



# An Air Cargo Perspective and Forecast

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# Agenda

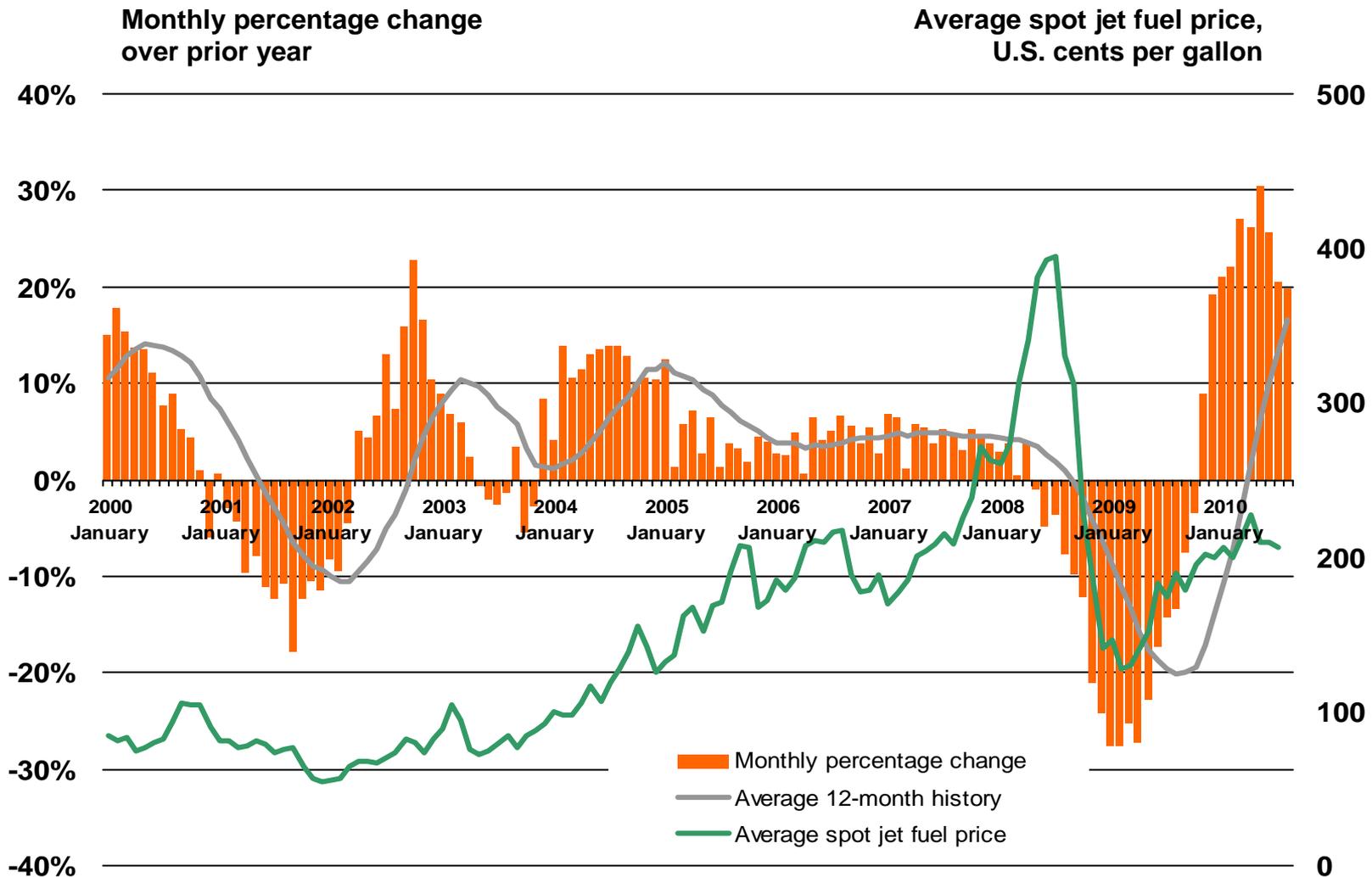
- **A look back**
- **A look ahead**
  - near term
  - long term
- **Freighter fleet**
- **Conclusions**



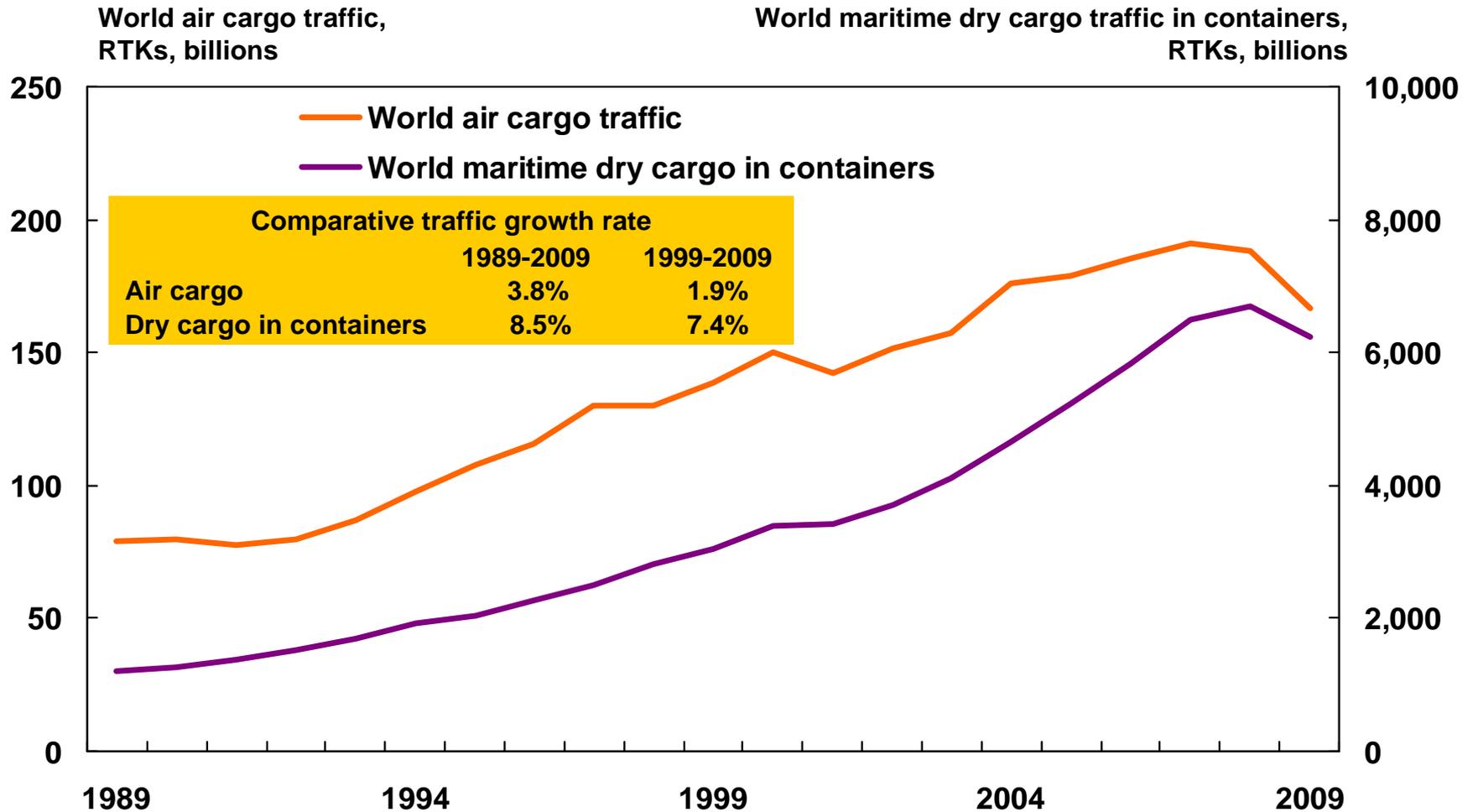
# 2010: a better year than expected



# World air cargo traffic continues recovering after high fuel prices and world economic slowdown

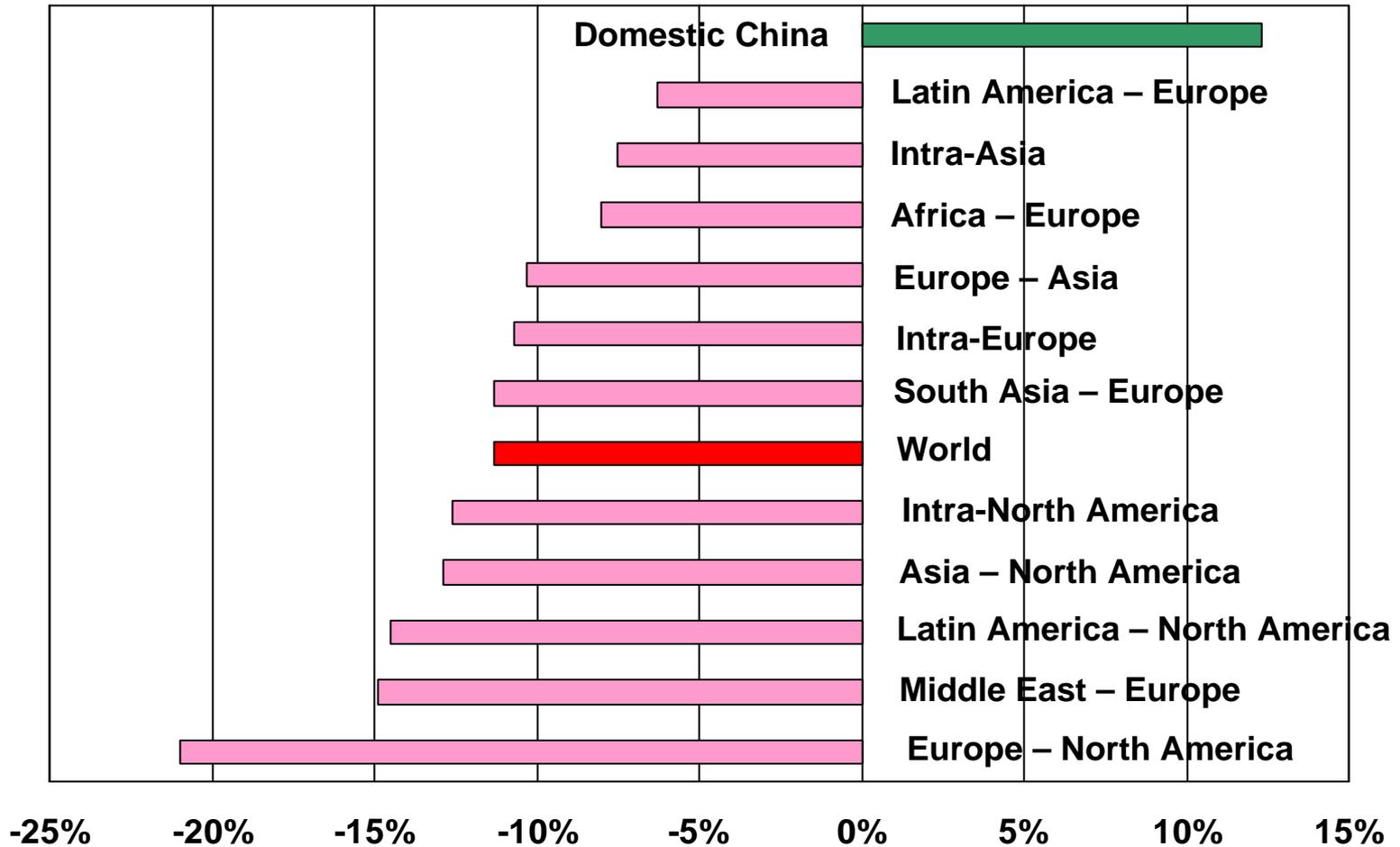


# World air cargo and containership traffic fell in 2009

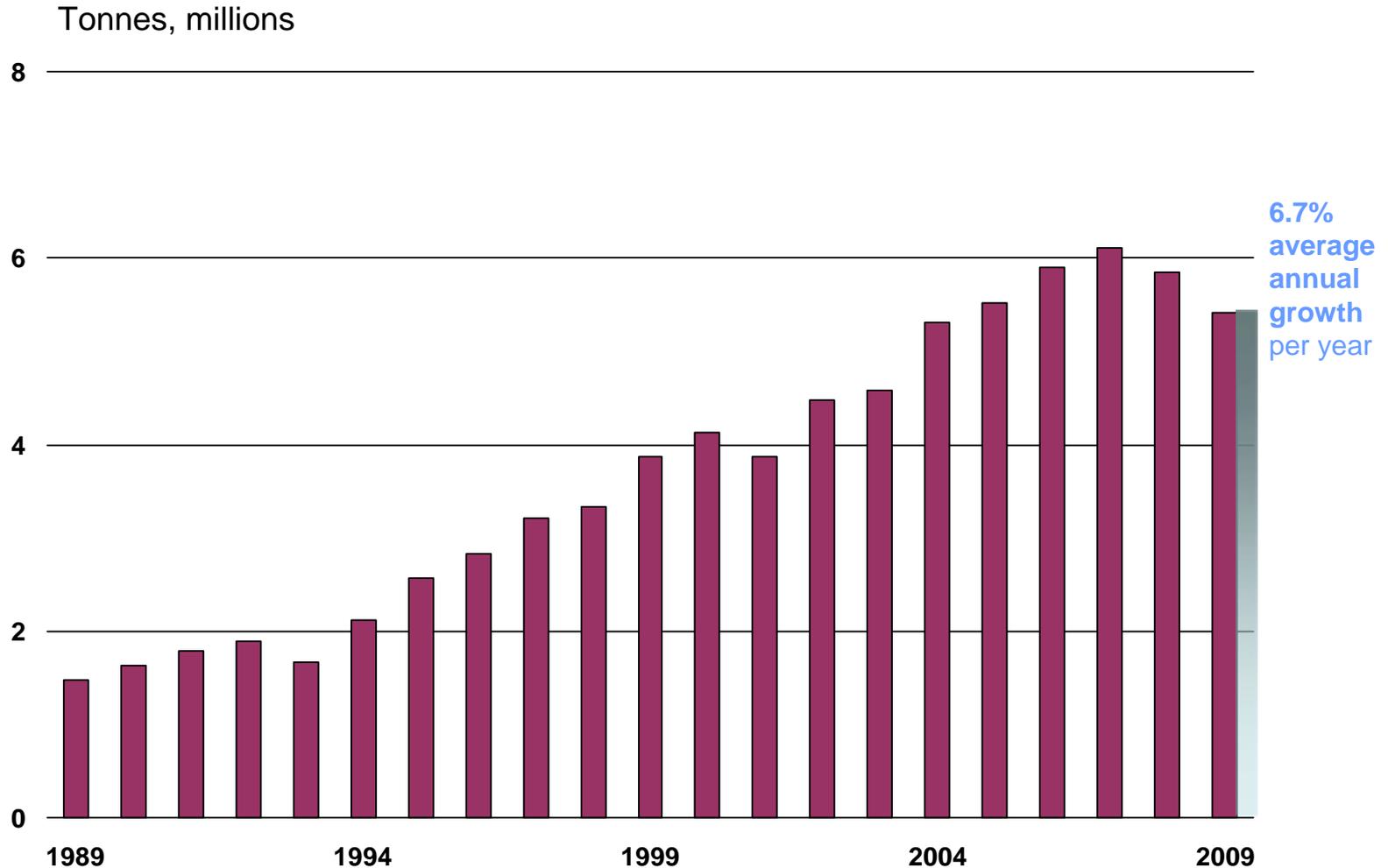


# Significant '09 decline in major world air cargo markets

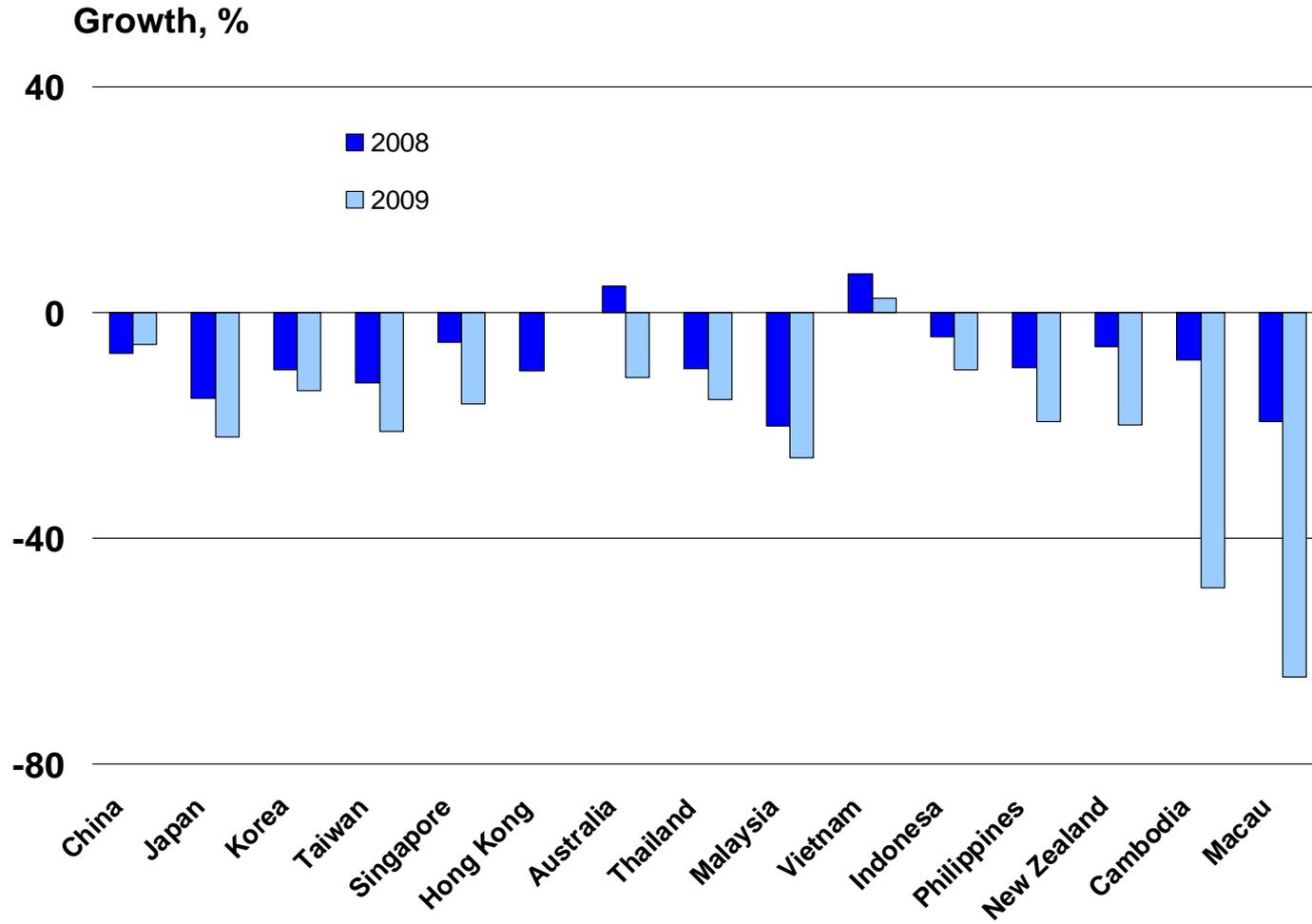
Annual growth by regional market, percentage



# Intra-Asian air cargo growth slowed by recent economic environment



# Asia-North America air freight market contracted 12.9% in 2009



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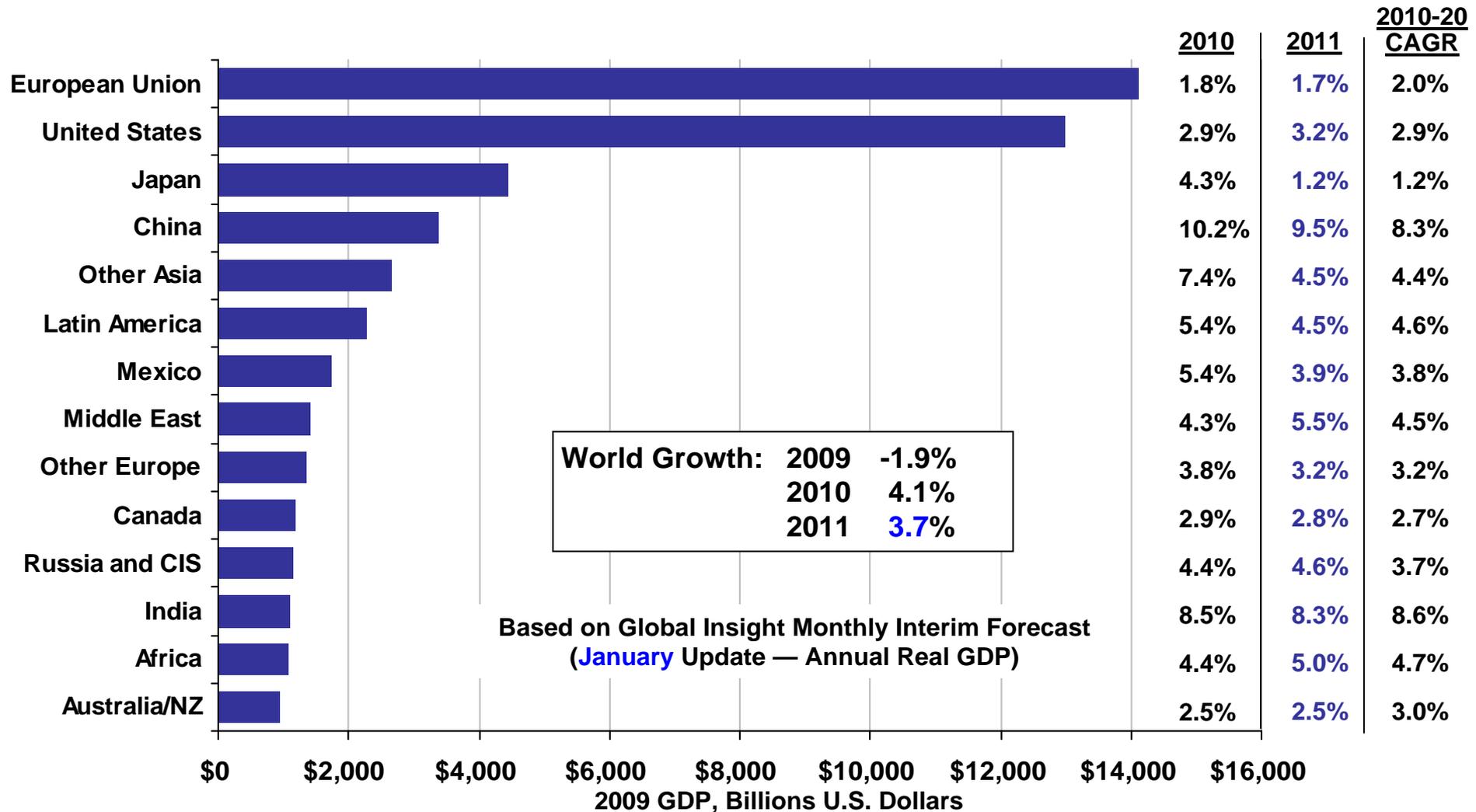
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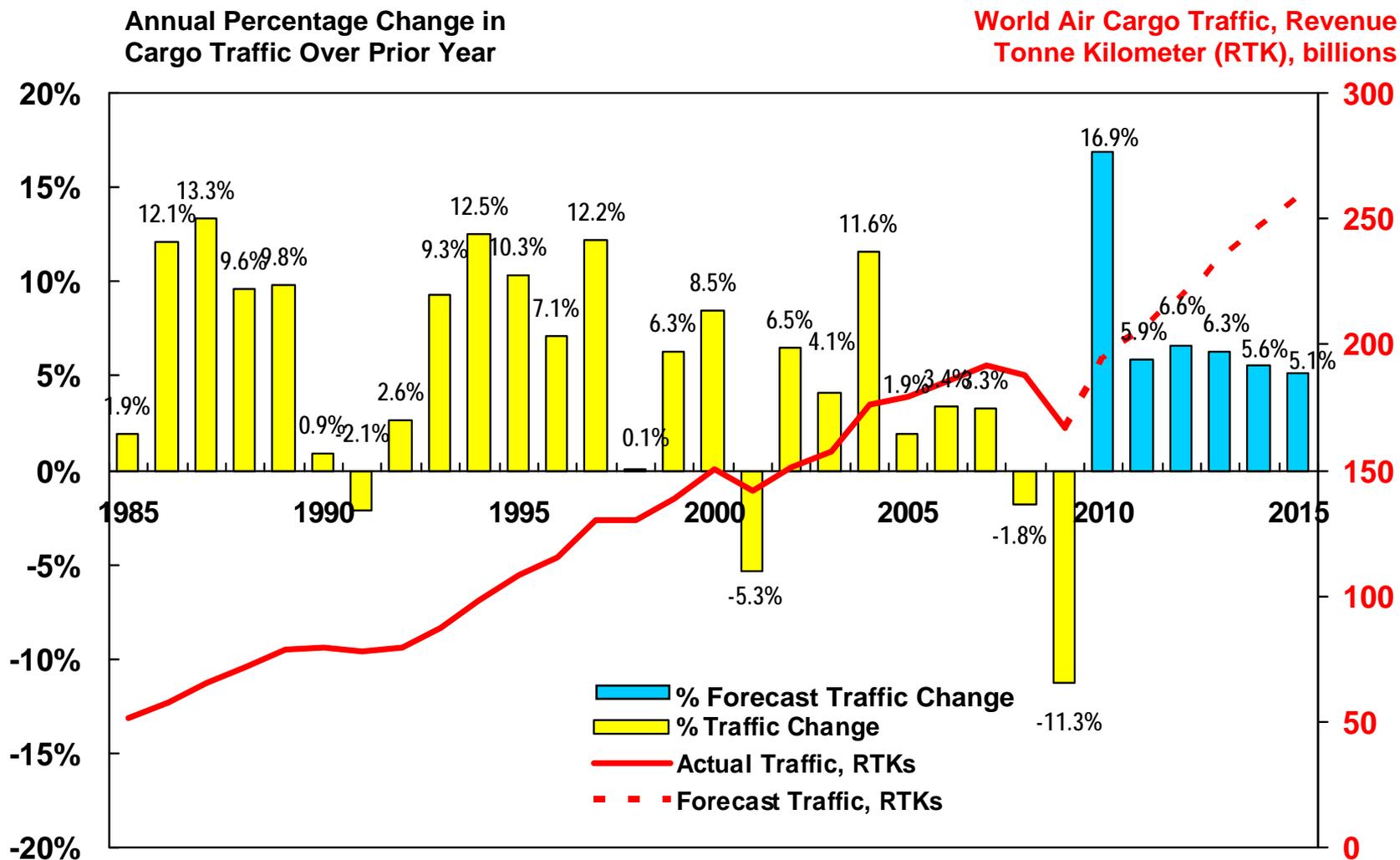
# Worldwide air cargo growth “drivers”

- **GDP**
- **Globalization of trade (sourcing, production and marketing)**
- **Trade liberalization (WTO, regional free-trade agreements)**
- **‘Just-in-Time’ management (inventory and competitiveness)**
- **Agricultural and industrial development leading to wider variety of high-value, low volume products (demand for fully integrated logistics services)**

# Asia leading transition from recovery to expansion



# World air cargo returning to 2007 “peak” traffic levels

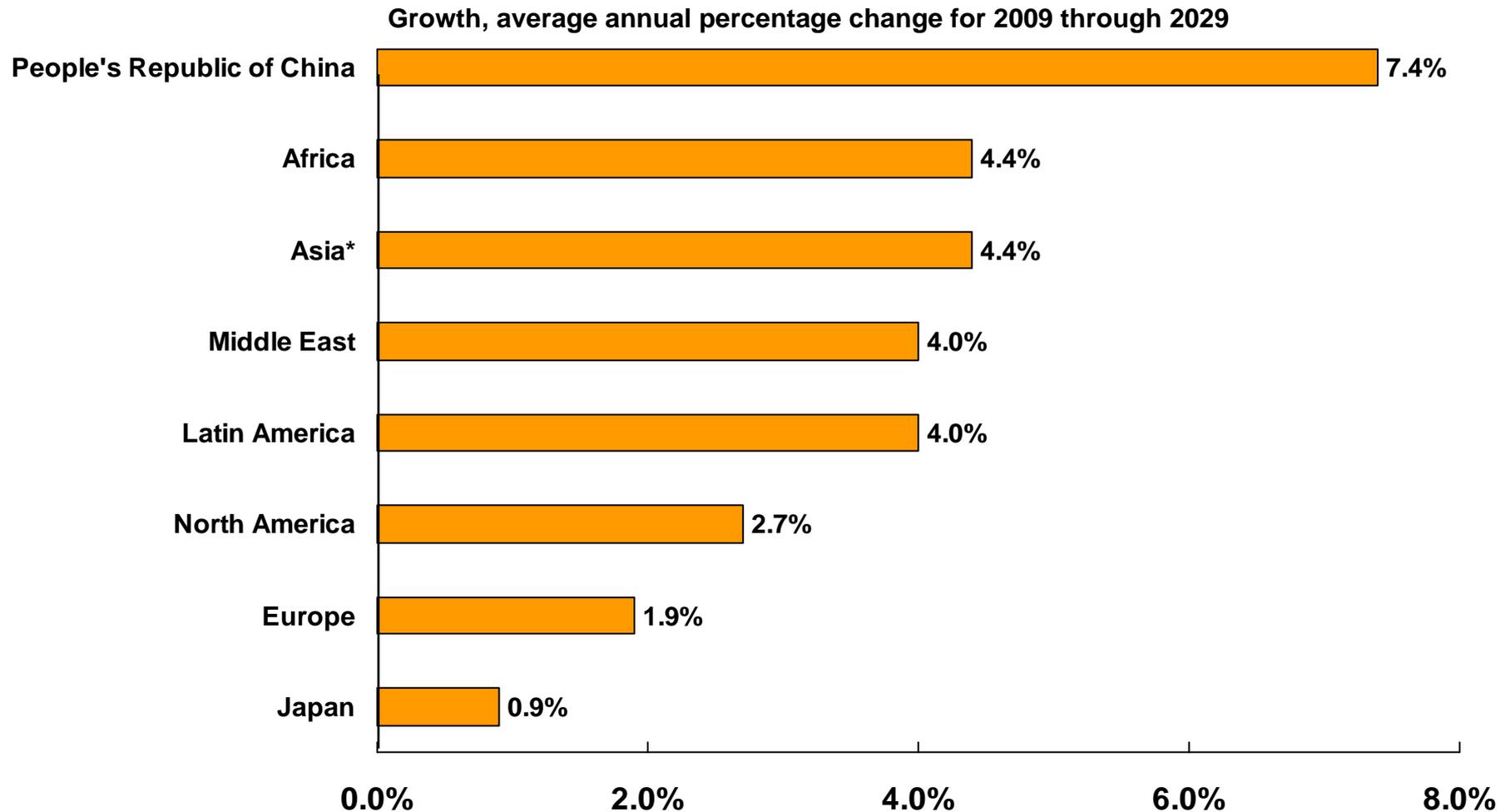


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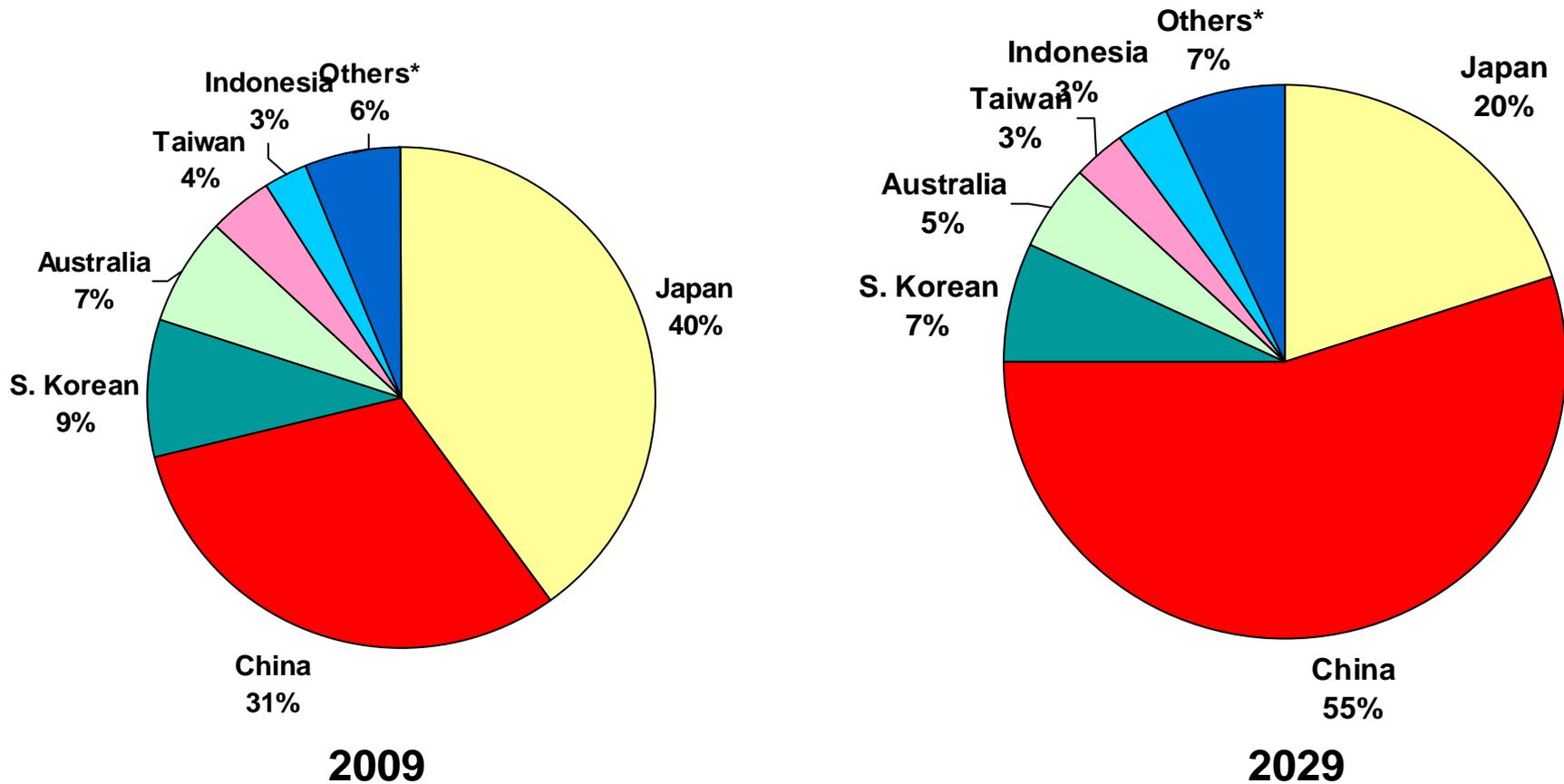


# Forecasted average 20-year regional & key country GDP growth rates



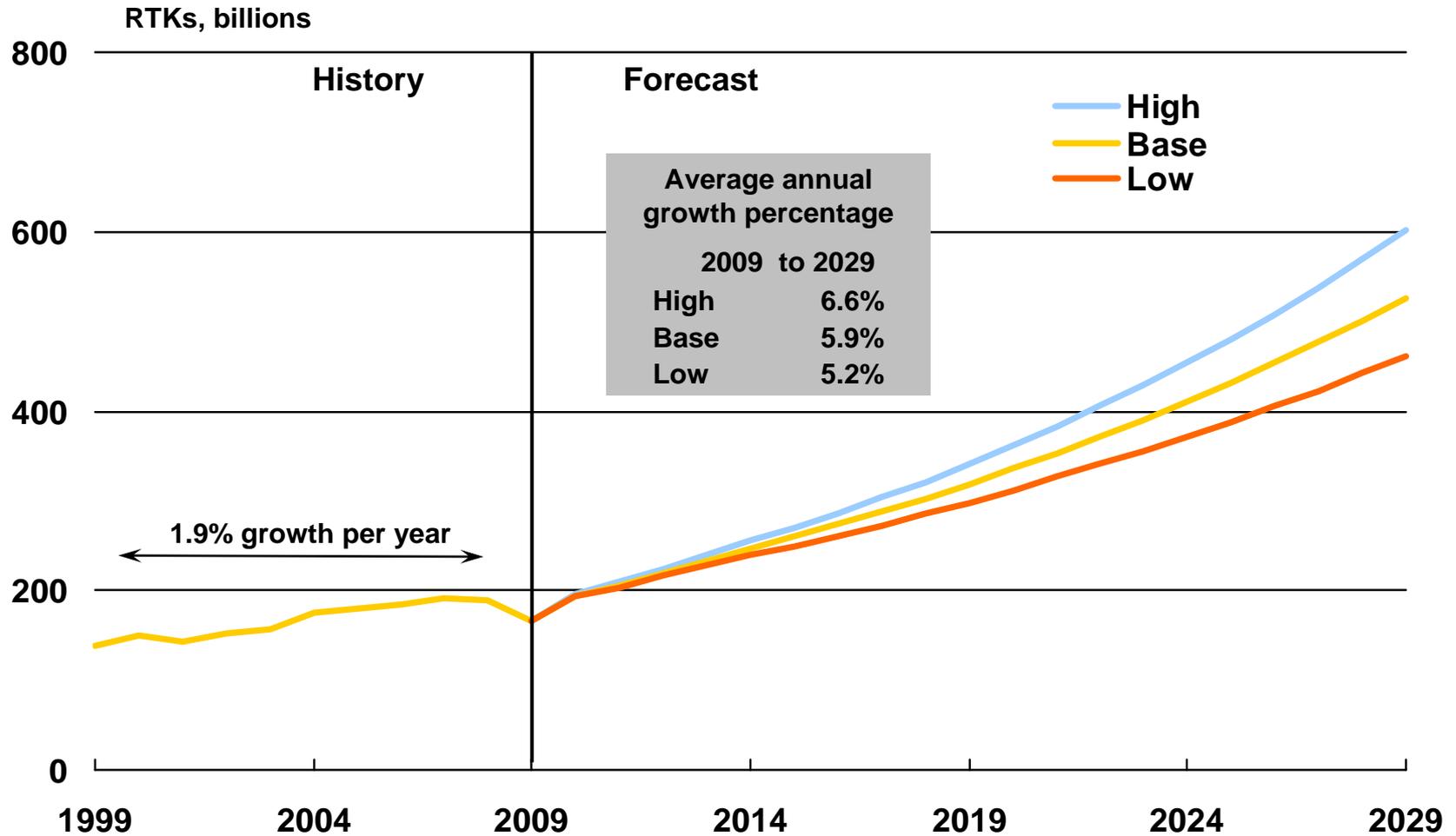
\* Includes People's Republic of China and Japan  
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# Asian economic power distribution shifts dramatically towards china

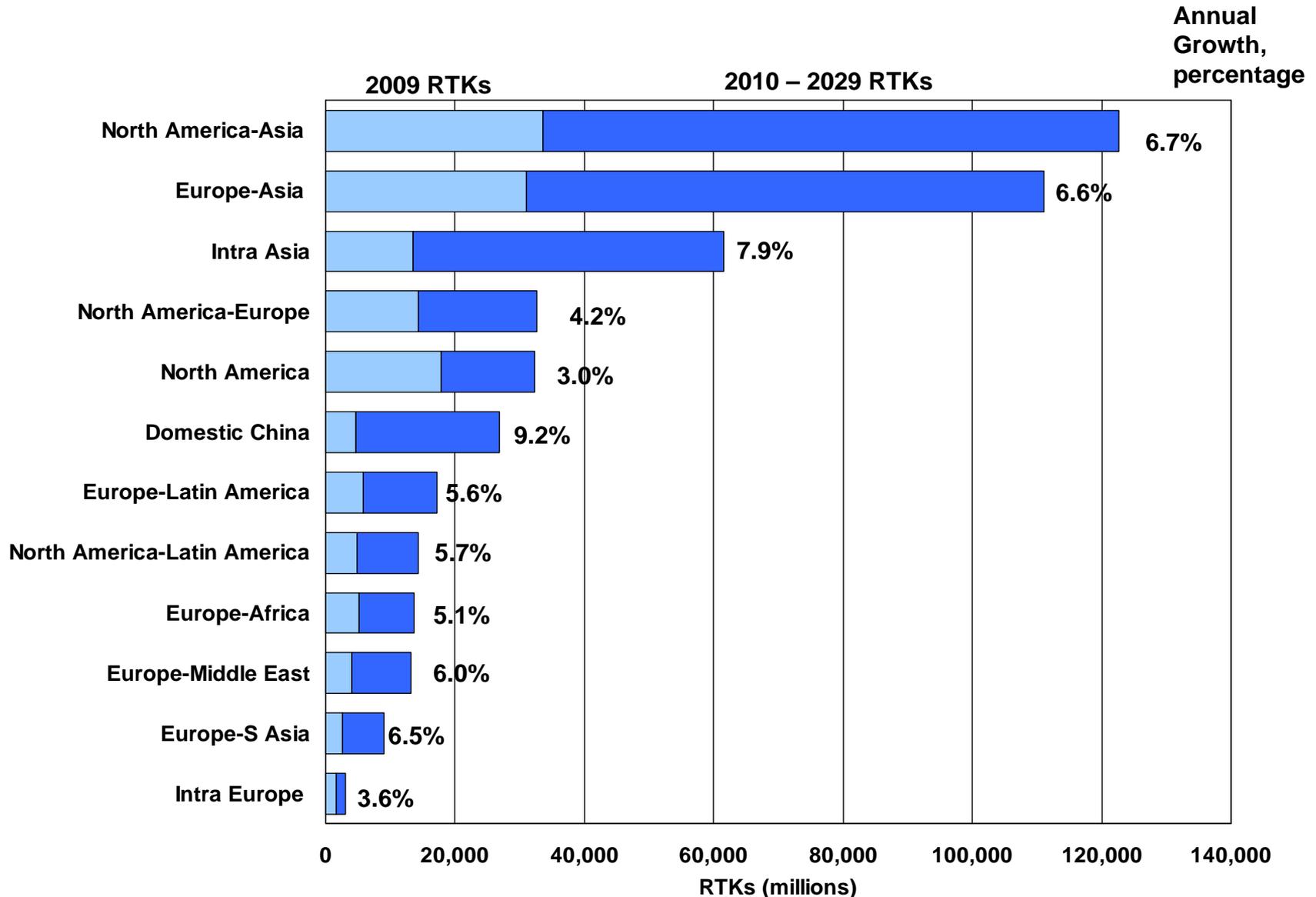


\*Thailand, Malaysia, Singapore, Philippines, and New Zealand

# World air cargo traffic will triple over the next 20 Years



# Asia air cargo markets continue to lead industry growth



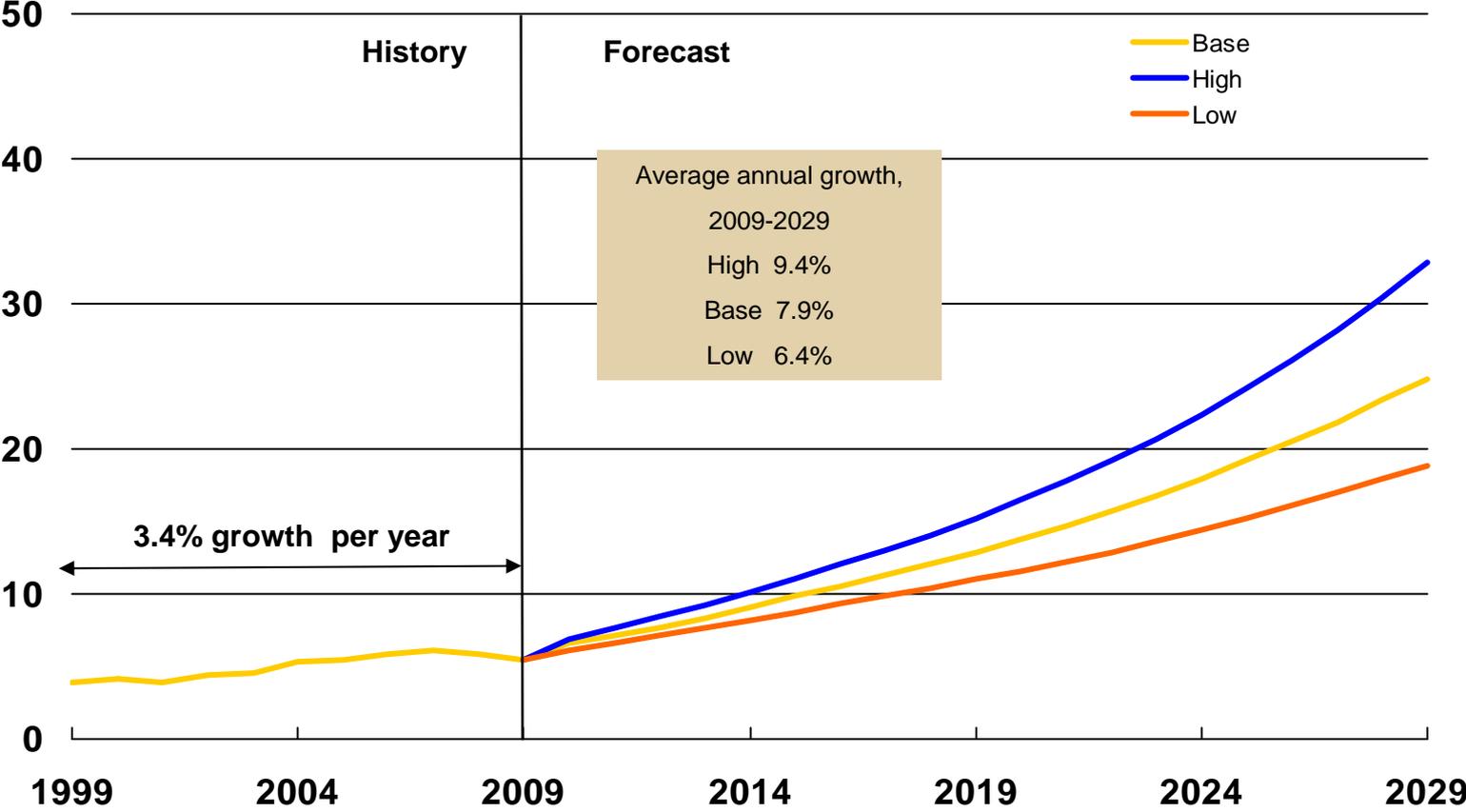
# Top 10 economy pairs constitute nearly one-half of the intra-asia market



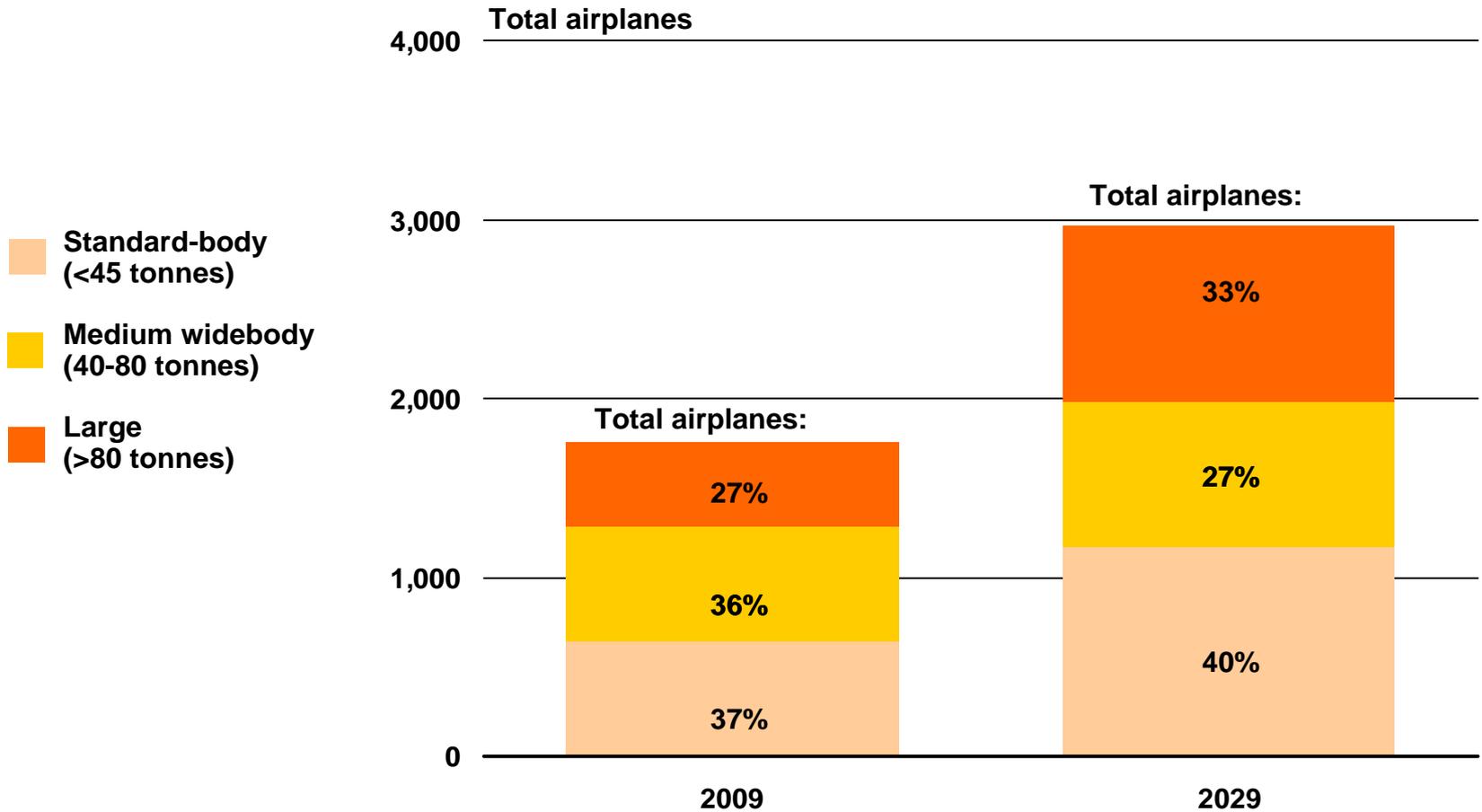
## Top economy pairs for intraregional air cargo traffic

1. China – Korea
2. Japan – Korea
3. Hong Kong – Taiwan
4. China – Japan
5. Hong Kong – Japan
6. Korea – Hong Kong
7. Japan – Taiwan
8. Australia – Singapore
9. China – Hong Kong
10. Singapore – Hong Kong

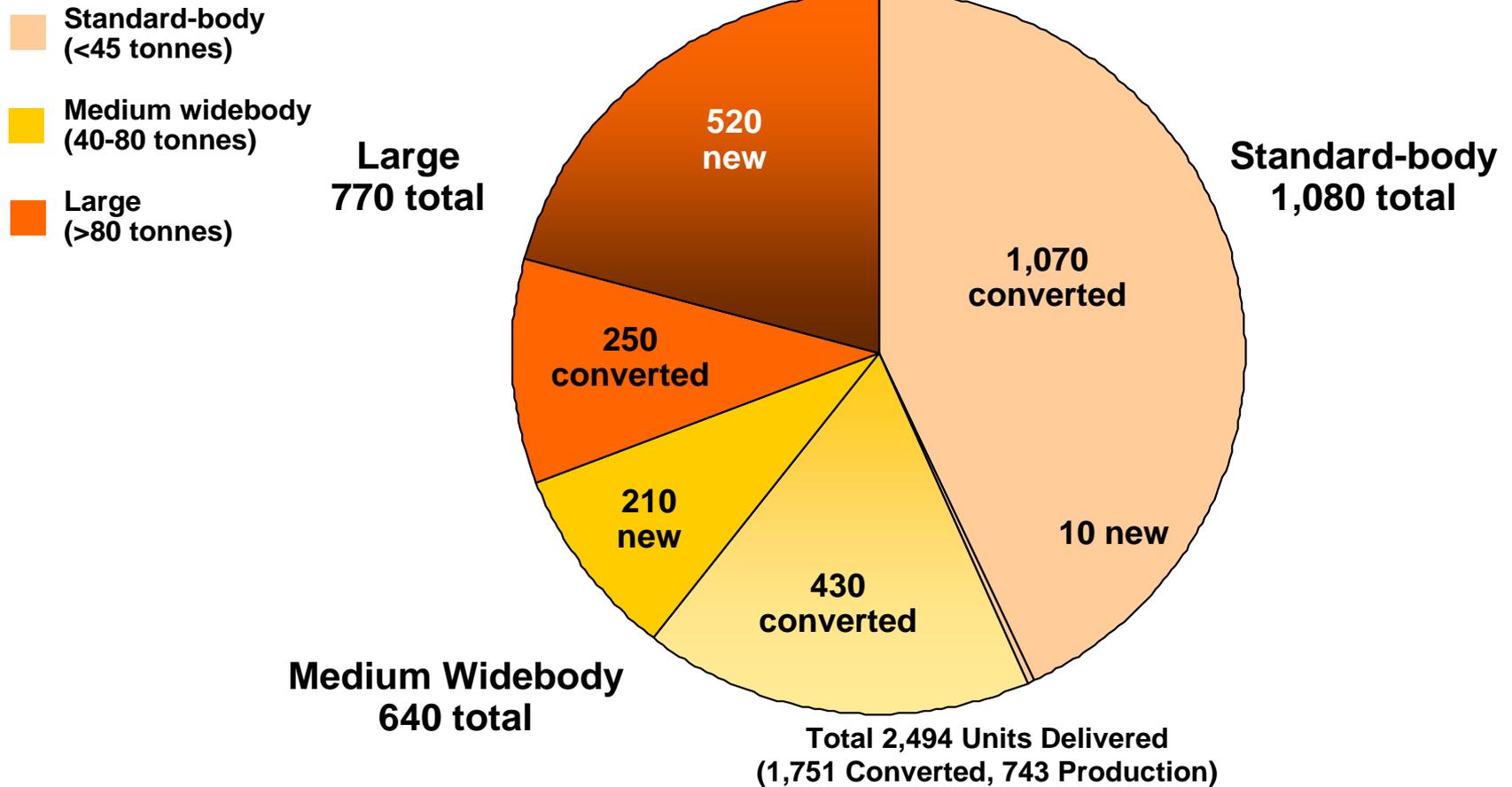
# Intra-Asia air cargo market will grow at 7.9% per year



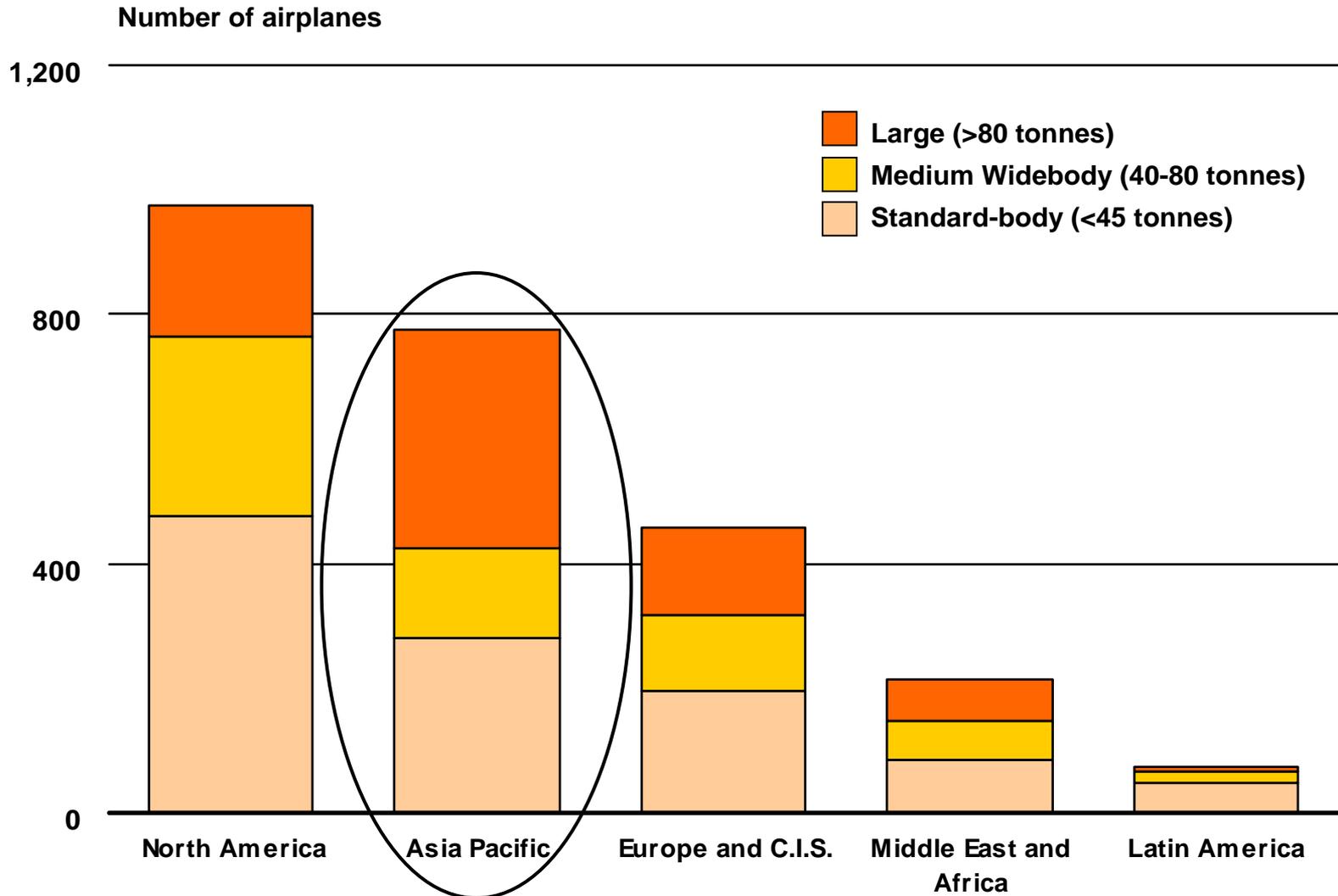
# Freighter fleet increase reflects world traffic growth



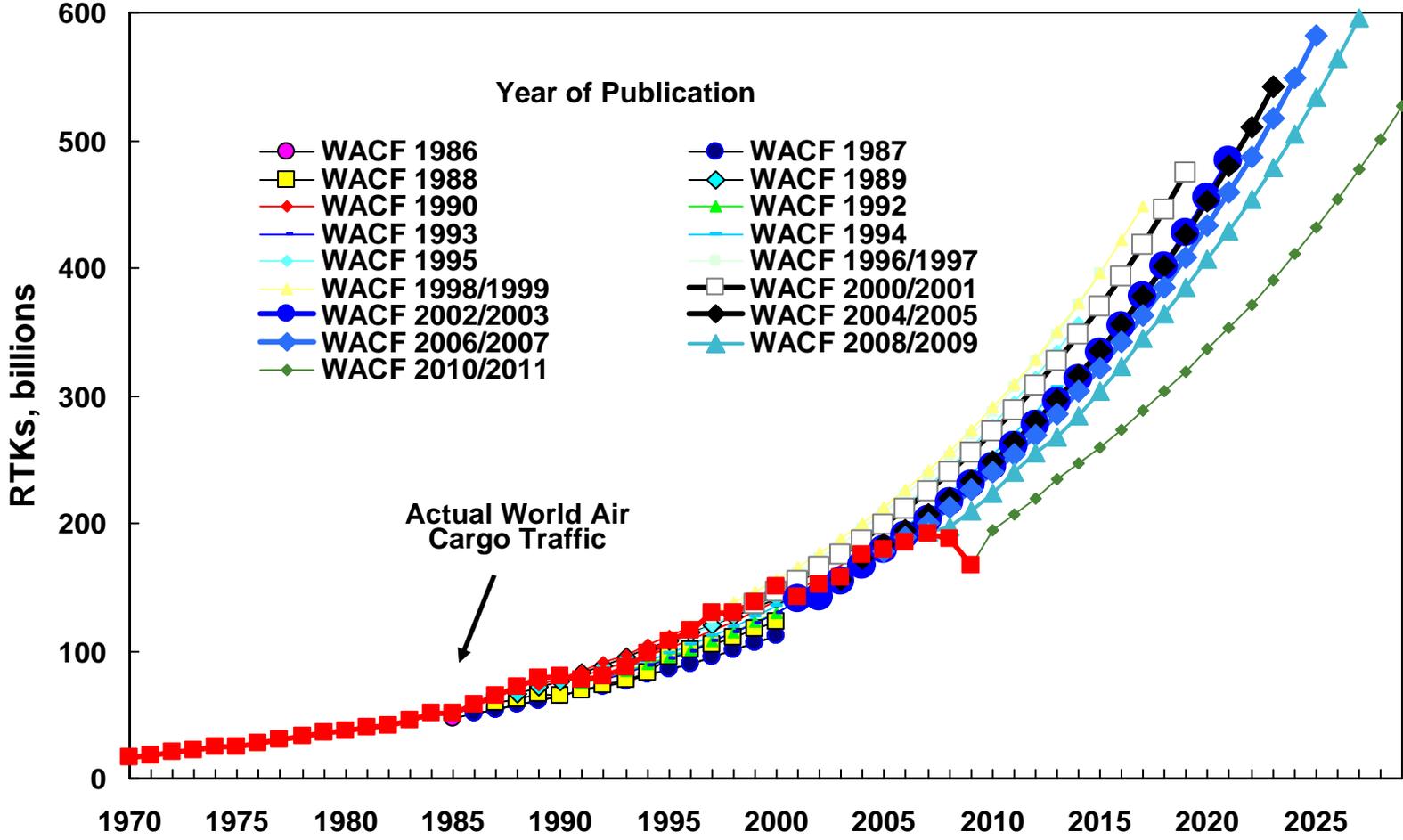
# The percentage of new to converted freighters grows with aircraft size



# Freighter deliveries vary by region with a reliance upon 'large size' for Asia-Pacific carriers



# Comparison of historic 'WACF' and actual traffic results

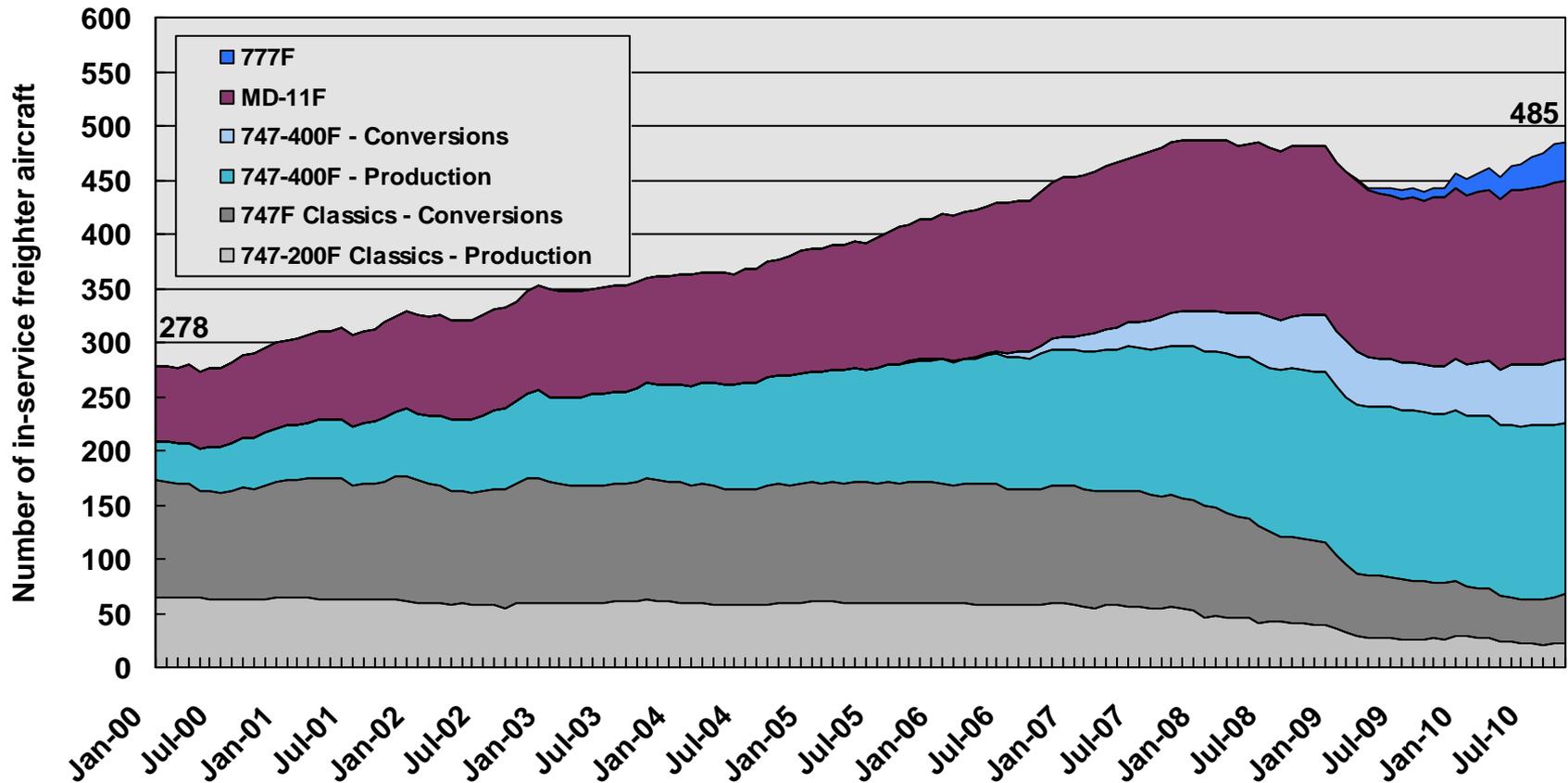


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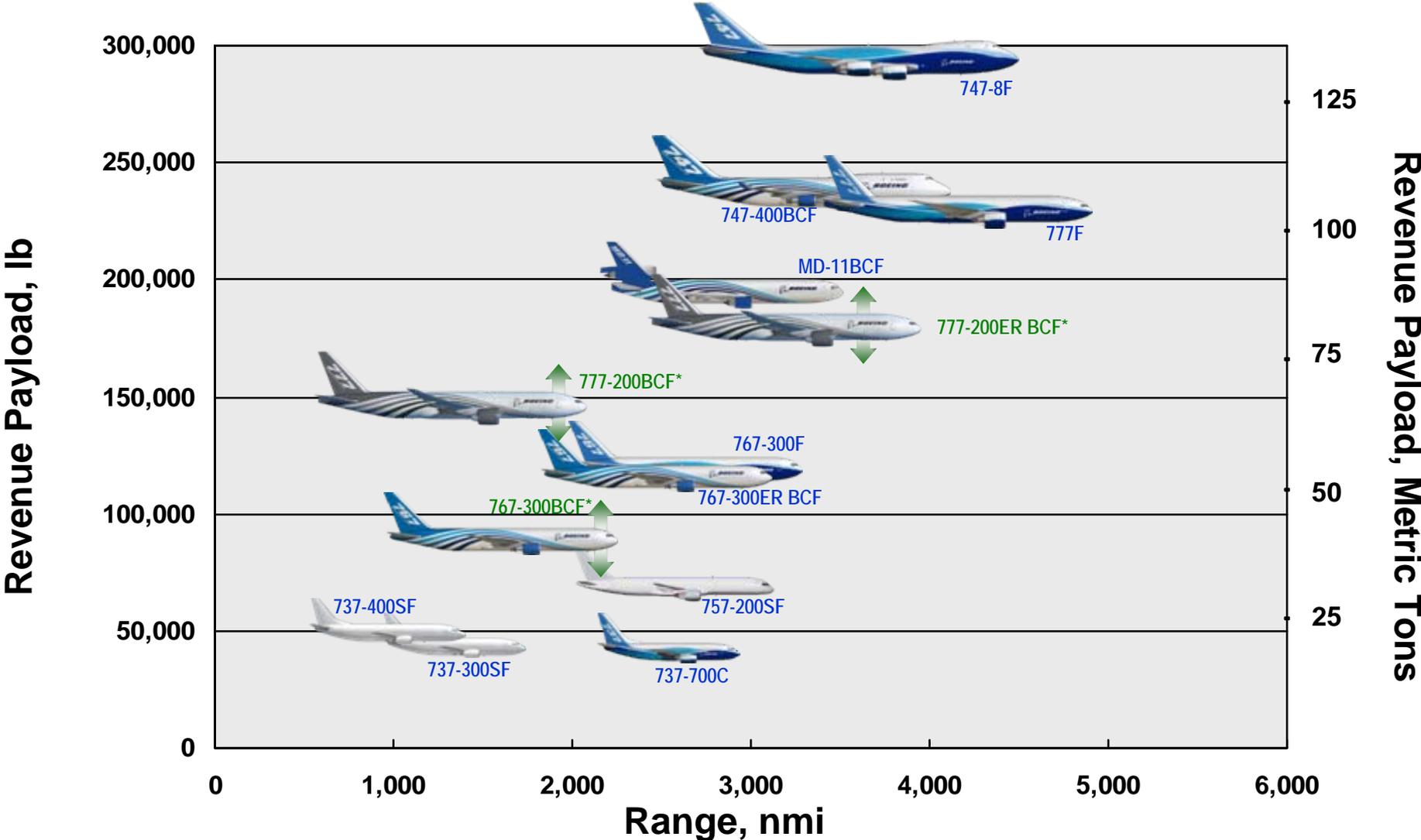


# Large freighter fleet modernization has been especially rapid since mid-2008



Source: Ascend database, Boeing as of October 2010

# Boeing's complete freighter offering



\*Note: Product Development Study

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# Air cargo industry challenges

- **Global economic uncertainty**
- **Fuel price volatility**
- **Modal diversion**
- **Environmental responsibility**
- **Security requirements**

# Air Cargo Perspective and Forecast

## *Conclusions*

- **After the worst-ever downturn, world air cargo has made a remarkable recovery, demonstrating its vital role in global commerce**
- **Air cargo industry fundamentals remain sound: imperative for reliability/speed, continued product innovation and global interdependence**
- **World air cargo traffic levels will triple over the next two decades with long-haul markets tied to Asia leading growth**
- **The world freighter fleet will expand by more than two-thirds to nearly 3000 aircraft by 2029**
- **Ongoing large freighter fleet modernization will make air cargo more competitive via improved economics**

# “2010-2011 World Air Cargo Forecast” web access



[www.boeing.com/commercial/cargo](http://www.boeing.com/commercial/cargo)