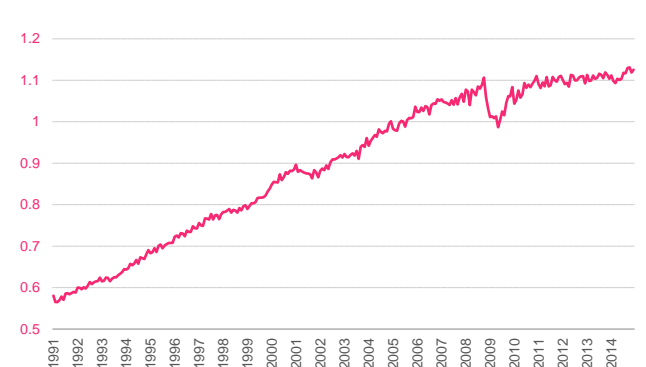
Source: IATA, ODS

### 3. Bank credit conditions



Source: ECB, Federal Reserve

### 6. Ratio of World Trade to Domestic Industrial Production

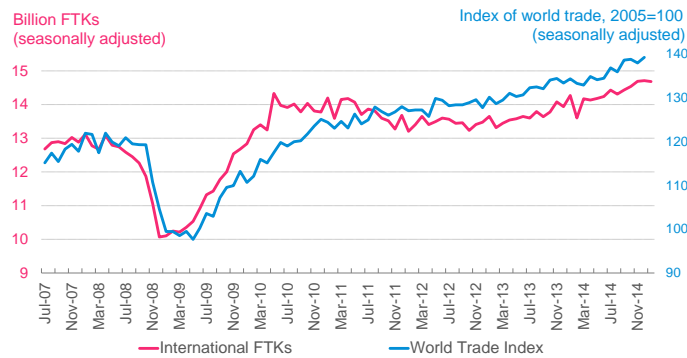


Source: Netherlands CPB

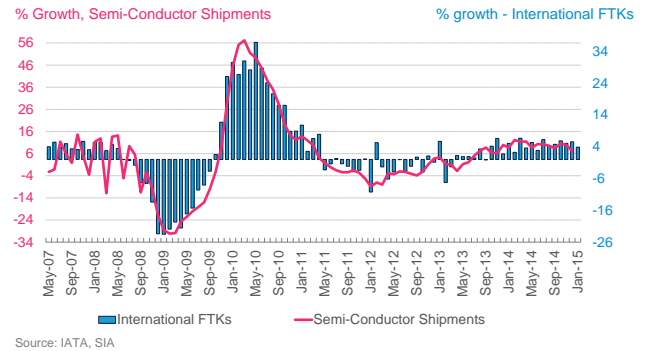
## Demand Environment & Drivers

- ➔ Growth in global trade volumes has continued to expand, with mirrored increase in FTKs growth over the past year (7). There have been different factors influencing demand on key trade lanes. On North-Mid Pacific route air freight experienced double digit growth in 2014 and may have gotten a boost from the backlog in US West Coast sea ports. In contrast, the intra-European air freight market contracted by nearly 1% in 2014, weighed down by sluggish economic performance and increasing risk environment.
- ➔ Business confidence continues to signal expansion in manufacturing activity but with dampened expectations (8). It remains to be seen if the spike in inventory to sales ratio gives cause for concern as a small inventory build-up is consistent with the lead up to the end of year holiday season (9). Demand drivers for consumer confidence remain positive across key markets, although in Europe pessimism still prevails but there are signs of significant improvement in expectations (11 & 12). The growth in air freight destined for Asia, supported by China's transition to a consumption driven economy, is expected to continue well into the future, transforming the demand environment and making Asia not only a major origin for air freight but also a leading destination. Continued positive demand for air-freighted commodities, as indicated by expansion in semi-conductor shipments are a potential source of optimism for the year ahead (10).

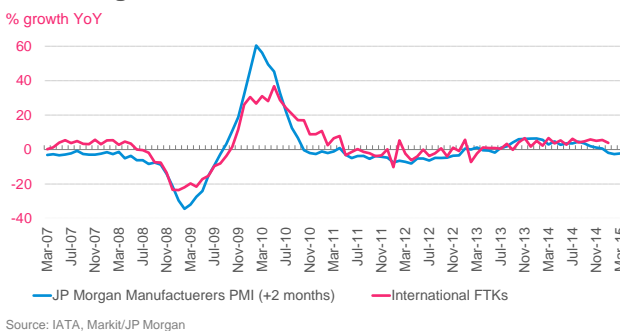
### 7. World trade in goods and air FTKs



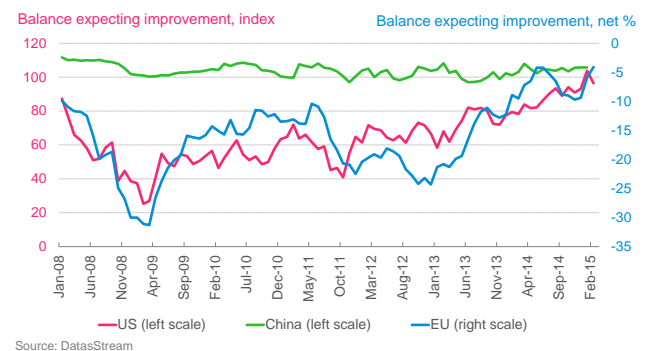
### 10. Semi-Conductor Shipments & Air Freight



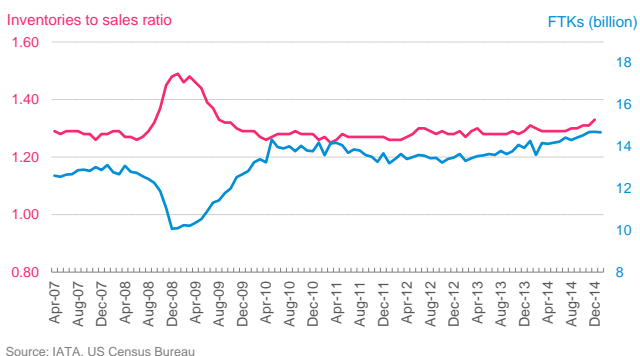
### 8. Purchasing Managers confidence survey & Air Freight Demand



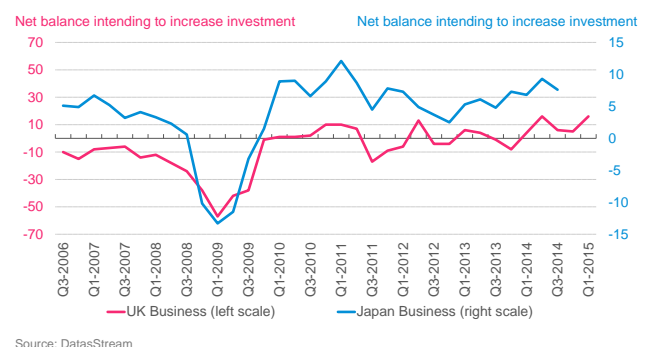
### 11. Consumer confidence



### 9. Total Business inventories to sales ratio & FTKs



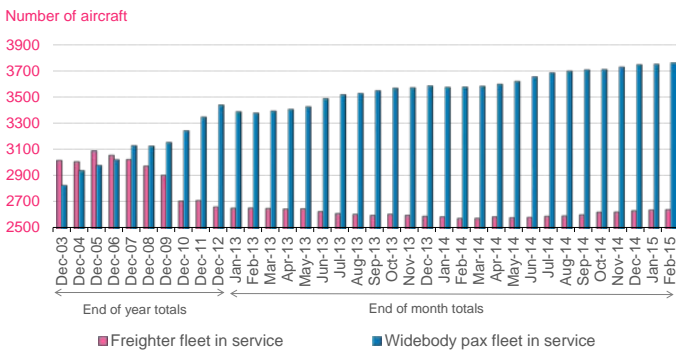
### 12. Capital spending intentions



## Capacity & Competition

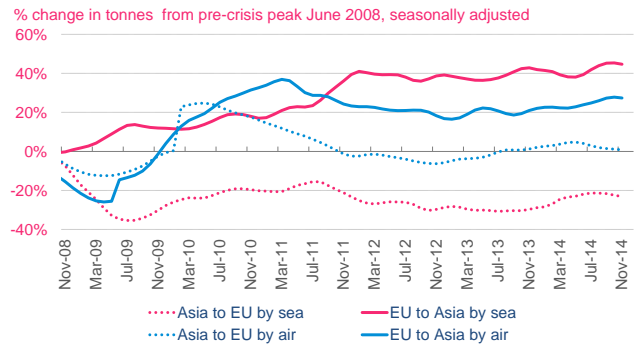
- ➔ Capacity addition in 2015 will be driven by delivery of wide body passenger aircraft, for every one tonne of hull capacity added by a wide body freighter three tonnes will be added by wide body passenger aircraft (13). Freightler aircraft utilization rates have continued to show a steady improvement and are near their 2011 highs, but air freight load factors are hovering around a weak rate of 46%, although freight only aircraft operate with load factors of about 70% (14). Looking ahead, aircraft utilization rates and freight load factors will continue to be challenged by fleet expansion, with an expected 7.4% increase in 2015 of new wide body aircraft (15).
- ➔ Air freight volumes from the EU to Asia are just 1% higher than they were in June 2008 but air freight volumes from Asia to EU have grown by 27% (16). This rebalancing in air freight volume has helped fill cargo space on both legs of a round trip journey. The difference between sea and air freight rates has largely remained unchanged over the past year (18). A key development to watch in 2015 is how the new Silk Road rail link from China to Europe, which is estimated to on average shave two days off end-to-end rail journeys, will impact modal choice and trade dynamics on this important trade lane.

### 13. Cargo fleet composition



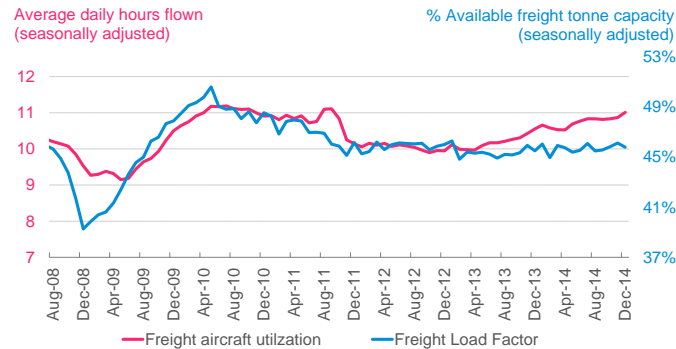
Source: IATA, Ascend

### 16. EU28 Trade with Asia



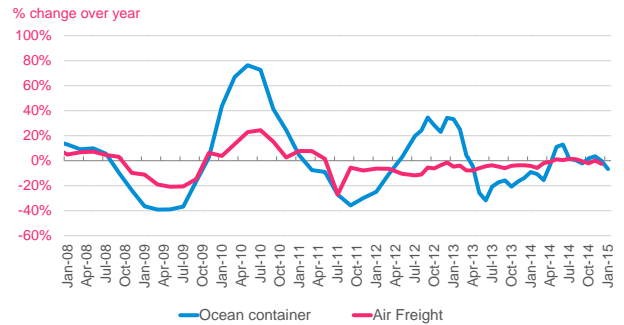
Source: International Transport Forum

### 14. Freight load factor & freighter aircraft utilization



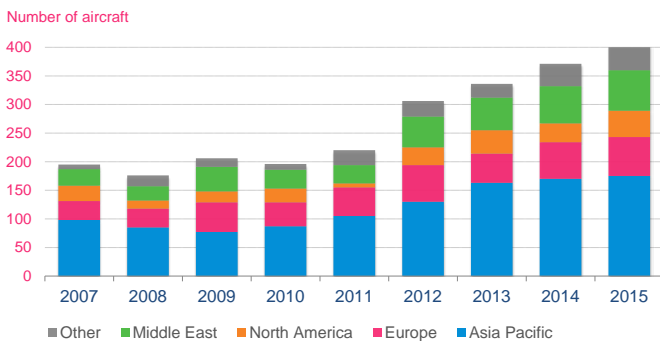
Source: IATA, Boeing

### 17. Ocean container and air freight rate growth



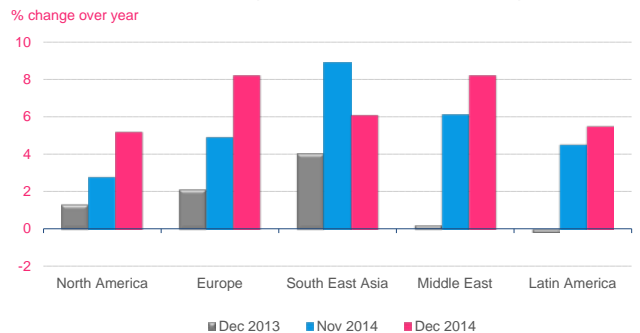
Source: Drewry, IATA CASS

### 15. Widebody Aircraft Deliveries by Airline Region



Source: Ascend

### 18. Container Shipping Volume Growth by Region

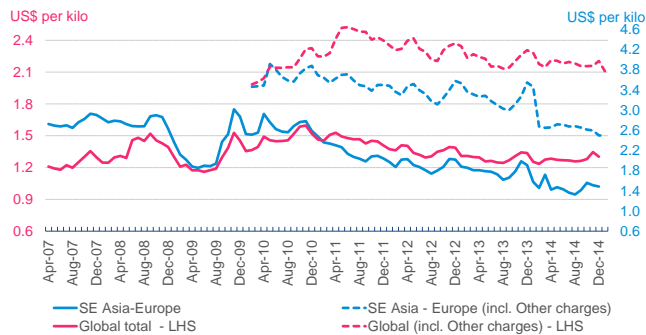


Source: Drewry

## Revenues, Costs & Profits

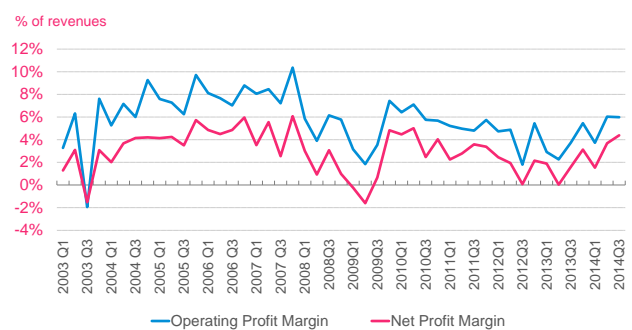
- ➔ Air freight yields have been declining steadily since mid-2011 and are now down 16% since that time (19), consistent with continued weakness in load factors. Although the recent decline in yields may also partially be explained by a decreasing cost base with jet fuel prices in USD experiencing a decline of 46% since their 2011 highs and 39% since their 2014 highs (20).
- ➔ Fuel hedging means that most airlines are not yet benefiting fully from the lower fuel price. For airlines with a significant unhedged portion of their fuel, the drop in fuel prices may have a temporary boost to airline profitability. Although airlines with a greater hedged position may have their profitability adversely impacted if their competitors are in a better position to pass on the fuel cost savings. Once the impacts of hedging dissipate the fuel price reduction will be passed on to consumers. Therefore, the change in fuel price is not expected to have a lasting impact on profitability of the cargo business, which has not delivered adequate returns for investors (22 & 23). However, if lower fuel prices persist it will boost demand for air cargo services, if combined with capacity discipline this would have a favorable impact on financial performance.
- ➔ Consistent with the uptick in the economic cycle, heads of cargo surveyed in January 2015 expect stronger growth in traffic volumes and falling inputs costs combined with declining yields over the next 12 months (24).

19. Air Freight Yields (US\$ per kilo)



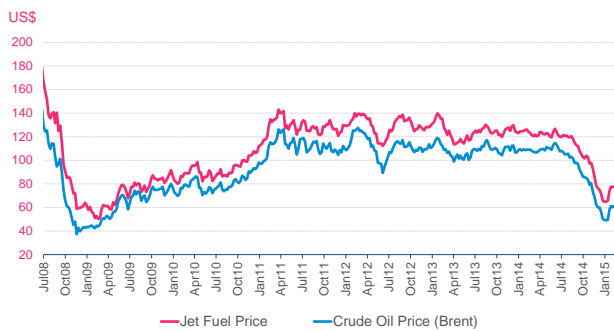
Source: IATA CASS

22. Profitability of US Cargo Only Airlines



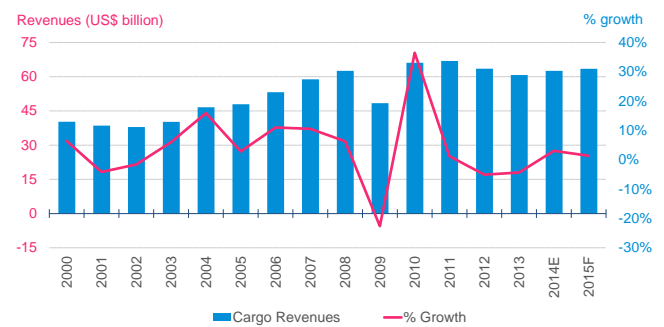
Source: US BTS

21. Jet Fuel and Crude Oil Price (US\$/barrel)



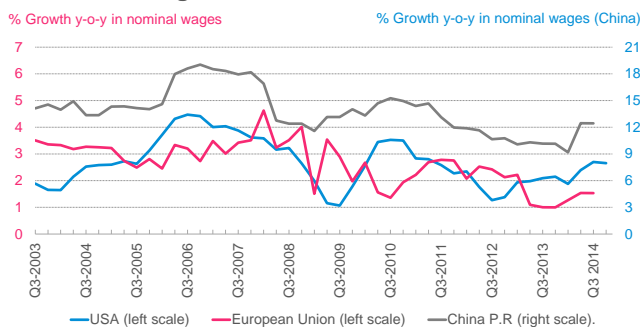
Source: Platts, Oanda, DigitalLook

23. Global Airline Industry Cargo Revenues



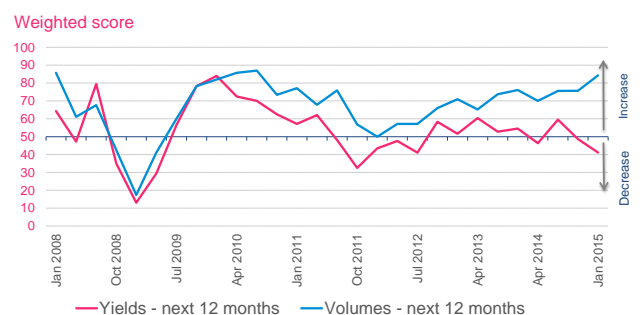
Source: ICAO, IATA

21. Nominal Wage Growth



Source: DataStream

24. IATA survey of heads of cargo



Source: IATA Business Confidence

## Air Freight Routes and Direction

Table 1. International Freight Volume Growth by Route Area (Source: IATA ODS statistics)

Route Area	% Growth in Freight Tonnes, year-on-year					
	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
Africa - Middle East	0.5%	11.3%	18.2%	13.0%	14.4%	15.8%
Europe - Far East	2.8%	2.9%	0.5%	0.8%	0.3%	-0.2%
Europe - Middle East	-4.0%	5.5%	8.8%	8.3%	11.0%	13.7%
Within Far East	7.2%	8.2%	4.7%	6.7%	6.8%	7.0%
Within Middle East	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Within South America	2.5%	3.7%	-5.0%	2.3%	3.8%	5.4%
Mid Atlantic	7.9%	-4.0%	-5.7%	-2.1%	-1.9%	-1.7%
Middle East - Far East	3.9%	19.5%	15.8%	17.8%	20.2%	22.7%
North Atlantic	9.7%	5.9%	4.0%	4.8%	4.5%	4.2%
North America-Central America	-3.0%	3.8%	-5.2%	-5.5%	-6.8%	-8.0%
Europe - Africa	2.0%	4.6%	0.9%	0.5%	-0.6%	-1.7%
North America– South America	4.3%	1.2%	-0.5%	1.6%	1.7%	1.9%
Far East - Southwest Pacific	-2.7%	-8.1%	-0.9%	-2.5%	-2.0%	-1.5%
North and Mid Pacific	19.8%	12.6%	13.8%	15.2%	15.6%	16.0%
South Atlantic	24.3%	12.7%	14.9%	14.9%	13.9%	12.8%
Within Europe	-4.4%	-0.4%	-0.5%	-0.6%	-0.2%	0.3%

Table 2. Outbound CASS Market Revenues (incl. fuel and other surcharges)

Origin Region	US\$m Q4 2014	% Growth in Air Freight Revenues, year-on-year					
		2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4
Africa	107	14%	-1%	6%	-5%	-4%	11%
Asia Pacific	1619	-14%	-8%	-4%	7%	14%	3%
Europe	2898	4%	6%	6%	7%	3%	-6%
Latin America & The Carribean	534	-6%	-2%	0%	1%	6%	5%
Middle East & North Africa	154	17%	14%	8%	9%	16%	6%
North Asia	1969	13%	21%	21%	23%	17%	6%
North Atlantic & North America	1269	-8%	-4%	-2%	2%	4%	1%

Table 3. Inbound CASS Market Revenues (incl. fuel and other surcharges)

Destination Region	US\$m Q4 2014	% Growth in Air Freight Revenues, year-on-year					
		2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4
Africa	498	-4%	-3%	-1%	7%	11%	8%
Asia Pacific	1849	-3%	2%	4%	5%	6%	0%
Europe	137	0%	8%	7%	9%	0%	-15%
Latin America & The Carribean	1847	-1%	-2%	-3%	12%	9%	-2%
Middle East & North Africa	772	2%	4%	6%	-7%	-8%	-1%
North Asia	629	-5%	2%	3%	15%	9%	1%
North Atlantic & North America	809	2%	6%	10%	5%	6%	-9%

## Glossary

- ACI: Airports Council International
- AFTK: Available Freight Tonne Kilometers
- ECB: 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

9<sup>th</sup> March 2015

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