

# Transportation and Logistics Trends and Policies: Air Cargo Competitiveness

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## Air Cargo Facts and Figures

- 1% of the volume of goods moved internationally moves by air.
- 35% of the value of international goods moves by air.
- Canadian: Imports -15% arrive by air and 11.5% are exported by air
- Air cargo is essential to global sourcing.
- Air cargo facilitates “competitive advantage” in a nation’s trade and economy
- Worldwide air cargo revenues were \$57B USD average 2006 to 2008.
- Air cargo growth is expected to average 5.8% per year for the next 20 years. Worldwide GDP is expected to average 3.2% per year during the same period.
- Air cargo is seen as a leading indicator of world trade activity ... and is expected to be the first to take advantage of economic improvements.



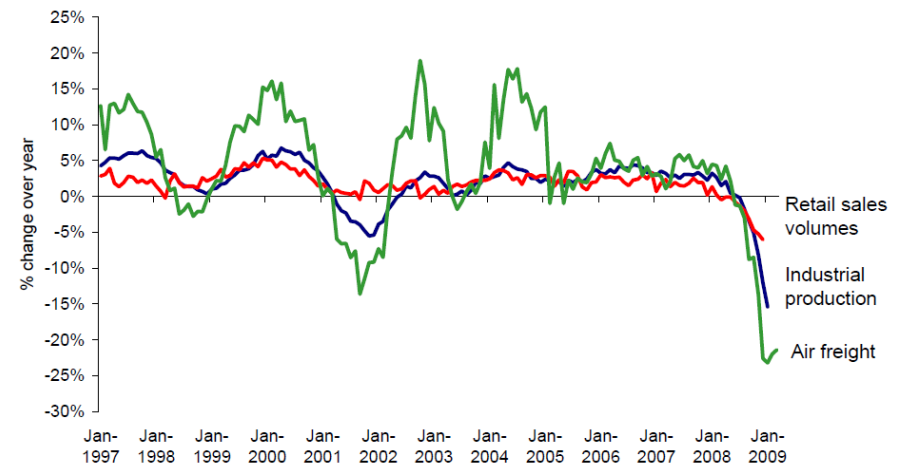
## Air Cargo Marketplace



- The air cargo market is highly competitive.
- Prices for air cargo services are driven by supply and demand (goods and air cargo capacity)
- The supply of air cargo capacity is related to the size, type and frequency of aircraft operating on a route.
- The growth in demand for air cargo services is closely tied to the change in GDP and especially the GDP of the importing country. This is referred to as “Demand Pull”.
- **Air cargo yields have declined by an average 3% per year for the 1987-2007 period**

## Air Cargo Economic Overview

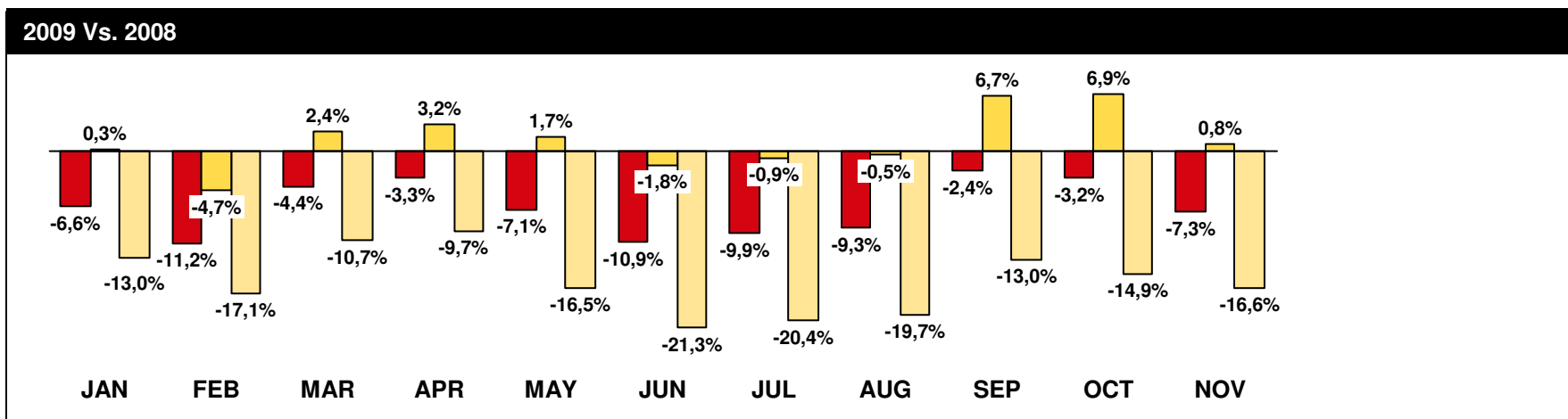
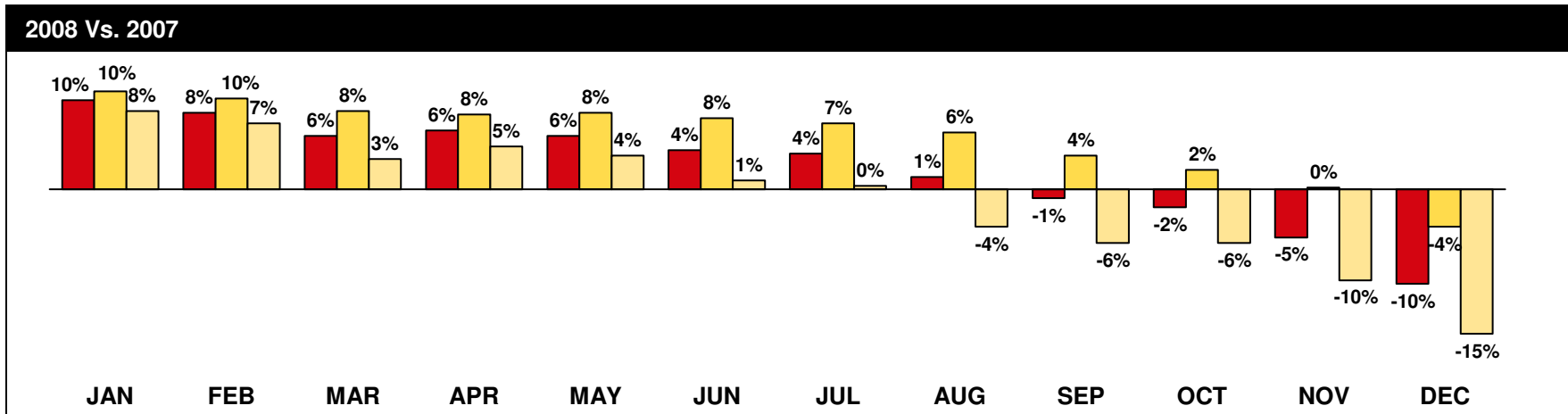
- Air freight has proved to be a very timely indicator of overall world trade
- Air cargo demand has moved sideways in the -21% to -24% range since its plunge from -7.9% to -23.2% between October 2008 and January 2009
- The severity of air freight slump is at least partly driven by manufacturers seeking to correct large inventory overhangs that emerged in late 2008.
- The more positive news is that air freight volumes have got no worse in March 2009  
Compared to twelve months earlier freight was down 21.4% in March, compared to a 22.1% fall in February. In fact the level of freight tonne kilometres (FTK) flown on international markets has moved sideways since reaching a low in December



Source: IATA

# Air Cargo Capacity Development / Decline

- All Configurations
- Passengers
- Freighter



Please note that historical data are subject to adaptation/changes according to actual schedule operated by the airlines

Source: Seabury, status November 16, 2009

# Air Cargo Study

## Competitiveness Study Overview

Joint Production Aircraft	Shanghai to Chicago	Shanghai to Toronto	Average Rate Difference, Toronto vs. Chicago (%)	Hong Kong to Chicago	Hong Kong to Toronto	Average Rate Difference, Toronto vs. Chicago (%)	Seoul to Chicago	Seoul to Toronto	Average Rate Difference, Toronto vs. Chicago (%)
Average Contract Rate (\$ CAD)	\$ 3.34	\$ 3.67	9.7%	\$ 3.00	\$ 3.57	19.1%	\$ 2.94	\$ 3.27	11.4%
% Capacity Share by City	89%	11%	-	79%	21%	-	74%	26%	-

Source: Air Cargo Competitiveness Study, Jan 18, 2010

## Cost Breakdown

<b>Competitiveness Study Overview cont'd...</b>			
<b>Freighter Aircraft (MD-11F)</b>	<b>Costs per Effective Aircraft Capacity (\$/kilo)</b>		
	<b>Shanghai to Chicago</b>	<b>Shanghai to Toronto</b>	<b>Cost Differences</b>
<b>Aircraft Lease and Fuel Costs</b>	\$ 1.75	\$ 1.82	\$ 0.07
<b>Air Gateway Costs</b>	\$ 0.25	\$ 0.33	\$ 0.08
<b>Landing Fees</b>	\$ 0.06	\$ 0.11	\$ 0.05
<b>Landing Fees % of Costs per Available kg Capacity</b>	3%	5%	2%

Source: Air Cargo Competitiveness Study, Jan 18, 2010 (Currency – CAD)



## Conclusions

### Pro-forma freighter analysis

- 85% of costs related to aircraft lease and fuel
- 15% are air gateway costs

However, air gateway costs make up 54% of total variance in costs on the two routes.

- The majority of this difference relates to landing fees, airport fuel flowage fees, provincial taxes and navigational fee differentials.

Costs per available kilo of capacity route comparisons indicate:

- Landing fees on Toronto are 5% of total, while on Chicago they are 3% of total – difference is 2%
- Combination of landing fees, provincial fuel taxes and nav' fees - \$0.16 per kilo of available capacity vs. a total of \$2.14
- Government policy – broadly stated could account for 7.5% of total costs.

Source: Air Cargo Competitiveness Study, Jan 18, 2010 (Currency – CAD)

THANK YOU FOR  
YOUR ATTENTION