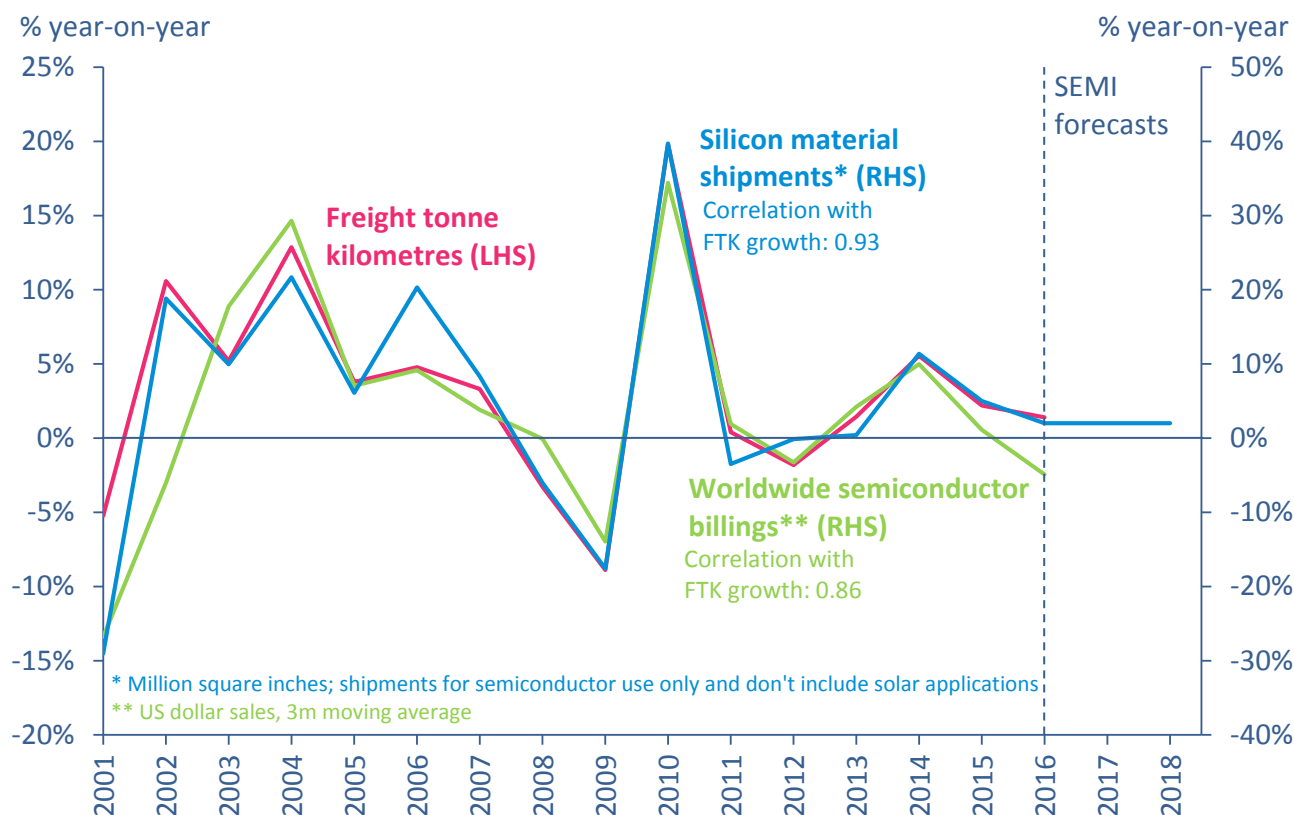




IATA ECONOMICS' CHART OF THE WEEK

4 NOVEMBER 2016

AIR FREIGHT NEEDS TO LOOK PAST TRADITIONAL DRIVERS OF GROWTH



Sources: IATA Monthly Statistics, SEMI, Semiconductor Industry Association

- The value of devices shipped containing semiconductors has been a useful coincident indicator of air freight in the past. Since many of such devices are shipped by air, annual growth in the series (the green line) has been strongly correlated with growth in freight tonne kilometres (FTKs) over the past 15 years or so.
- The series measures the *value* of shipments in US terms, and performs well during times of currency stability. But the problem is that it is prone to distortion, particularly during big moves in the US dollar. This explains why the series has substantially under-predicted FTK growth in recent times.
- Looking at shipments *volumes* helps to get round this problem. The blue line shows growth in shipments of the raw silicon materials that go into the production of semiconductor devices, and is therefore not susceptible to distortion by exchange rate movements. Accordingly, this series has been an even better indicator for air freight than the value-based series.
- The silicon business has matured in recent years, in part related to miniaturization of consumer electronics. SEMI, the global industry association for the electronics manufacturing supply chain, forecasts silicon volume growth of just 2% in 2016, 2017 and 2018. Based on the past relationship, this is consistent with FTK growth of just 1% each year over the next three years. More broadly, the world trade backdrop remains sluggish, and the World Trade Organization recently cut its forecast for near-term trade growth. All told, the onus for air freight in the future will increasingly be on maximizing opportunities from fast-growing industries including pharmaceuticals rather than relying on the traditional drivers of growth.
- For more analysis on air freight, check out our latest air freight monthly analysis ([link](#)) and cargo chartbook ([link](#)).

Terms and Conditions for the use of this IATA Economics Report and its contents can be found here: www.iata.org/economics-terms
By using this IATA Economics Report and its contents in any manner, you agree that the IATA Economics Report Terms and Conditions apply to you and agree to abide by them. If you do not accept these Terms and Conditions, do not use this report.

IATA Economics
economics@iata.org