Will Growth Continue?

Presentation By:

David F. Hoppin
Principal
MERGEGLOBAL
TRANSPORT ECONOMICS & STRATEGY

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Will Growth Continue?

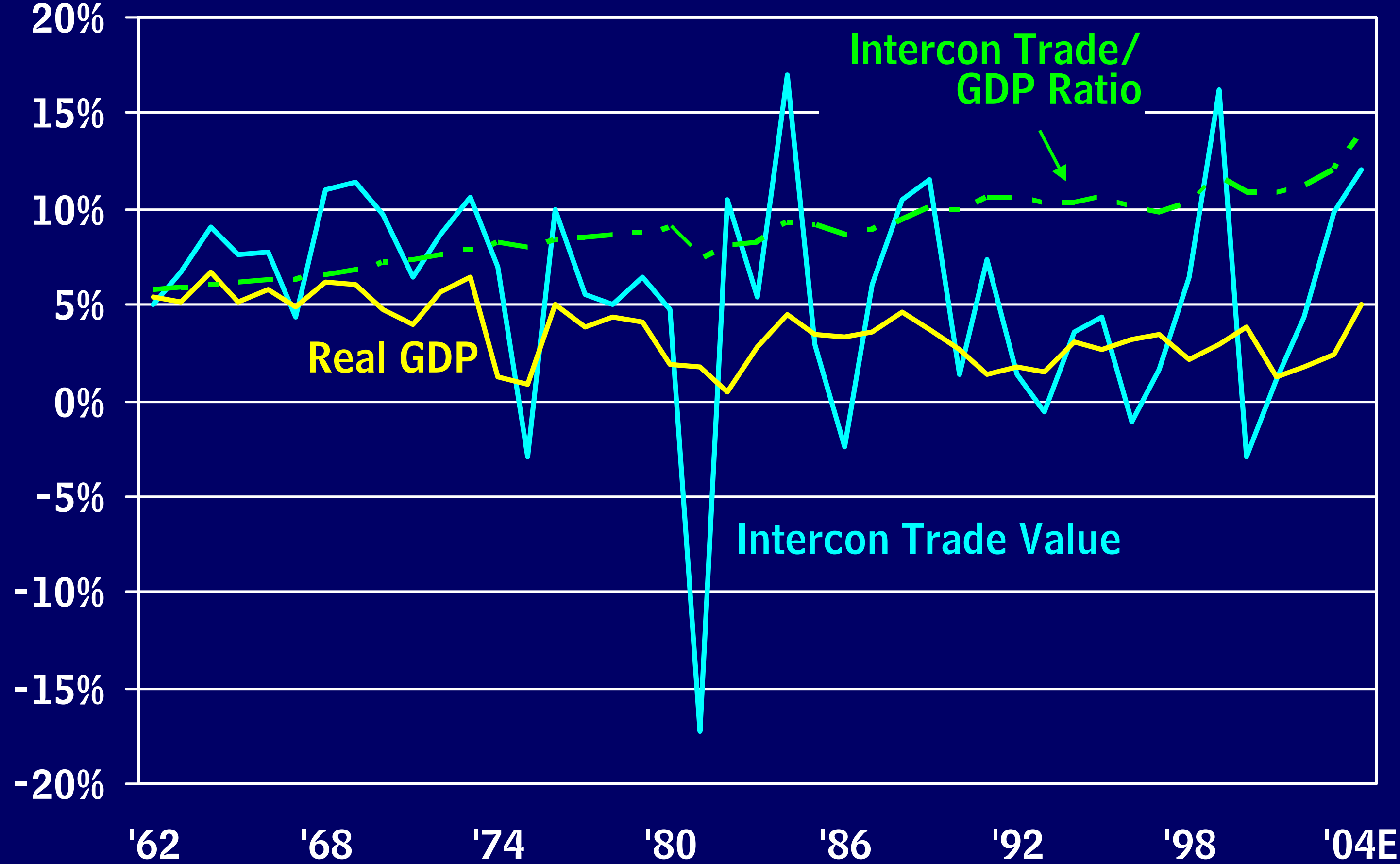
Agenda

- Macroeconomic Fundamentals
- MergeGlobal's World Air Freight Demand Forecast
- The Challenge Of Profit
- MergeGlobal's World Freighter Fleet Forecast
- Conclusions

Macroeconomic Fundamentals

Globalization will continue.

Real World GDP & Intercontinental Trade* Growth
Percent Change From Year Before In USD (1995 Dollars)

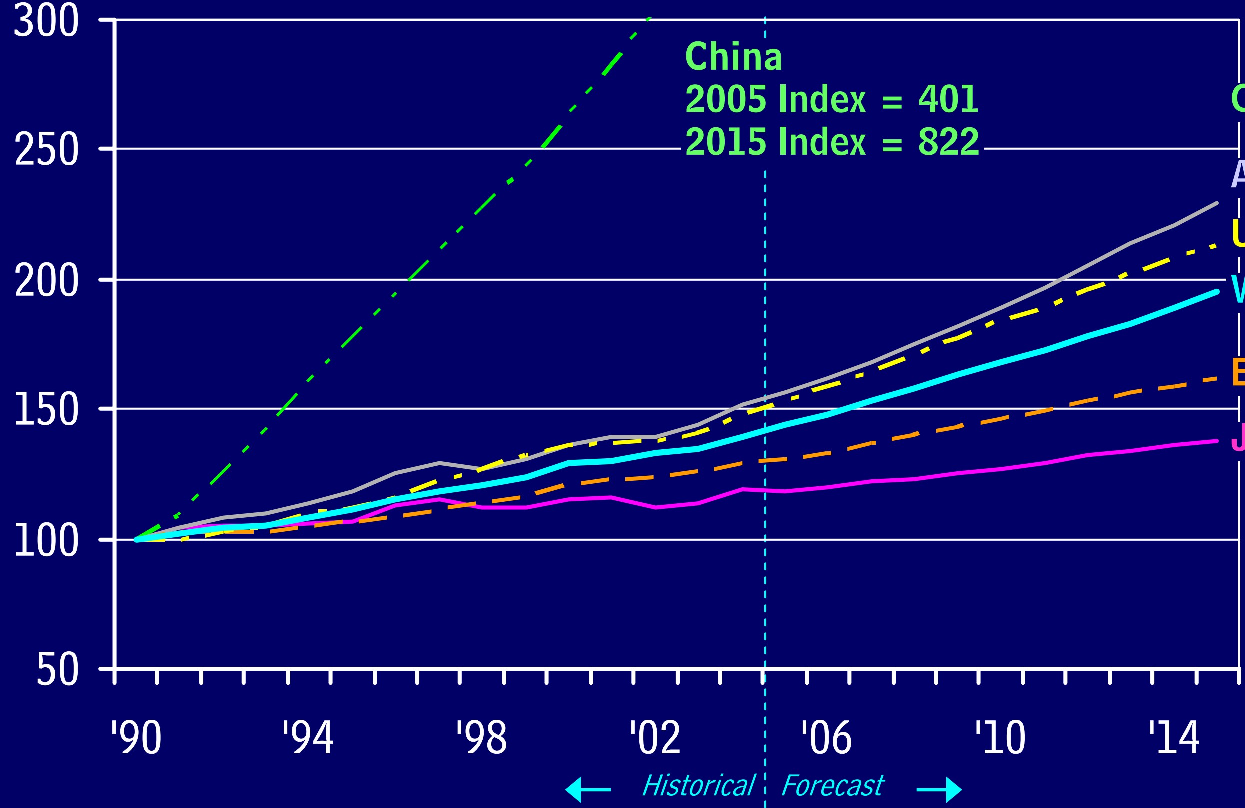


** - Excludes cross-border trade within North America and Europe.*

Source: MergeGlobal, Inc. estimates from IMF, IBRD data.

By any measure, China's growth has been extraordinary...

Real GDP Growth: 1990 - 2005
Index: 1990 = 100



Real GDP As Multiple Of 1990 Size

	2005	2015
China	4.0x	8.2x
Asia	1.6x	2.3x
USA	1.5x	2.1x
WORLD	1.4x	2.0x
Europe*	1.3x	1.6x
Japan	1.2x	1.4x

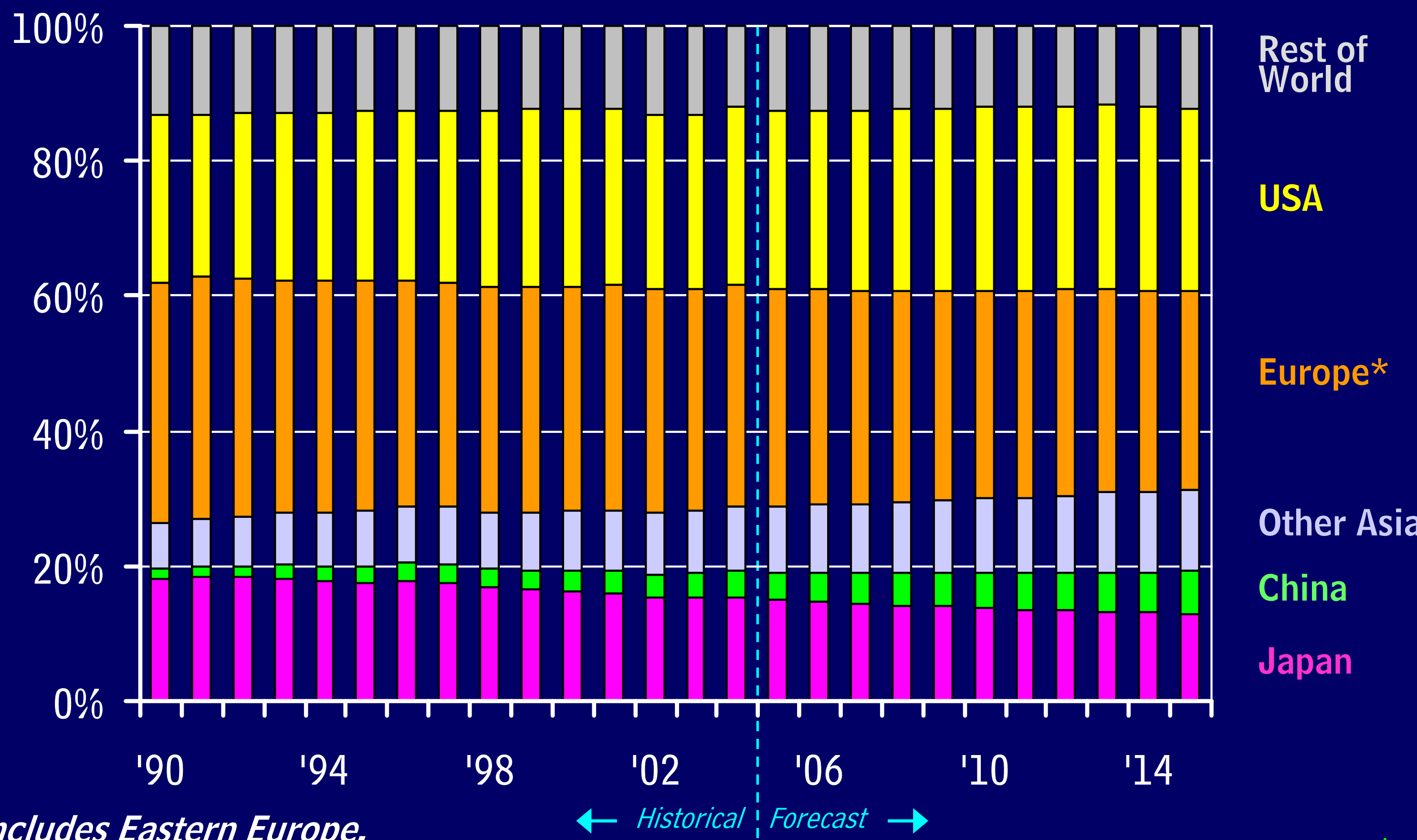
** - Includes Eastern Europe.*

Source: MergeGlobal, Inc. from Oxford Economic Forecasting Associates, Ltd.

... but still China accounts for a far smaller share of world GDP than Japan, the U.S. or Europe.

Share Of World Real GDP: 1990 - 2005

USD (1995 Dollars)



** - Includes Eastern Europe.*

Source: MergeGlobal, Inc. from Oxford Economic Forecasting Associates, Ltd.

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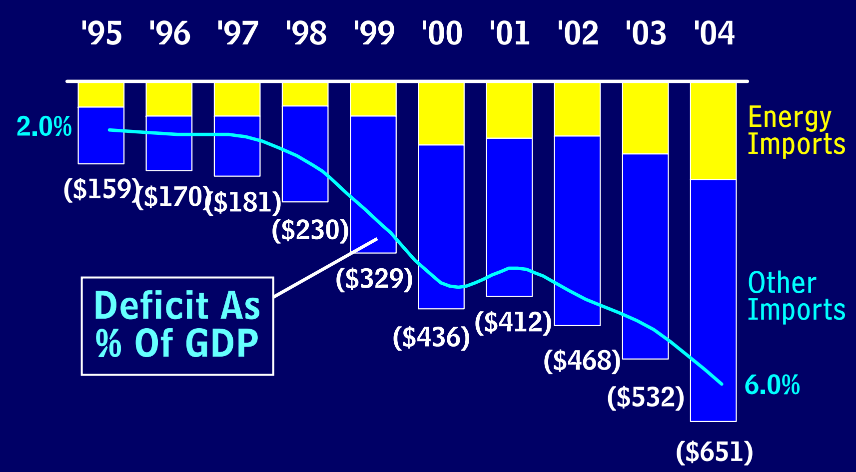
Debt-happy U.S. consumers continue to drive import growth.

U.S. Consumer Debt: 1995-2003
USD Trillions

U.S. Trade Deficit: 1995-2003
USD Billions



Note
The household Debt Service Ratio (DSR) is an estimate of the ratio of debt payments to disposable personal income. Debt payments consist of the estimated required payments on outstanding mortgage and consumer debt.

Source: MergeGlobal, Inc. from US Federal Reserve Board

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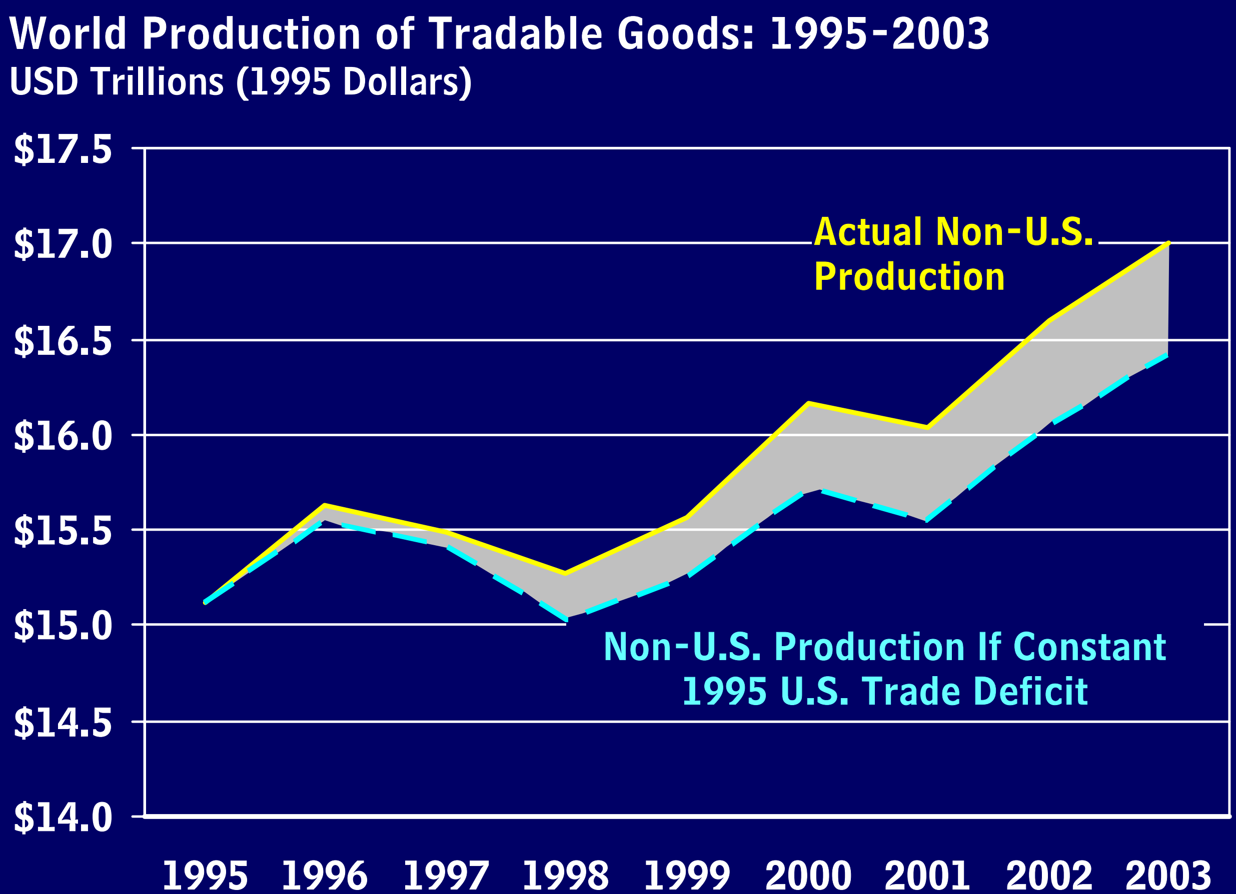
If the U.S. kept its annual trade deficit constant at 1995 levels, the world economy would have lost $2.8 trillion in production between 1995 and 2003.



Source: MergeGlobal, Inc. from Oxford Economic Forecasting, Ltd.

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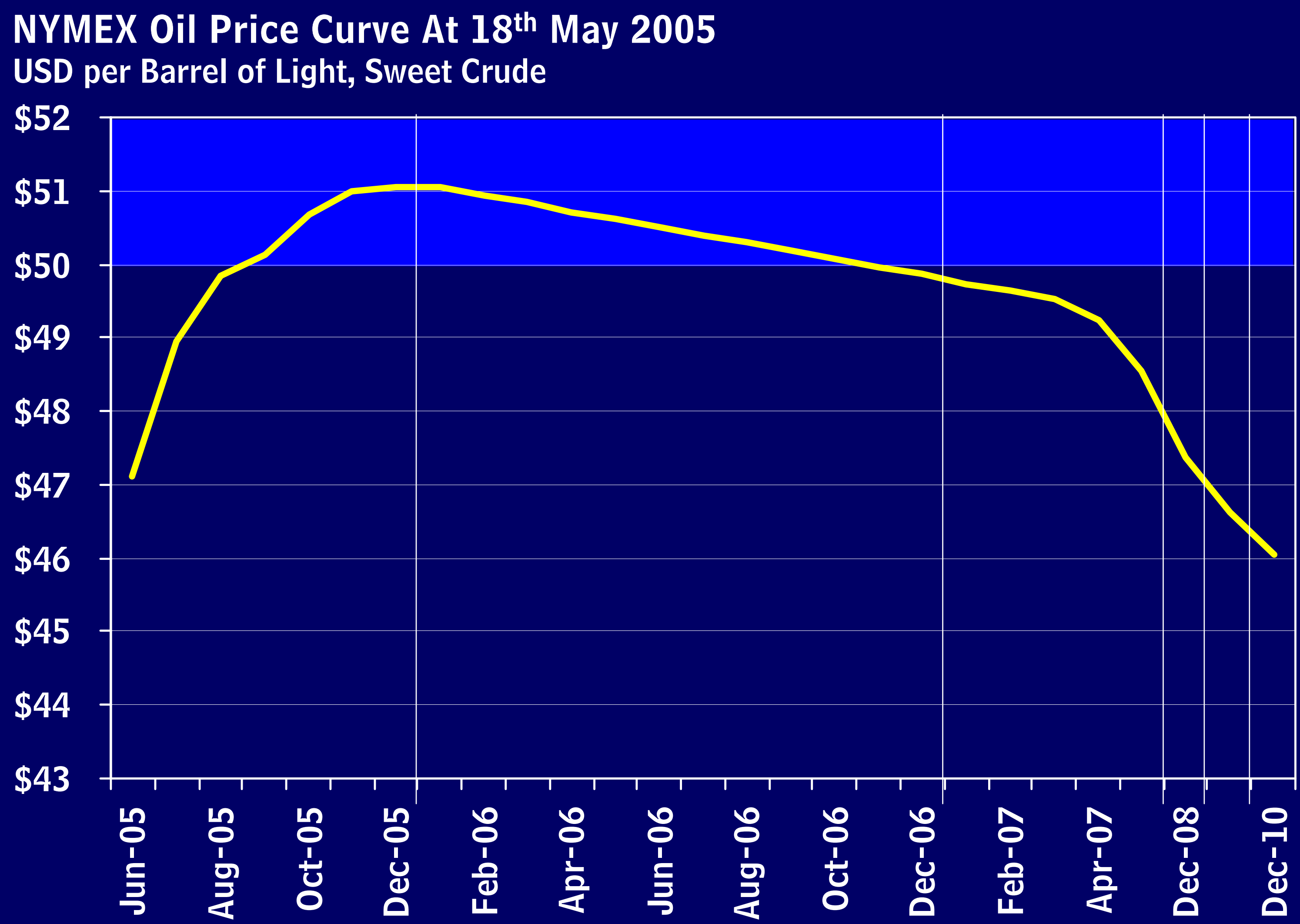
The market expects oil prices to remain above $50 per barrel through 2006.



Obviously there are multiple risks to the macroeconomic forecast!

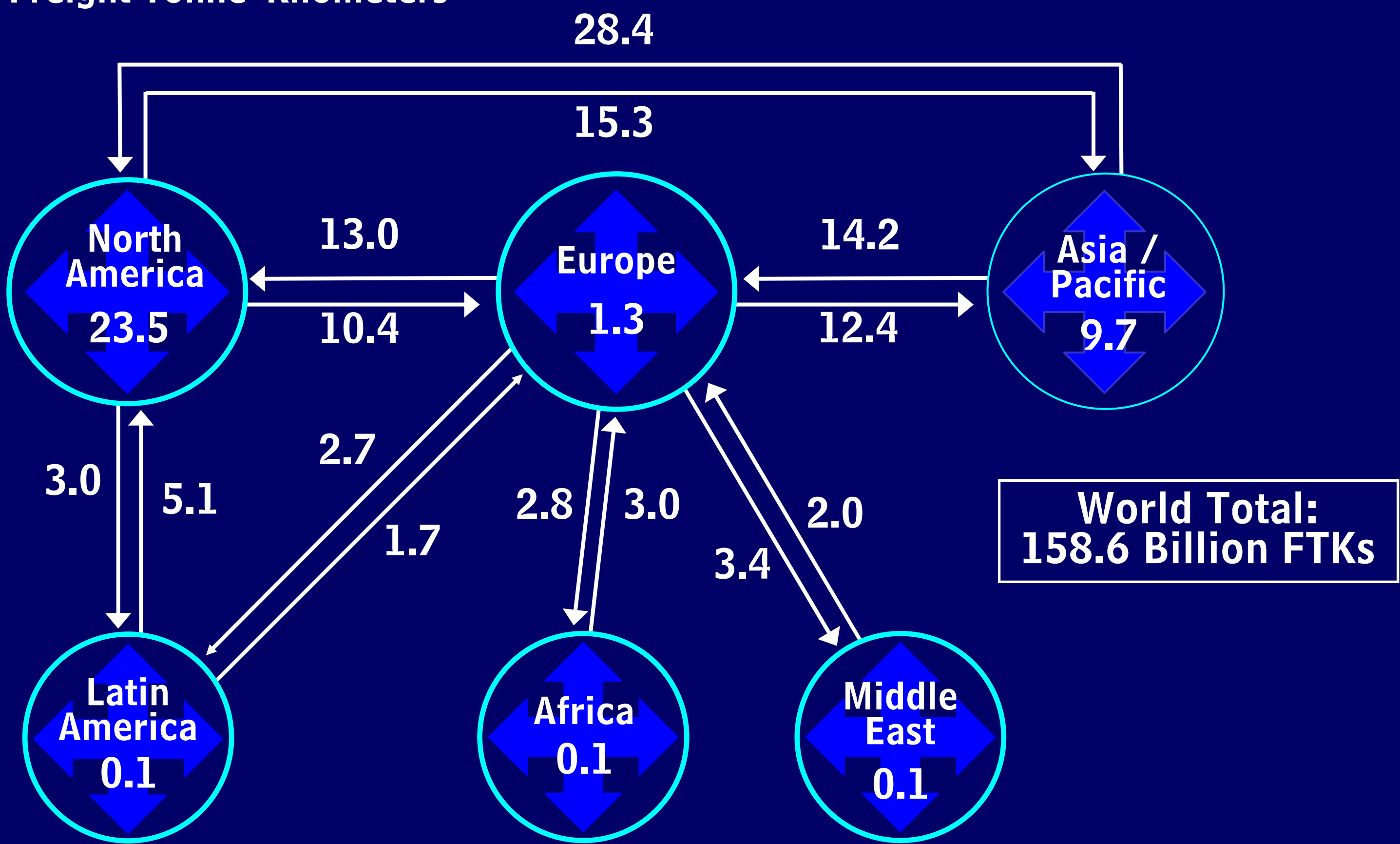
- Terrorism/war-related "shocks"
- Overdependence on U.S., especially indebted U.S. consumers, to drive global economic growth
- Significant further depreciation of the US dollar against Asian and European currencies would diminish U.S. appetite for imports!

Air Freight Demand Forecast

Air freight demand is concentrated in east-west lanes.

Primary Air Freight Flows: 2004

Billions of Freight Tonne-Kilometers



Source: MGI Global Air Freight Flow Model

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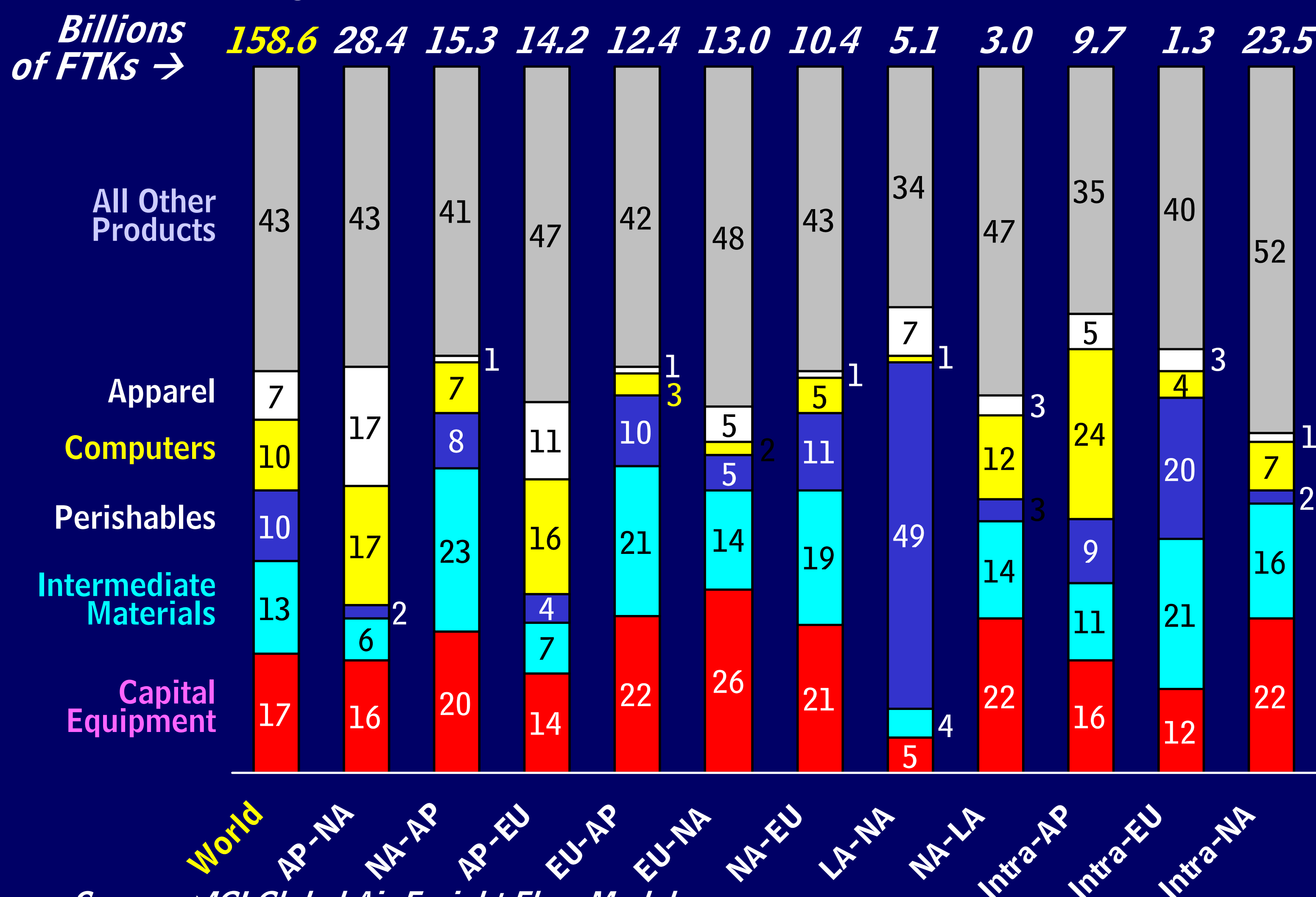
Commodity mix drives freight density and profitability.

World Air Freight Traffic: 1999-2009F

Billions of Freight Tonne-Kilometers



Source: MGI Global Air Freight Flow Model

2004 was a great year – but still should be viewed in context of the previous traffic peak in 2000-1.

Recent Traffic Trends In Major East-West Markets

Trailing 12 Month Index: 100 = Export Tons In Base Year (Aug-00 thru Jul-01)

Source: MergeGlobal, Inc. from U.S. Department of Commerce and a sample of carrier-level statistics for the Asia-Europe market.

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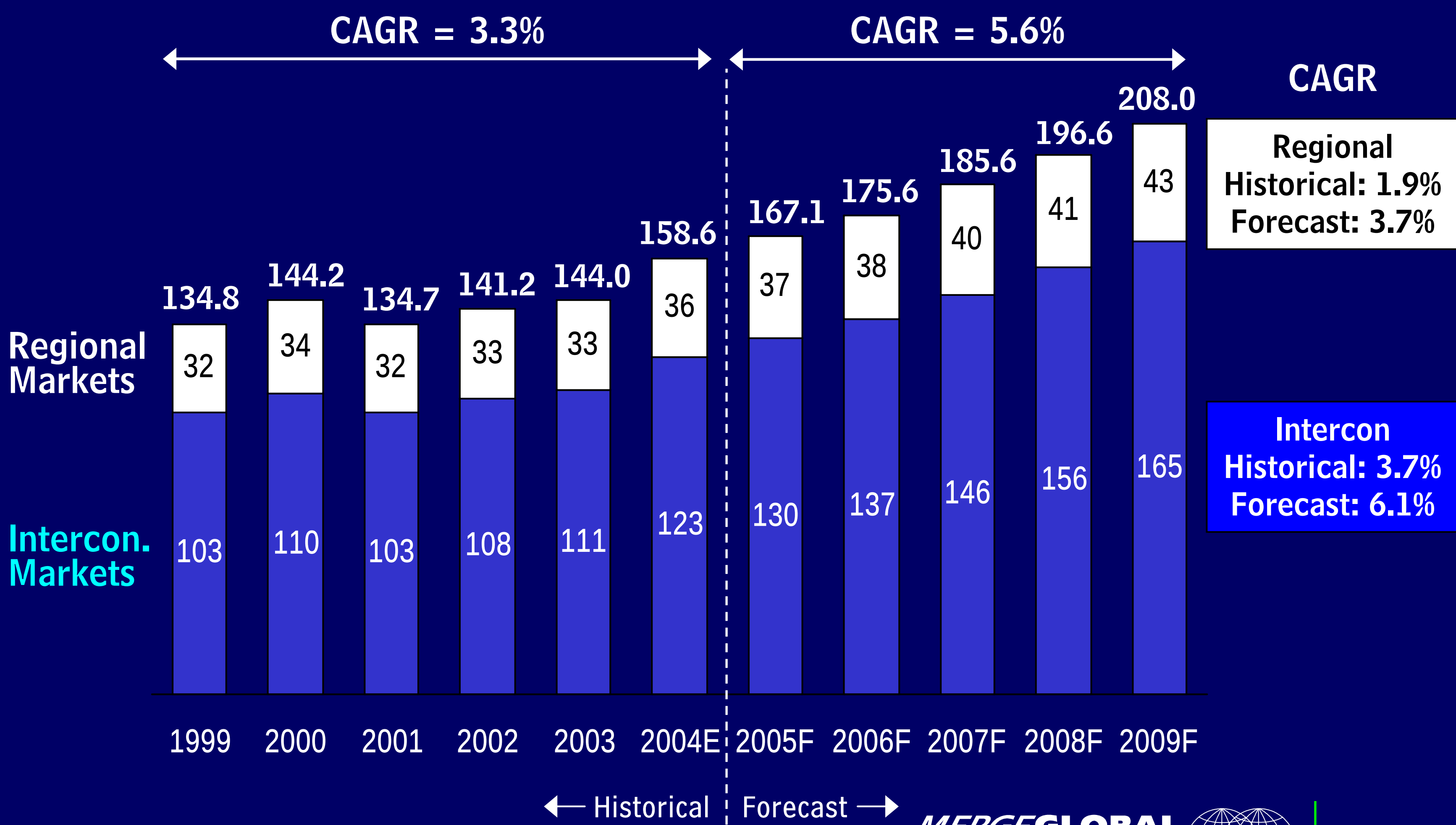
We expect steady growth in global air freight demand.

World Air Freight Traffic: 1999-2009F

Billions of Freight Tonne-Kilometers



Source: MGI Global Air Freight Flow Model

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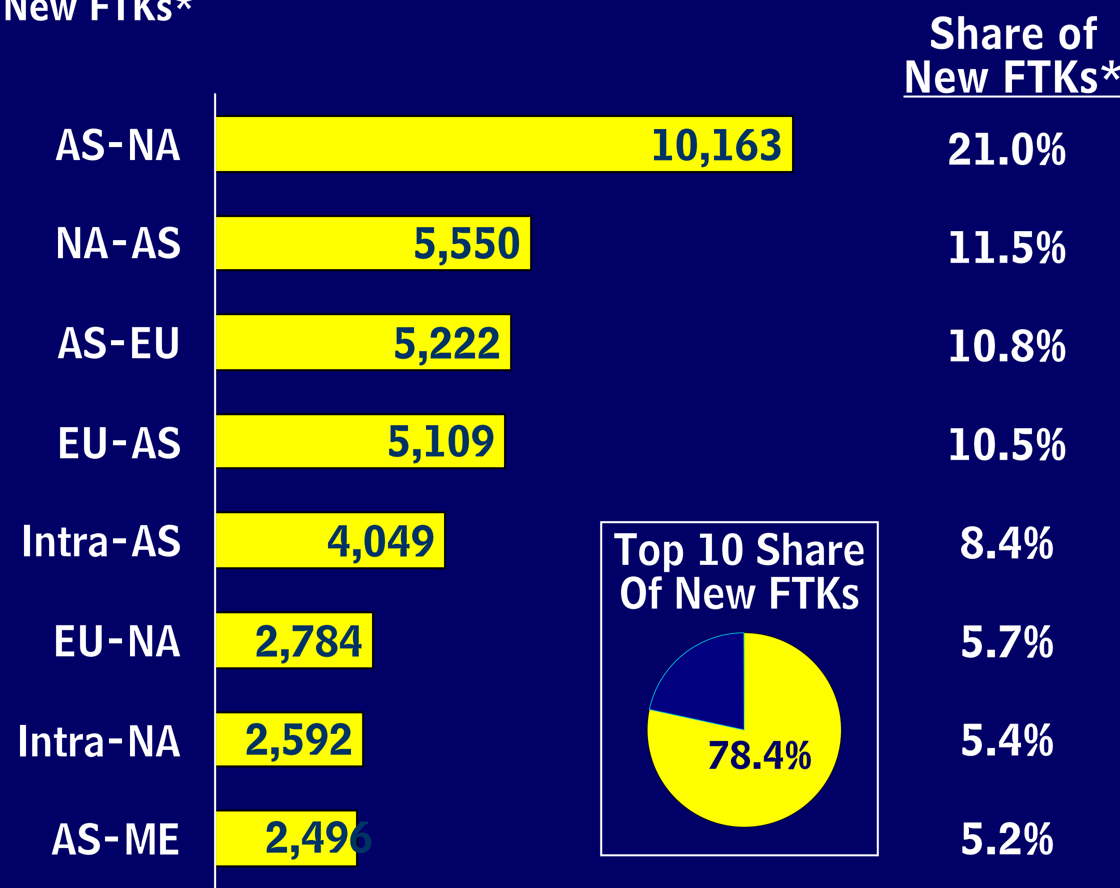
Absolute traffic growth is geographically concentrated.

Fastest Growing Markets: 2004E-2009F

Millions of New FTKs*



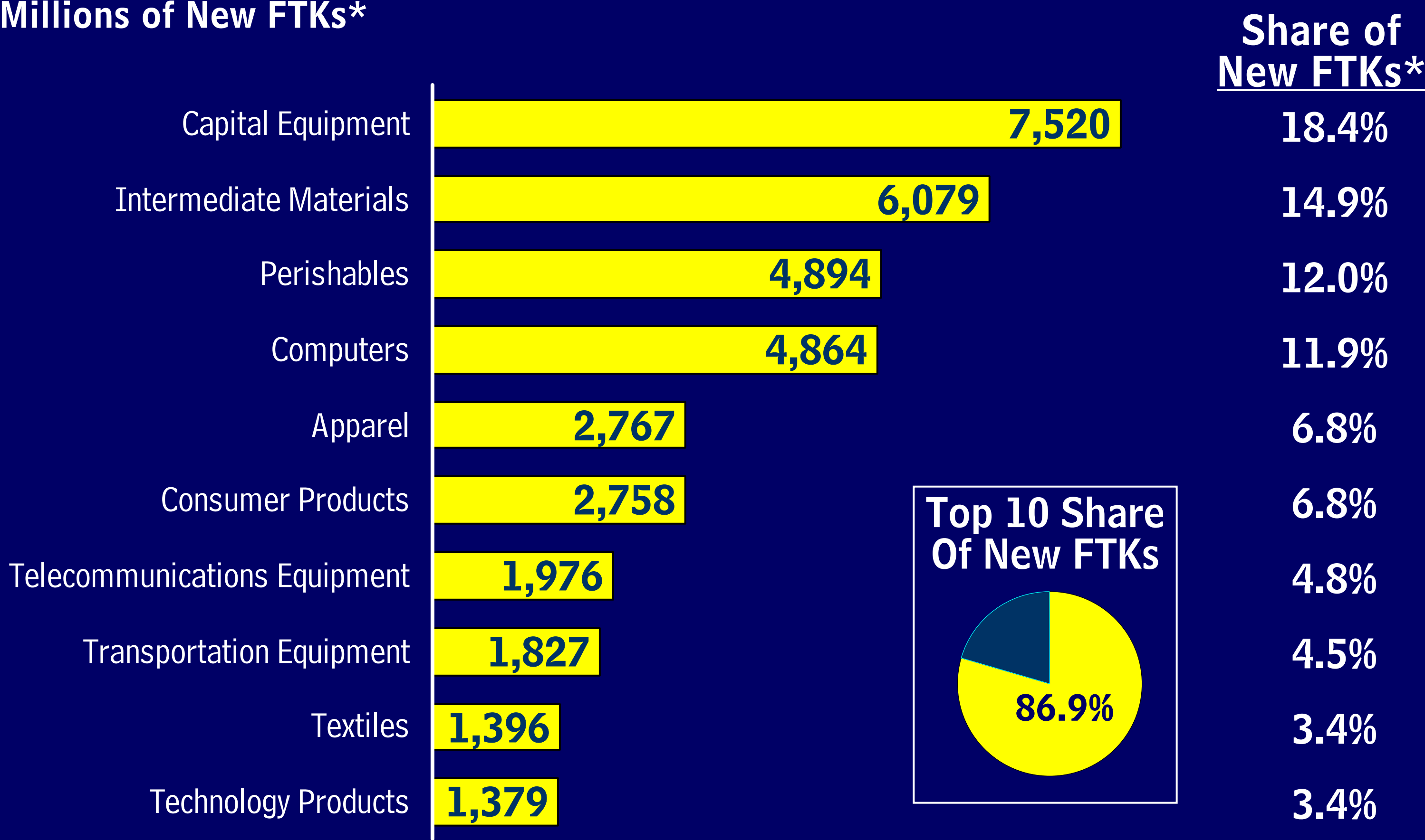
*- New FTKs represent the increase in annual FTKs between 2004 and 2009.

Source: MGI Global Air Freight Flow Model

Globalization of manufacturing drives the two fastest-growing air freight commodity types.

Fastest Growing Shipper Industry Segments: 2004E-2009F

Millions of New FTKs*



**- New FTKs represent the increase in annual FTKs between 2004 and 2009.*
Source: MGI Global Air Freight Flow Model

Forecast error could come from a number of "unknowable" factors.

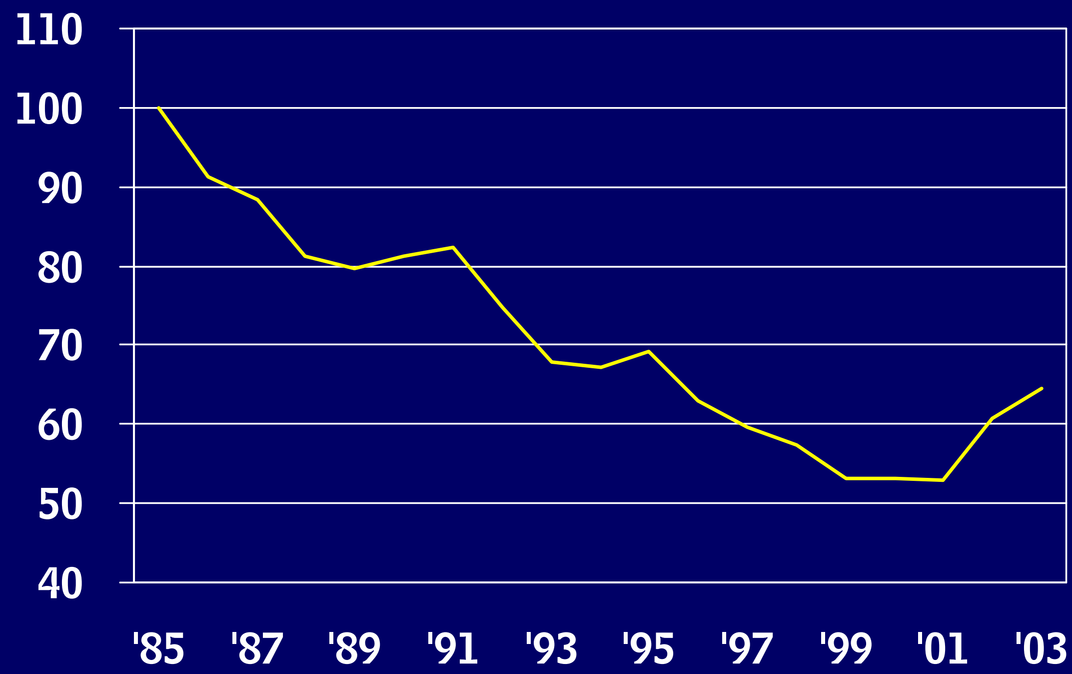
- Impact of evolving aviation security rules
- Impact of technological trends (miniaturization, gadget integration) on future air freight demand?
- Continuous relocation of manufacturing activity to low-cost centers (currently to China, in the future to ?)
- Viable "middle market" transport mode

The Challenge of Profit

Air freight yields have improved since 2001 – but still are in long-term decline.

- Structural decline in yields due to:
  - Growth of containerized belly capacity
  - Reduced regulatory price controls
  - Longer lengths of haul (rise of Asia as the world's manufacturing center)

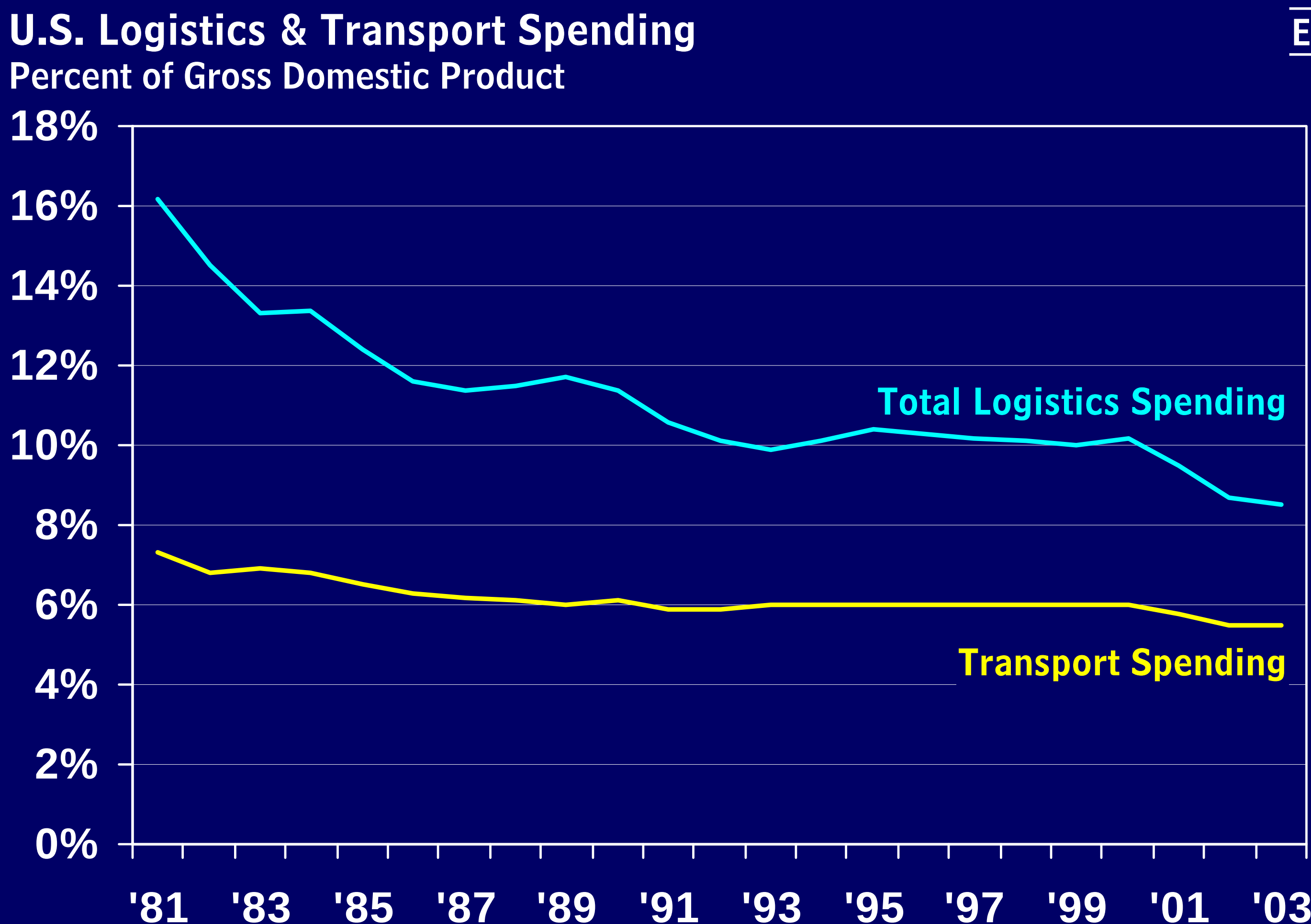
International Air Freight Yields
USD per FTK (Index: 1985 = 100)



Source: Boeing World Air Cargo Forecast

Shippers are squeezing both transport and logistics costs.

EXAMPLE

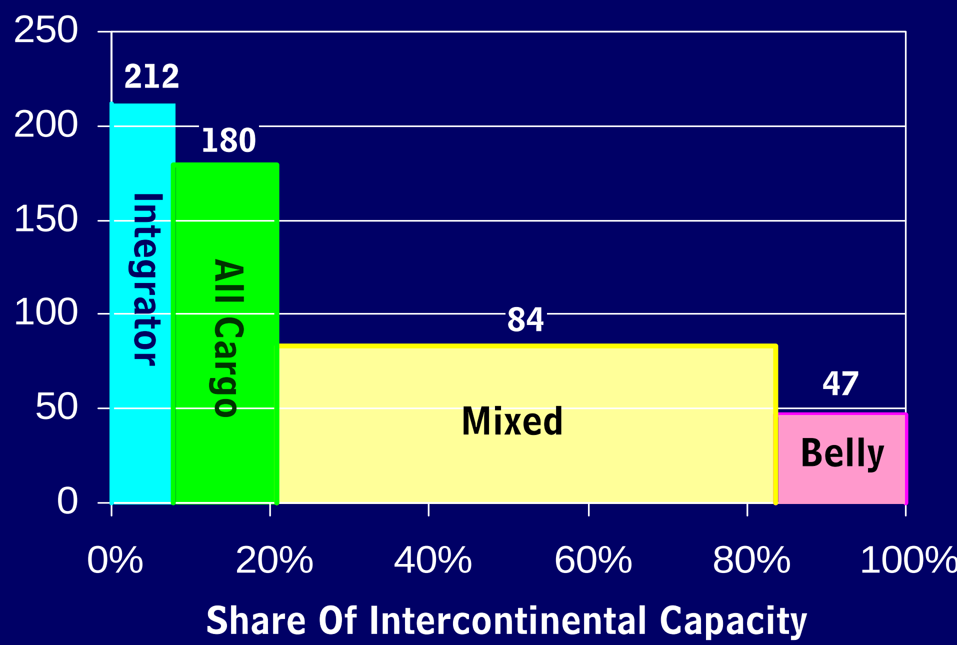


Source: CASS Logistics

... especially for freighter operators, both integrated and non-integrated!

- Belly lift accounts for approximately 50% of global intercon capacity.
- However, pure-belly carriers – which operate no main-deck capacity of any type – account for less than 20% of the global total.
- The majority of intercontinental lift is generated by mixed-fleet carriers.

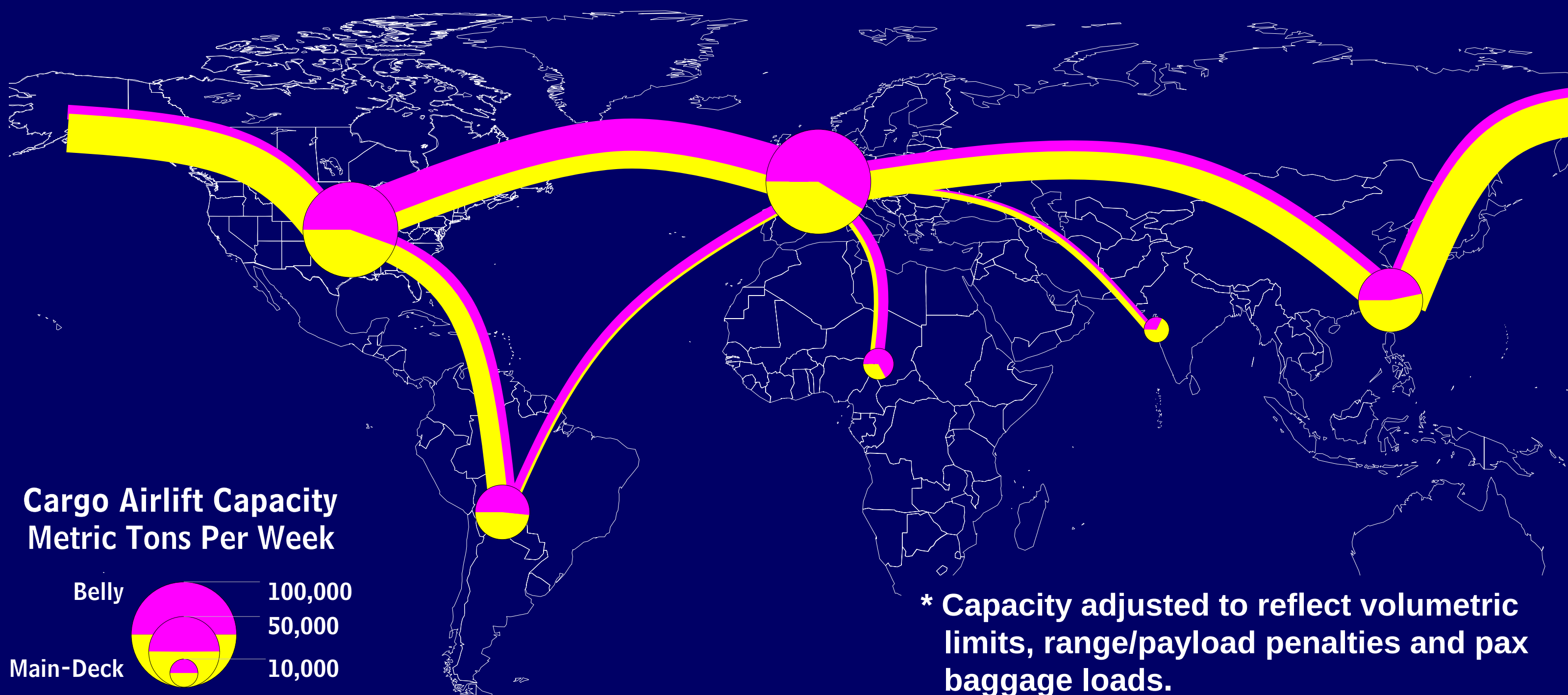
Relative Intercontinental Unit Cost: 2003
Index (Average = 100)



Source: MergeGlobal, Inc. from U.S. DOT, IATA, ICAO and company reports.

Belly intensity varies widely by market – from more than 70% in the North Atlantic, to less than 30% in the North Pacific.

Airlift Capacity* In Major Markets: 2004



* Capacity adjusted to reflect volumetric limits, range/payload penalties and pax baggage loads.

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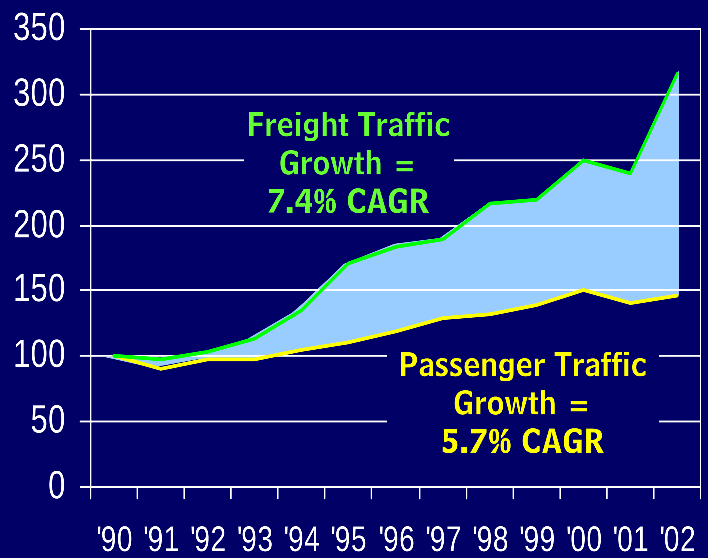
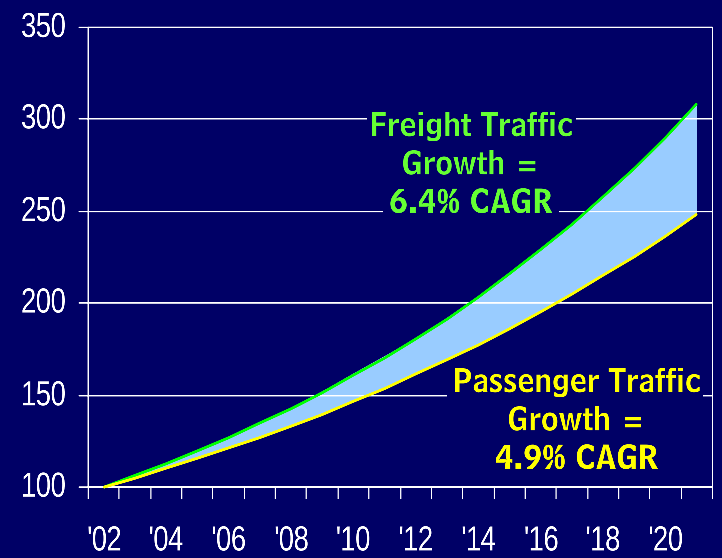
Belly intensity will decline over the long term – naturally, at different rates in different markets.

Belly/Freight "Growth Gap": 1990-2002
Index (1990 = 100)



Belly/Freight "Growth Gap": 2002-2021
Index (2002 = 100)



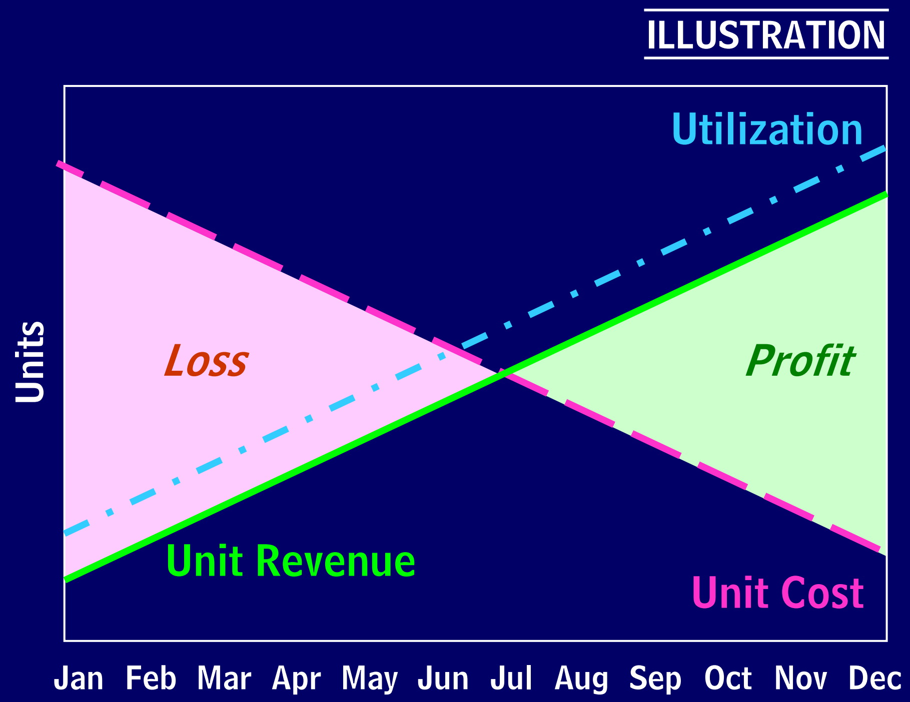
"Growth Gap"

Source: IATA World Air Transport Statistics

Source: MergeGlobal, Inc. from Boeing Current Market Outlook – 2002 and World Air Cargo Forecast – 2002

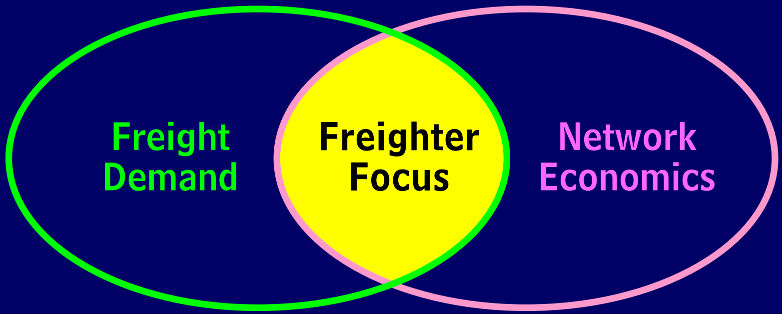
It seems obvious that more freighters will be required. But it is less clear how to make money with them!

- Air freight demand tends to be highly seasonal. It is not unusual for freighter operators make 60% of annual revenue in four months.
- Ability to make money in the peaks depends on excess capacity operated in the troughs.
- Profit-maximizing carriers perform heavy maintenance in the weak periods – dramatically increasing cash outlays.
- Possible to be highly profitable on a year-round basis but run out of cash in the second quarter!



The intersection between freight demand and network economics is dynamic in virtually all markets!

- Revenue and cost are fundamentally different.
  - Revenue is one-way and built up shipment by shipment, path by path.
  - Cost is round-trip, because the aircraft must return to the starting point, and incurred in large increments by long-lived assets.



- When customers look at an airfreight network, they see paths to move goods between various cities at various times.
- When carriers look at an airfreight network, they see a collection of path-specific demands that need to be satisfied by moving large, expensive assets around in a pattern that balances revenue-competitiveness with cost-efficiency.

Source: MergeGlobal, Inc.

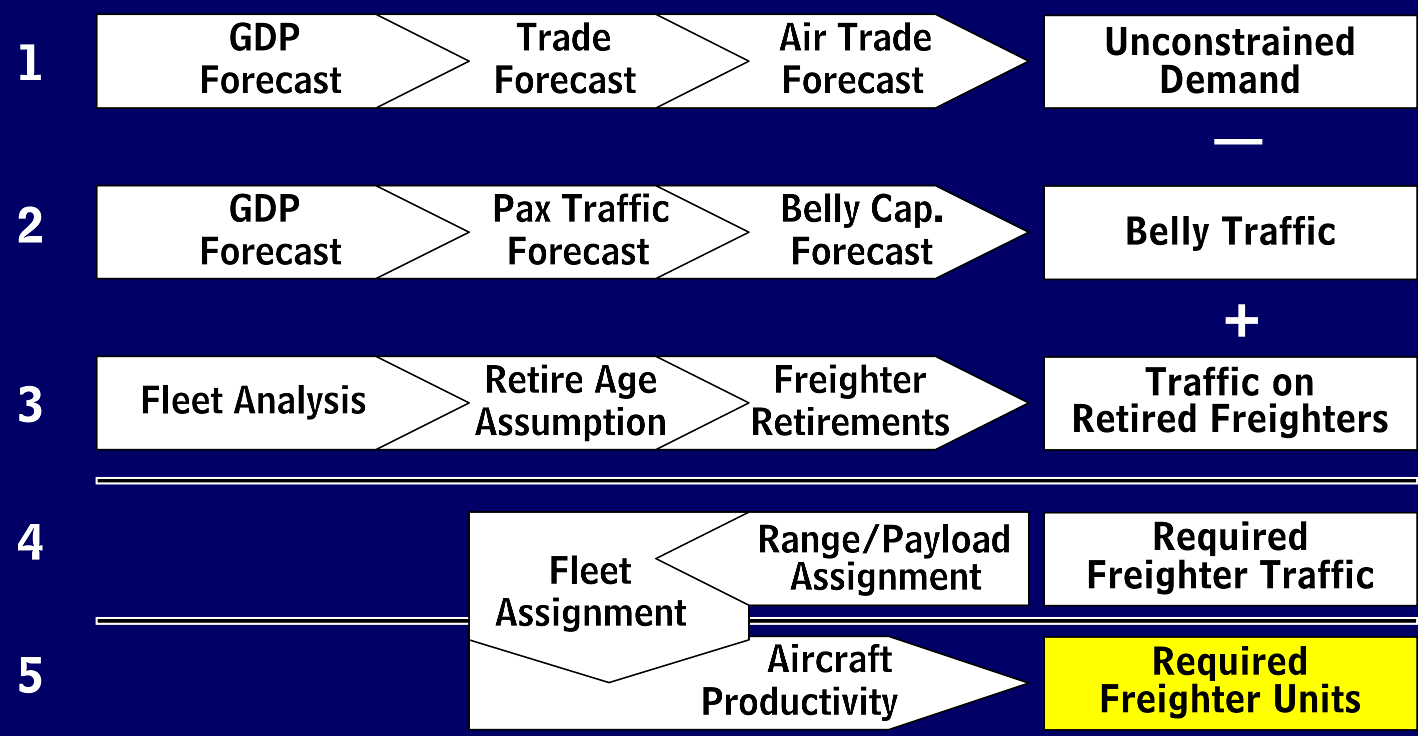
Two logical extremes capture and project the main issues in freighter strategy.

	High Revenue	Low Cost
Philosophy	"Air cargo is segmentable"	"Air cargo is a commodity"
Strategy	• Complex product range • Heavy marketing spend • Large network – emphasize scope, scale and quality • Superior operational execution – especially with regard to revenue integrity!	• Bare-bones product • Little or no marketing – willing dependence on key customers • Small network ("cherry-picking") • Focus on being absolute low-cost producer

Freighter Fleet Forecast

MergeGlobal's freighter forecast is based on cargo traffic demand and anticipated belly capacity growth.

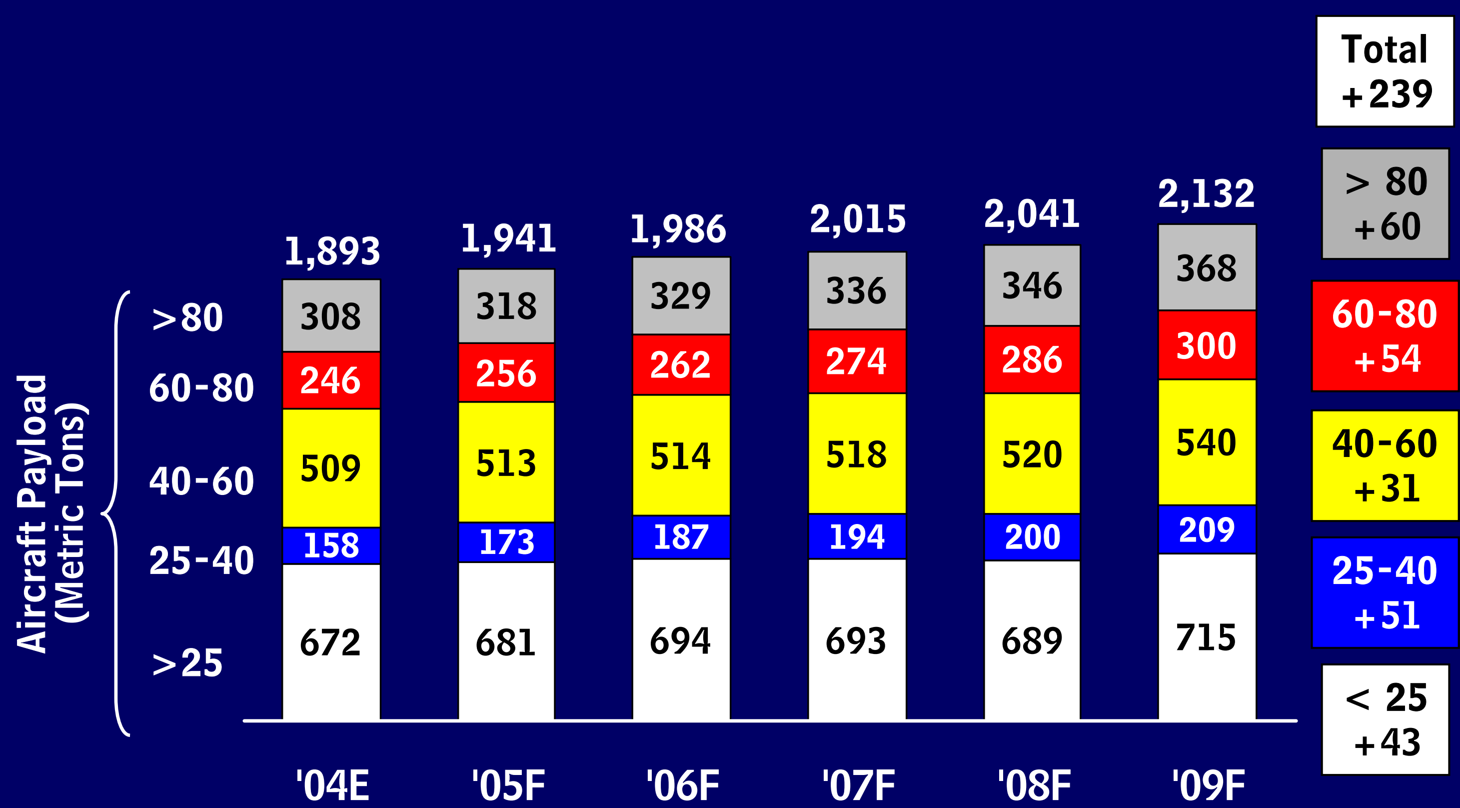
Freighter Fleet Forecast Methodology



Source: MergeGlobal, Inc.

Jet freighter fleet growth will be concentrated in widebody aircraft.

World Jet Freighter Fleet: 2004E-2009F
Aircraft Equivalents



**- Change in Units represents additional freighter aircraft required to meet forecast demand.*

Source: MergeGlobal, Inc. Global Freighter Capacity & Fleet Model

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Conclusions

"Proceed with caution"

- Macroeconomic picture is positive but there are significant, visible risks.
  - U.S. deficits and asset-price bubble
  - Impact of sustained high oil prices
  - "Shocks"
- Air freight demand growth will continue.
  - Intercontinental flows will grow faster than domestic/regional
  - Asian air freight exports will lead the way
- World freighter fleet capacity will grow faster than traffic demand.
  - Carriers generally will upgauge in an effort to drive down unit cost

Thank You!

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