Understanding air cargo markets and their importance

November 2011
Brian Pearce
www.iata.org/economics

To represent, lead and serve the airline industry
What is driving air cargo?

Total air travel and air freight volumes
Seasonally adjusted
Source: IATA

FTKs

RPKs
It’s not relative transport costs

The cost of air freight versus sea, $/kg

Sea  Air

14x
Shippers use air cargo only when they have to

- Perishability (e.g. food, fashion)
- Opportunity cost (e.g. capital tied up in high value product)
- Inventory-related cost (just-in-time)
- Time-definite requirements (express)
- 50% ‘emergency’/ 50% planned (Merge Global)
There are good leading indicators

Growth in air freight and the PMI index (advanced 2 months)
But even they fail at major turning points

Freight tonne kilometers flown, seasonally adjusted

IATA forecast March 2008

-25%
Even long-term trends are hard to get right

Long-term cargo forecasts in 2000 and 2010

Where we are today

Boeing, 2000
Airbus, 2000
Boeing, 2010
Airbus, 2010

+45%
Population and purchasing power are the long-term pull factors for trade flows.
Large cities too

Urban Popn. 2015

Source: UN, SRS Analyser
No GDP ‘rules of thumb’ e.g. 5-6% cargo growth on 3% GDP growth doesn’t work

Ratio of FTK growth to GDP growth

%FTKs/%GDP

10-year moving average
But can look directly at international trade
Air cargo has been losing share in world trade in the past 18 months

**World trade in goods and FTKs by air**
Source: Netherlands CPB and IATA

Billion FTKs

FTKs by air (left scale)

World goods trade volumes (right scale)

index of world trade, 2000=100
For several different reasons

- Mode shift
- Commodity mix
- Trade lane
Mode shift - cyclical

Total Business inventories to sales ratio and FTKs
Source: US Census Bureau and IATA

Inventories to sales ratio

FTKs (billion)
Mode shift - structural

Source: Seabury Cargo
The commodity mix has also weakened air cargo.
Major air cargo trade lanes weakened by consumers in Europe and US

Source: Merge Global
But air cargo and air transport connectivity is vital for modern economies

Businesses can set up much more efficient global supply chains.
Critical value of air transport becomes clear when it is not there

**BBC**
Volcano ash flight ban 'cost London £100m'
10 million roses ruined, 5K Kenya workers laid off

**The State**
Volcano disrupts BMW supply chain to S.C.

**People's Daily Online**
EU says volcanic ash costs tourism industry 1 billion euros

**CNN Money**
Ash cloud grounds U.S. produce, fish and parts

**TIME World**
Volcano Fallout: Where's the Tuna and Pineapples?
Value of aviation campaign

Connecting cities enables flows of trade, tourists, investment and ideas.