

# airline CARGO

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management



**No frills**

Low cost carriers look to freight

**Furry freight**

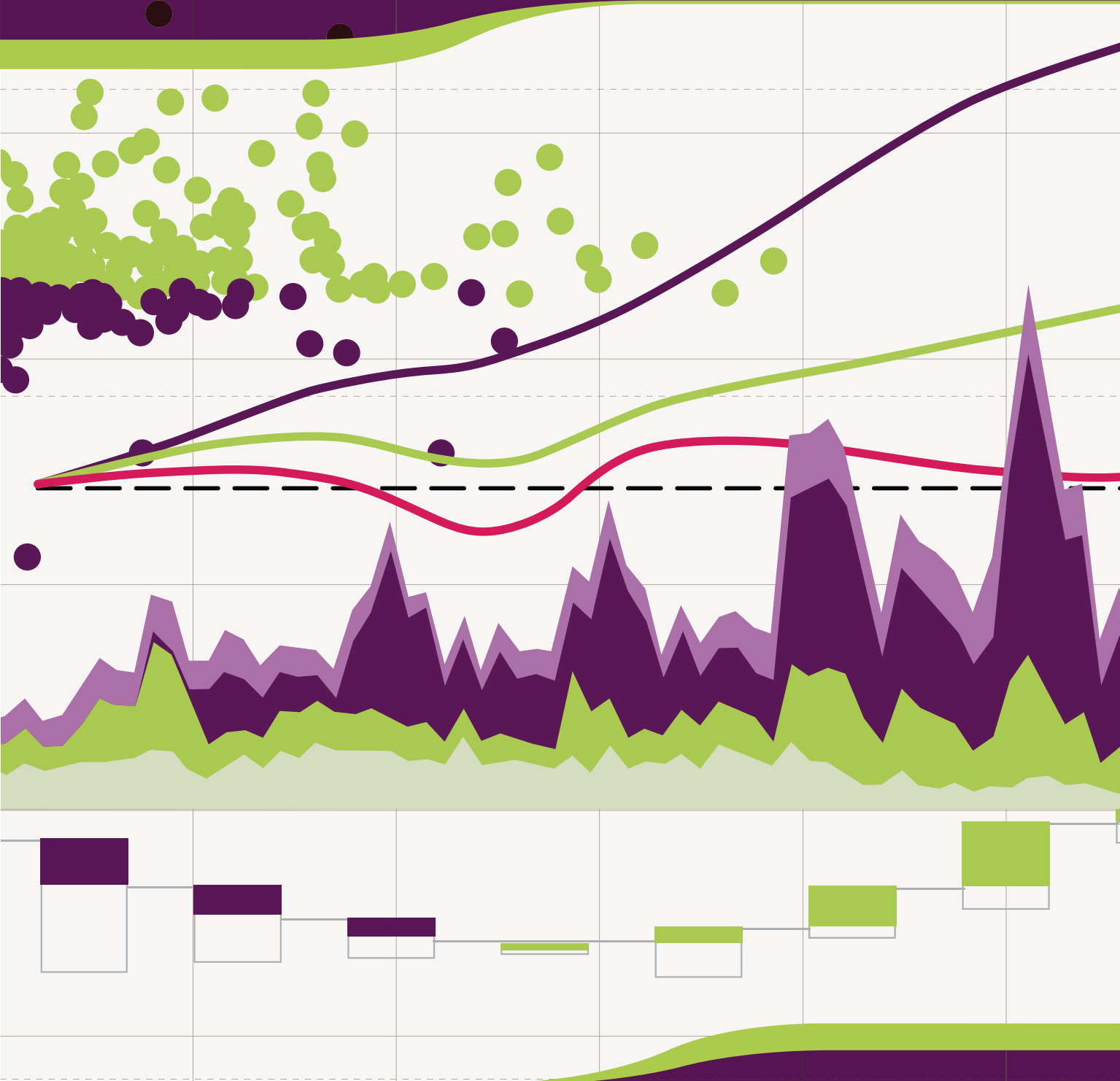
Live animal cargo

# Turning point

Exclusive: Seabury sees growth

↘ EXCLUSIVE

# Seabury's analysis of 2016



# Turning tide

With a tough basis for comparison after 2015's West Coast port strike, 2016 was always going to be a tricky year. Lower oil prices and a decline in high-tech export volumes have also skewed the picture. Seabury's **Marco Bloemen** and **Soufiane Daher** look ahead to what 2017 has in store

**A**s 2016 draws to a close, the air cargo industry is poised at a turning point – times have been tough but there are signs that a more positive phase is beginning. Are they to be relied upon?

This year got off to a difficult start, with air trade volumes hit by the negative comparison with 2015, when traffic was given an exceptional boost by the knock-on effects of the West Coast port strike.

Topping the double-digit transpacific performances recorded in the early months of the year would have been a tall order. Besides other one-off events such as car recalls, the port strike added about 200,000 extra transpacific tonnes last year into the USA, around 80,000 of which were from China, Seabury's analysis has found.

Back to earth with a bang, transpacific air trade fell by 18% eastbound and 11% westbound in the first seven months of this year, contributing to a 1.2% dip in global air trade growth in the same period. In fact, we estimate that air trade growth could have been

marginally positive, without that exceptional uptick in the first half of 2015.

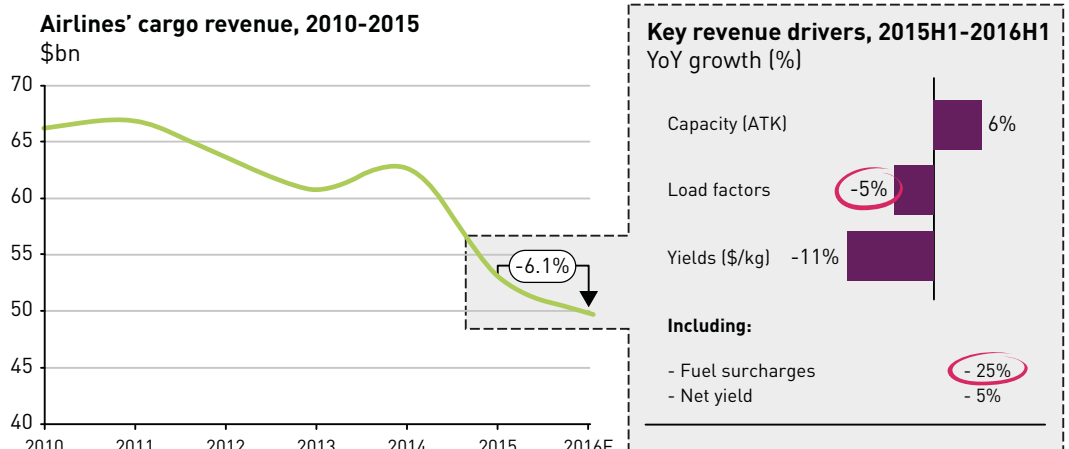
## Stronger second half

With a recovery from the disruptions of 2015 underway, the second half of 2016 looks likely to be stronger, with a traditional year-end peak set to help matters. Still, as shown in Chart 1 (below), cargo revenues may fall about 6% in the year as a whole. While there will be no respite from the downward trend of the past years, fuel cost savings could end up helping profitability to the tune of about \$1.8 billion over the past three years – a small silver lining, but a silver lining nonetheless.

While the drop in fuel prices has provided some relief in terms of operating costs, mainly for freighter operators but also for belly capacity, operators know that this evolution in the oil price is a double-edged sword.

Not only has the oil and gas sector taken a hit, reducing volumes of goods to be transported for some

**Chart 1: Cargo revenue is on a downward trend...**

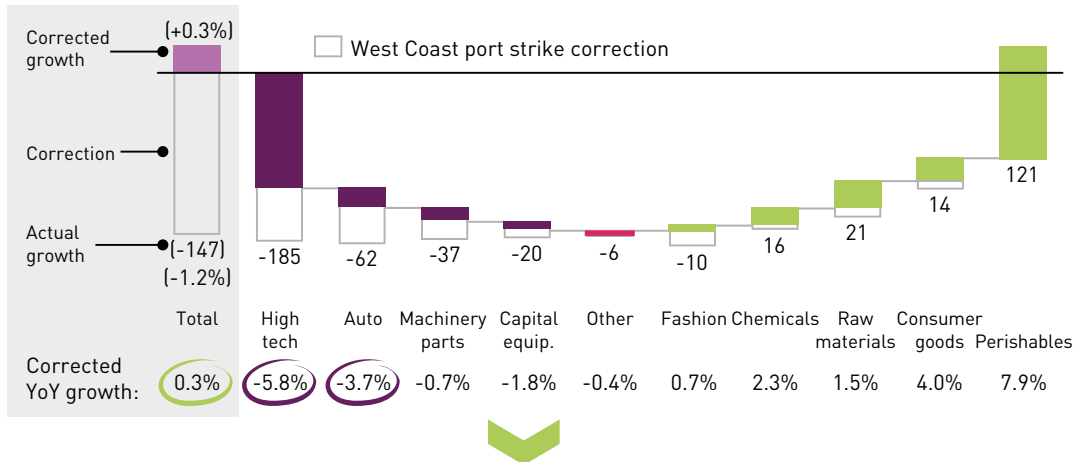


**Lower fuel prices have severely affected cargo revenues, while capacity keeps expanding despite modest demand growth**

Note: Global revenue is based on IATA figures for 2014 and 2015; [source: IATA Revenue Forecast; IATA Monthly Statistics; Seabury Capacity Database; Seabury analysis (August 2016)]

**Chart 2: Air trade in 2016 saved by perishables****Air trade growth by commodity group, 2015-2016 (Jan-Jul)**

Thousand tonnes



**Even when correcting for effect of West Coast port strike, high-tech and automotive are the key declining industries**

*[source: Seabury Global Trade Database (September 2016)]*

operators on some key routes, but the lower operating costs have done nothing to discourage capacity growth, despite weak growth in demand, pushing load factors down once again. Freighter operators, some of whom may have expanded their reach during the highs of 2015, are seeking to maintain their advantage and for some that might mean holding on to capacity that lower fuel prices make cheaper to run.

All that contributes to a situation in which capacity continues to outpace demand, further exacerbating the imbalance between supply and demand while also hitting yields and load factors. Since 2010, only in 2014 has cargo traffic demand (FTK) outgrown capacity (ATK).

The steady growth in capacity is also due to increases in belly hold availability, which is outpacing growth in freighter capacity and looks set to continue to do so as operators open up new passenger routes and aircraft order books continue to swell.

## Shockwaves

If tough comparisons characterised the first half of 2016, geopolitical and corporate shocks have been the order of the day in the second half. They may not have had a concrete impact on the global logistics sector yet. However, industry operators are waiting with bated breath to see what effects surprise events including Britain's Brexit vote, turmoil in Turkey, the recent passing away of King Rama IX of Thailand and the bankruptcy filing of Hanjin Shipping line will have on their businesses. Not to mention another huge world event – the results of the US elections in November.

Dire economic forecasts post-Brexit have not had an impact on cargo volumes in the European region but players are watching with interest, not only for clues on the economic effects but operationally speaking, on how transporting goods through London will play out if and when Britain finally leaves the European Union.

Political unrest in Turkey – a strategic hub for the air cargo industry because of its east-meets-west location – could also have a big impact if it continues.

Hanjin's bankruptcy initially boosted demand for air and rail transportation but the effects are small so far and it is too soon to tell if and how long they will last. Watch this space.

## Bearing fruit

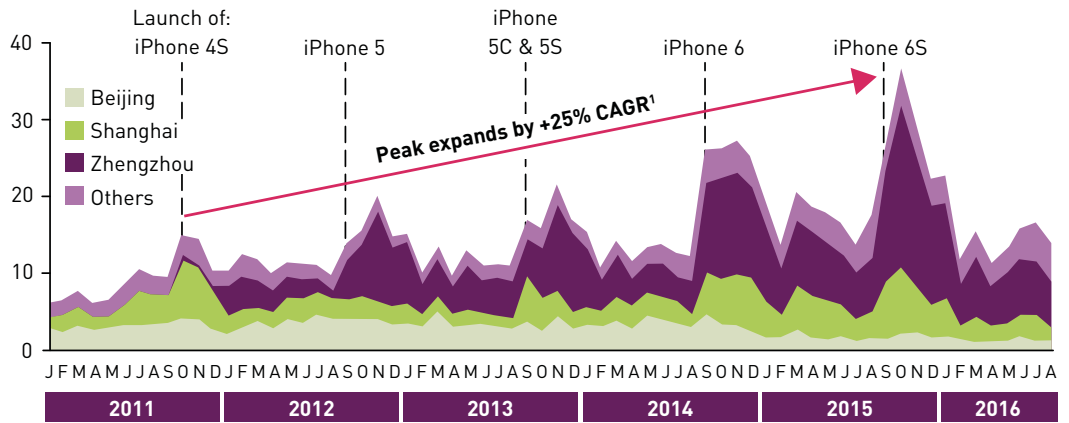
But what about the good news? One of the bright spots in 2016 has been the perishables sector, with carriers from all four corners of the globe reporting an increase in demand and looking for ways to meet it.

In the first seven months of the year, perishables have almost single-handedly offset the decline in volumes of some of the key high-value commodities – high-tech and automotive (see Chart 2, above). Fresh flowers topped the charts with 18,000 tonnes more transported in the same period, while salmon exports – mostly from Norway and Chile – rose by around 15,000 tonnes. The Norway to Vietnam trade lane for fresh fish showed the strongest growth, up by 7,000 tonnes in January to July while the country's fish exports to the United States were up 5,300 tonnes in the same period. ▶

**Chart 3: Will the iPhone 7 help high-tech recover?**

**China's air exports of mobile phones, 2011-2016 (Aug)**

Thousand tonnes



**Factories in Zhengzhou and Shanghai are largely contributing to year-end export peaks**

1) Year-end peak of September-November, 2011-2015 CAGR (source: Seabury Trade Database China Monthly (October 2016))

Growing appetite worldwide for fresh products including grapes, avocados and berries helped the fresh fruits sector to expand by about 36,000 tonnes.

Overall, perishables contributed about 120,000 tonnes to global growth in the first half of 2016.

**Post-peak high-tech**

The good news for perishables was offset by a much bleaker picture in the high-tech sector – long gone are the heady days of the early 2000s when it represented the engine of air trade growth. Instead, since the global financial crisis and the subsequent recovery, high-tech has been trailing behind.

In January to July 2016, a decline equivalent to about 100,000 tonnes of laptops and tablets and about 30,000 tonnes of mobile phones has been witnessed. About a fifth of that decline is directly attributable to the port strike effect while the rest is linked to generally lower demand for high-tech goods, as well as a shift to ocean shipping for laptops.

Can the must-have consumer technologies help air cargo operators claw back some of those volumes? In line with previous experience, the launch of the iPhone 7 can be expected to boost volumes towards the end of the year (see Chart 3, above) while Samsung's recall and subsequent discontinuation of the Galaxy Note 7 will have a big impact too. iPhone-related export waves have expanded by roughly a quarter every year and steadily since 2011. If that trend also applies to the iPhone 7, we could expect an additional 30-35,000 tonnes of mobile phone exports in the second half of

the year – a good boost although likely not enough to offset the continuing decline in laptop exports. Exports are gradually shifting to Zhengzhou, where Foxconn now manufactures about 70% of the new iPhones, while the remainder likely originate from Shanghai.

On a more positive note, e-commerce has grown by around 25% per year in the past four years to reach \$1.3 billion in 2014, earning a reputation as one of the most promising sectors of growth. But carriers know that not all e-commerce is carried by air. Cross-border e-commerce is estimated to account for a fifth of that figure and the segment most likely to be using air freight (except within the intra-Europe market). According to the Universal Postal Union, the number of international ordinary parcels reached 100 million in 2014, having more than doubled since 2007. Besides, express cargo continues to outgrow general freight, as it has recorded 5% yearly growth since 2007 (see Chart 4, p45), while the air freight market has in fact stagnated.

**Shifting trade lanes**

As global events took their toll on the different sectors, major trade lanes prospered or suffered throughout the year. The transpacific, unsurprisingly, took a West Coast port strike-related hit, coming down from 2015 highs. The Asia-Pacific to Europe trade lane posted 12% growth, adding about 120,000 tonnes to global growth over the first seven months of the year.

In fact, Europe was one of the key regions recording above-average growth in both air imports, which rose 2%, and exports – up 6.6%.

US exports have been paying the price for a strong dollar, down around 8.5% this year so far, though that will depend of course on the outcome of November's elections.

The second half of this year is much less affected by the West Coast port strike hangover than the first and we could well see growth moving back into positive territory.

Traditionally, intra-Asia trade routes have proven to be a reliable bellwether of global air trade, representing around 16% of global air trade. Throughout 2016, growth within the Asian market has been recovering, although it remains unstable.

As we indicated, China's air exports – despite being down by 1.6% Jan-Jul this year – could have been marginally positive if it wasn't for last year's surge. Yet, 'marginally positive' is an underperformance for the 'factory of the world'. To understand export trends in China is to understand demand dynamics for its largest shippers. China's exports are relatively concentrated, with just 10 shippers representing one third of the exported value. When it comes to high-tech – China's largest air export industry – Apple's key supplier in China, Foxconn, is the largest shipper by volume exported and is twice as large as its closest rival. Other key global shippers such as Samsung, Asus and Apple-supplier Pegatron complete the top 10. Among these shippers, Samsung was virtually the only one experiencing growth in the first seven months of this year, up 11% following the launch of its Galaxy S7 (see Chart 5, p46). So far, Foxconn is in the red, down 7%, but we should expect a stronger performance

towards the end of the year, as iPhone 7 volumes are reflected in the statistics. On the other hand, Asus recorded a significant decline, down 39%, reflecting the downward trend in laptop exports.

## Belly up

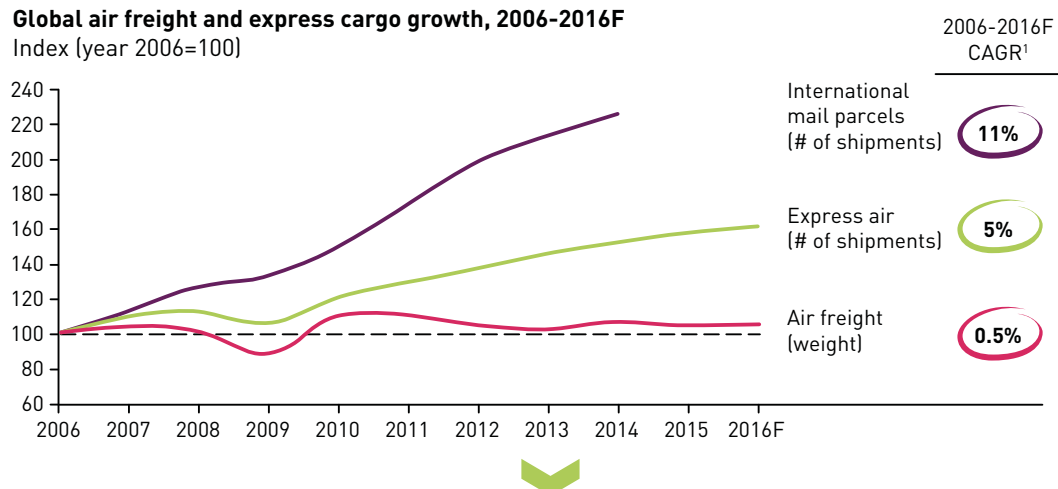
The trend in recent years towards belly capacity expansion has continued in 2016, and coupled with stagnating freighter capacity, this means that belly capacity is gaining share on freighter services, at least when it comes to scheduled widebody routes. While belly capacity keeps on pouring into the market, it is not always actually relevant for cargo (see Chart 6, p47). For example, an increase in belly capacity in serving the Caribbean market may hardly be used at all. If we zoom in on the widebody international belly capacity added this year, we can see that the top origins contributing to growth are in fact large cargo airports handling approximately 1 million tonnes or more. Roughly 100,000 tonnes of widebody capacity have been added from Doha, Qatar while Seoul, South Korea; Istanbul, Turkey and Dubai, United Arab Emirates have also made additions.

While some of that capacity may be serving leisure destinations with not much cargo potential, it is expected that the majority of services will go to medium/strong cargo markets. In fact, belly growth will have affected nearly all airport categories – whether small, medium or large markets. There are only a few exceptions, such as Frankfurt, Germany where volumes are flat and Kuala Lumpur, Malaysia where they are declining. ▶

**Chart 4: E-commerce and Express outgrow general air freight**

### Global air freight and express cargo growth, 2006-2016F

Index (year 2006=100)



### Cross-border e-commerce is boosting volume of parcels carried worldwide

<sup>1</sup> CAGR for international ordinary parcels is estimated for the period of 2006 – 2014  
 [Source: Universal Postal Union; Seabury Express Trade Database; Seabury analysis (September 2016)]

**Chart 5: Most Chinese high-tech shippers see volumes declining****Top 10 high-tech China shippers, 2016 (Jan-Aug)**

Thousand tonnes

Foxconn	88	▼
Quanta Group	41	▼
Samsung	35	▲
Pegatron	20	▼
ASUS	19	▼
Compal	18	▼
Inventec	15	▼
Wistron	8	▼
Intel	7	▼
Sony Ericsson	6	▼

**Top 10 shippers represent -48% of China's high-tech air exports***[source: Seabury China shipper Database (October 2016)]*

Seabury expects this trend to continue as a result of strong passenger demand and large outstanding passenger aircraft orders, as well as an increase in belly capacity per aircraft as new generation passenger aircraft with growing cargo capacity arrive on the scene. With these assumptions, we could see belly capacity continuing to grow by about 5-6% per year over the coming five to 10 years. That may mean that belly capacity is going to nearly double within the next decade. With such steep supply growth while demand maintains its modest growth pace, we can expect load factors globally to be challenged.

**Counting conversions**

Capacity gains from aircraft conversions have also been on the rise (see Chart 7, p47) – about 550 converted aircraft are in service this year, compared to 517 by the end of last year. The increase comes primarily from a few integrators: SF Airlines with an additional nine Boeing aircraft while newcomer Prime Air, Amazon's own cargo operation, operates 10 Boeing 767F aircraft, mostly from ATSG's subsidiary Cargo Aircraft Management. Amazon's move to partner with Atlas and ATSG has shaken the market this year, confirming the relevance of growth in e-commerce for the cargo industry. In fact, the deal includes the possibility for Atlas Air to acquire 20 Boeing 767-300 passenger aircraft and convert them to freighters for Amazon. Recent announcements including

Texas-based Spectre Air Capital's firm order for an initial 15 Boeing 737-700 and 737-800 passenger-to-freighter conversions with Israel Aerospace Industries, with rolling options, confirms the trend.

**Looking forward**

And what of the future? After an eventful year, thoughts naturally turn to what lies in store in 2017. Global economic growth estimates are moderately positive for 2017 – in line with this year's. We do not expect air trade to grow much faster than GDP, as it used to in the last century.

Some things won't change: emerging markets will continue to outperform developed markets in terms of growth – South and Southeast Asia are the ones to watch for relative growth, while China, even amid dire warnings about an economic slowdown, will still post growth in absolute terms.

For the air cargo sector, there will be good news and bad news. Declines in the volumes of laptops needing to be transported by air may not be as dramatic as in 2016 – but that said, there is no new high-tech commodity in line to fill the gap.

Perishables will continue to grow faster than other sectors, fuelled by rising demand for fresh flowers, fruit and fish across the globe.

US based carriers can expect to enjoy some relief as currency exchange headwinds will continue to stifle

outbound routes, but not to the extent seen in 2016. While the long-term effects of the UK's decision to leave the EU are unclear, one short-term result may be stronger exports by air because of the drop in sterling, and conversely a decrease in imports.

The wider European region should expect a rise in exports of perishable goods by air, helped by

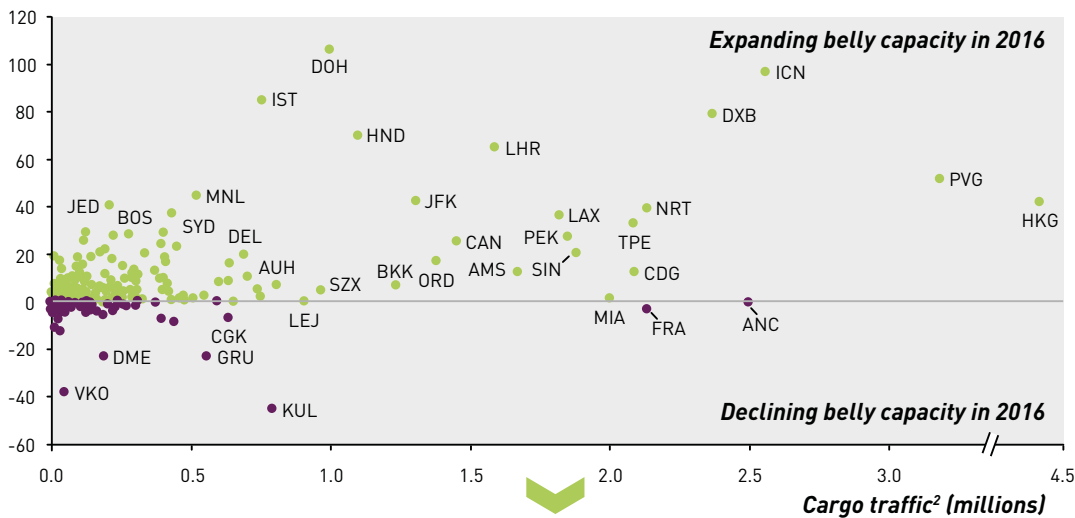
currency effects as well as by an increase in air freight capacity.

Overall, demand for air freight worldwide should show moderate growth in 2017 – but with widebody belly capacity increasing by 5-6% as well as the delivery of new freighters due in 2017, the issue of overcapacity will dominate the industry next year too. ■

**Chart 6: How relevant is the belly capacity deployed?**

**Change in belly capacity vs. cargo traffic, 2015-2016<sup>1</sup>**

Thousand tonnes



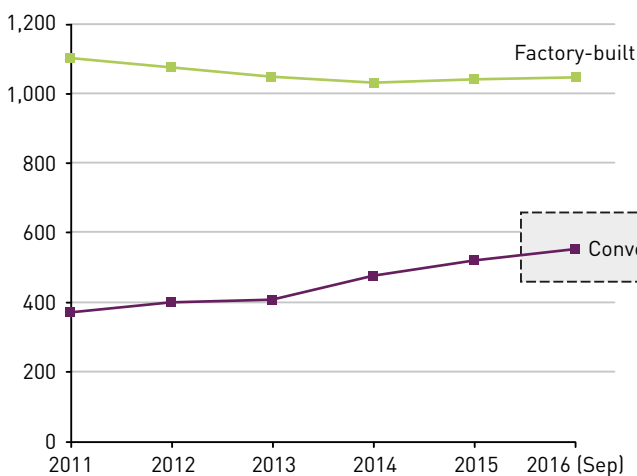
**Deployed belly capacity has affected a high number of airports, whether large cargo markets or not**

1) Outbound widebody belly capacity is used, actuals for Jan to Sep and planned schedules for Oct to Dec;  
2) Data for 2014 (Airport Council International) (source: ACI; Seabury Capacity database; Seabury analysis (August 2016))

**Chart 7: Converted aircraft fleet is expanding**

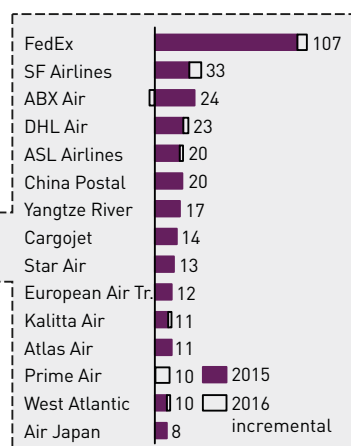
**Number of in-service freighters, 2011-2016 (Sep)**

# aircraft (in service)



**Top 15 operators 2016 (Sep)**

# aircraft (in service)



**SF Airlines and Prime Air (Amazon) have contributed the most to the growth in the conversion segment**

Note: number of aircraft in service by the end of each year (source: Ascend; Seabury analysis (September, 2016))