

ADJUSTING FORECASTS!

Potential consequences of the crisis
in the air transport business

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The framework

- Specific characteristics of air transport:
 - ☞ cyclical
 - ☞ volatile
 - ☞ forerunning
- The financial crisis and the crisis of the real economy will provoke a crisis in the air transport business

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A recent publication

- Meersman, H., Van de Voorde, E. and T. Vanelslander, 2008, The Air Transport Sector after 2010: A Modified Market and Ownership Structure, European Journal of Transport and Infrastructure Research, 8(2), 71-90.
- A forecasting exercise in three steps:
 - ☞ The current 'state of the art' in the air transport business
 - ☞ The development process of the last decade
 - ☞ Potential scenarios and strategies
- Adjusting forecasts?

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Benchmarking tools used

Demand

Total market evolution
Route areas
Segmentation
Influencing variables

Supply

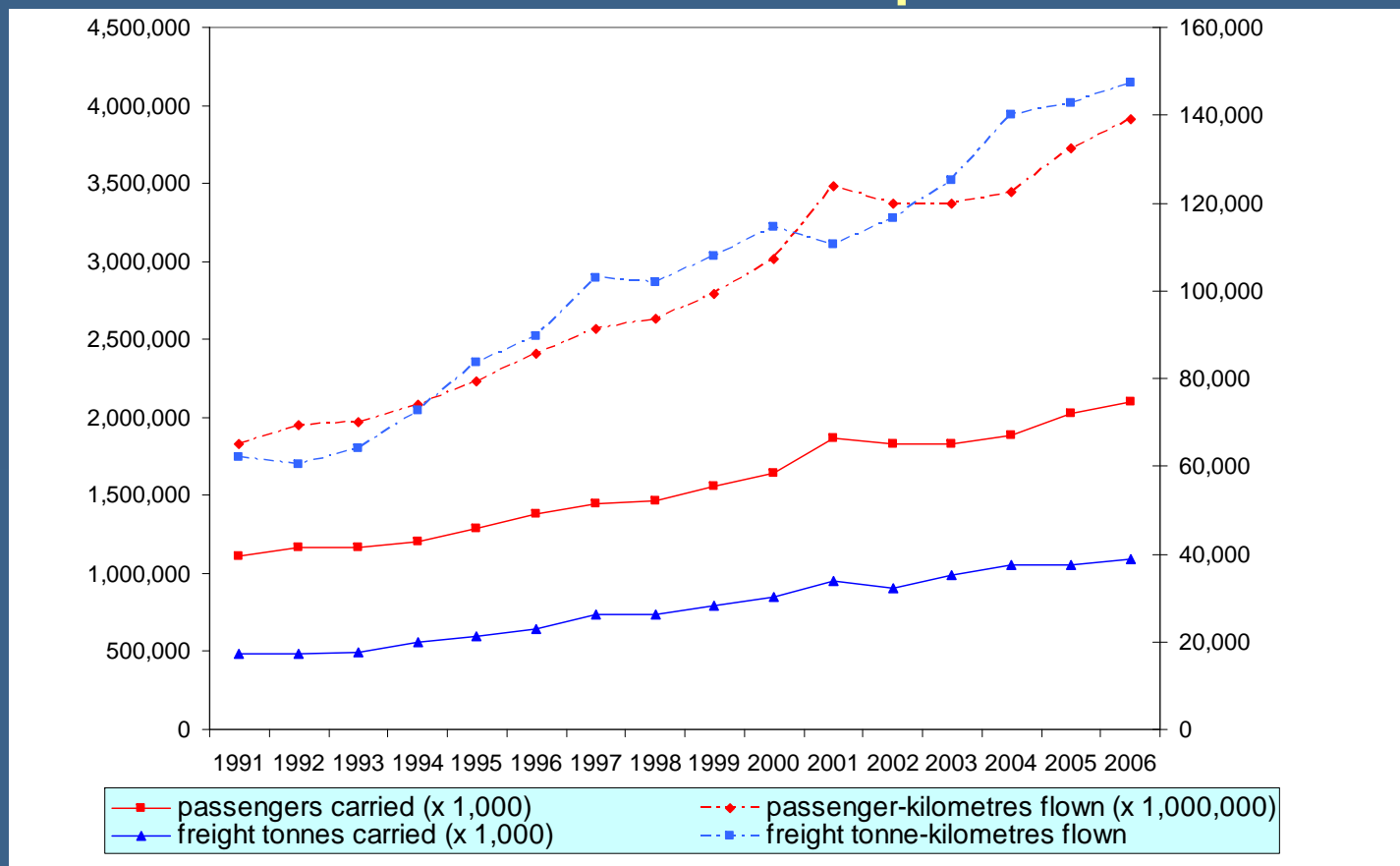
Available seat-kilometres
Cost analysis
Strategies

Equilibrium

Load factor
Yield

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World air transport: volumes⁴



World Air Transport - Scheduled services - domestic + international

Source: IATA

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World air transport: load factors

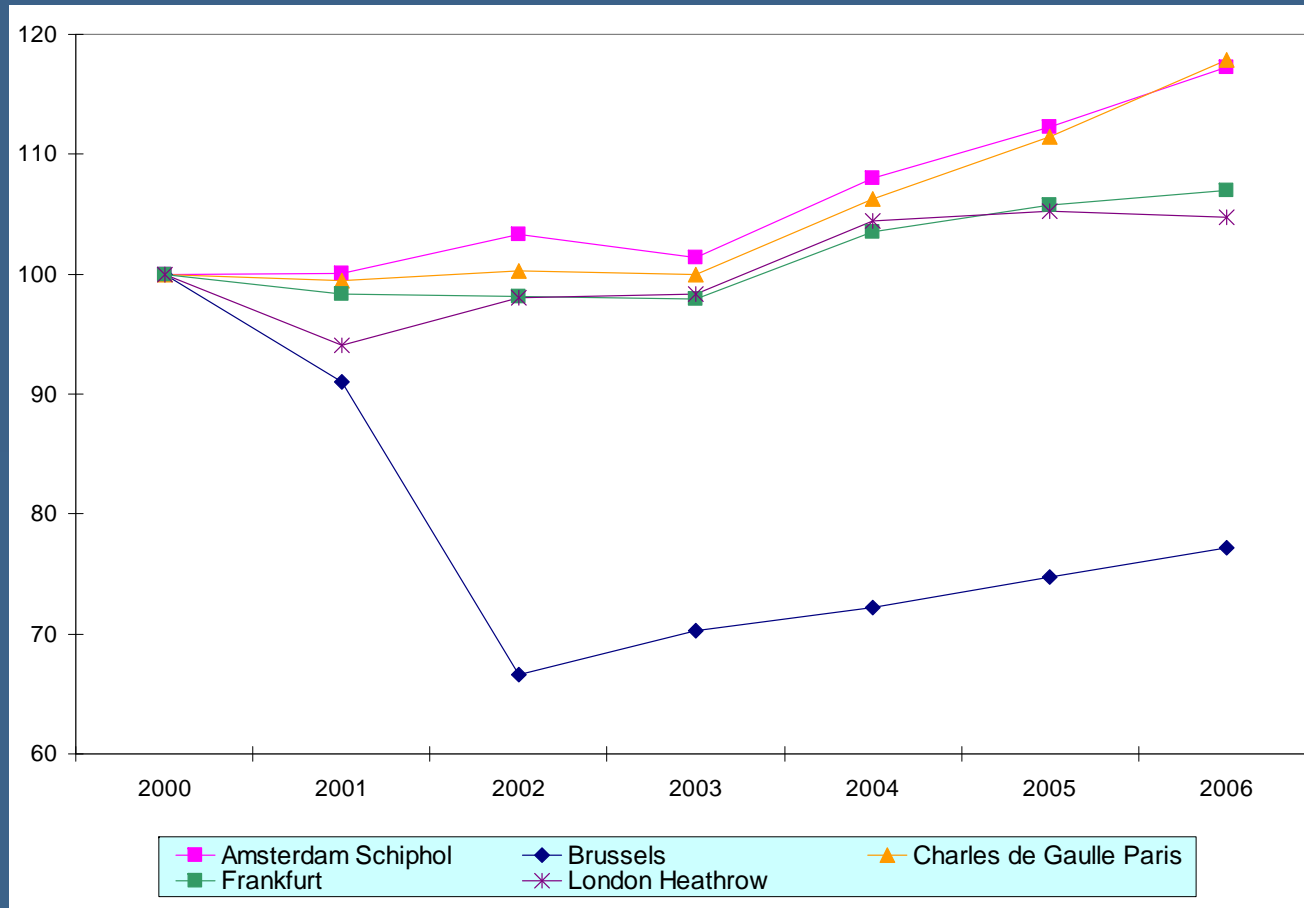


World Air Transport - Scheduled services - domestic + international

Source: IATA

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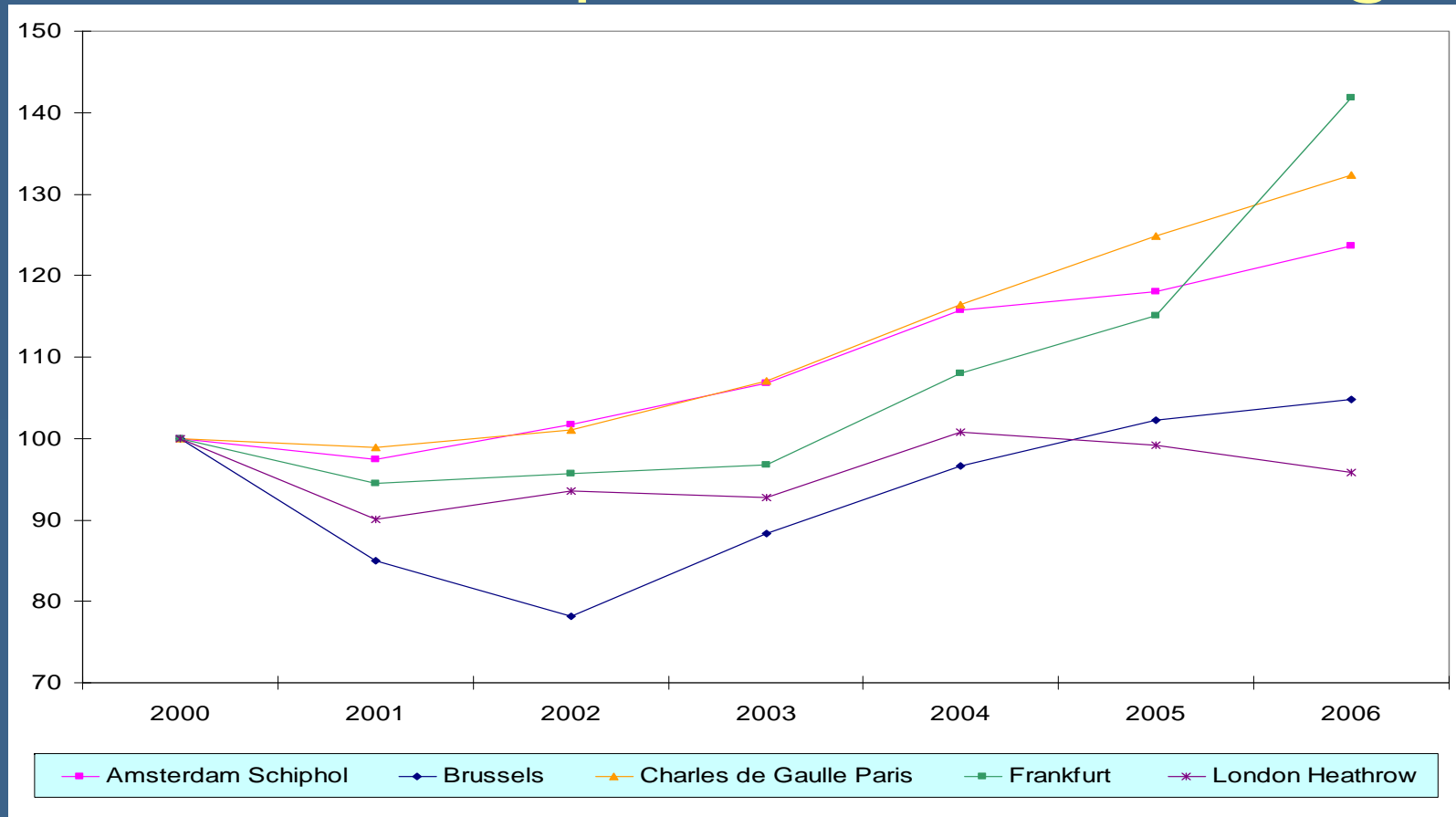
Airport volumes: passengers⁶



Source: Ruimtelijk Planbureau

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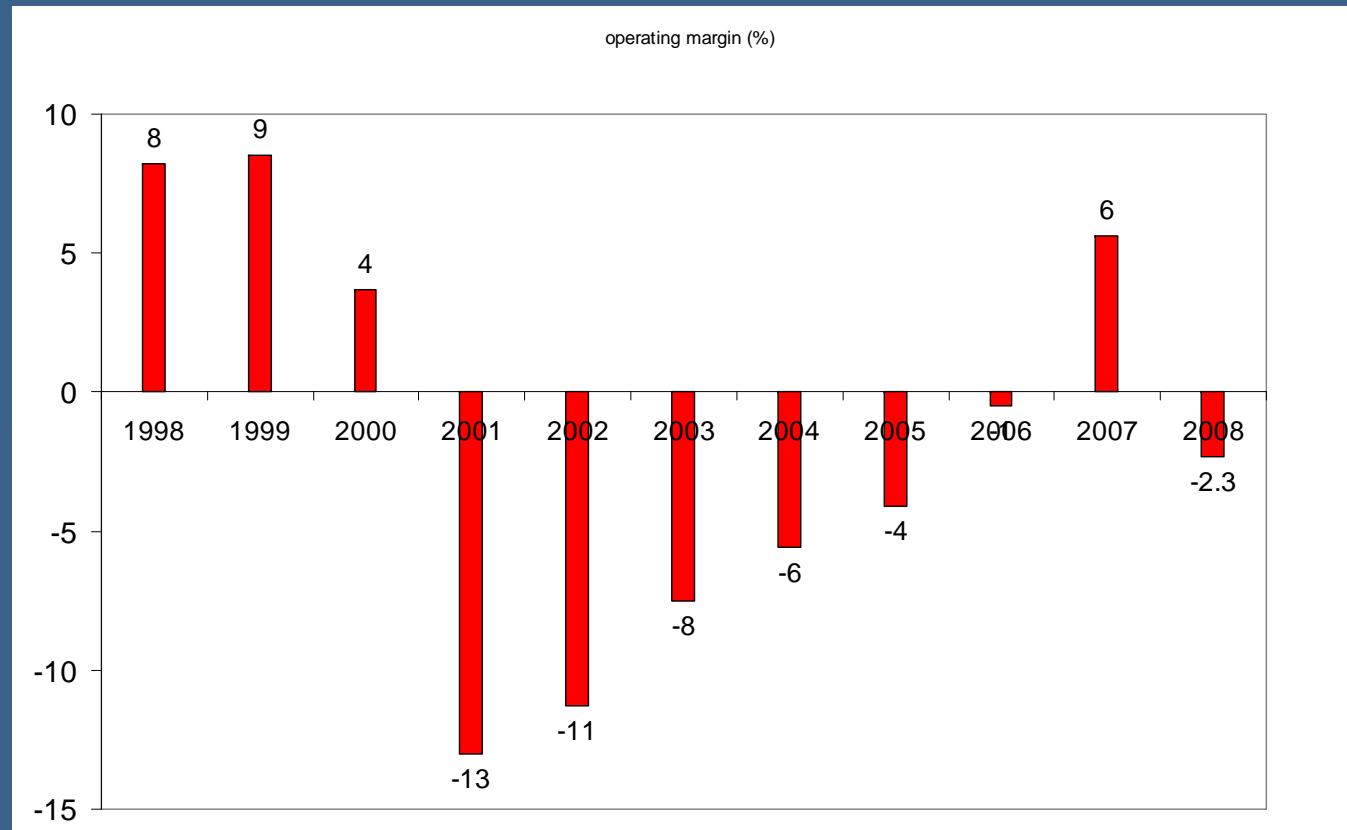
Airport volumes: freight⁷



Source: Ruimtelijk Planbureau

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Global airline industry



Airline industry profits & losses

Source: IATA

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Global airline industry (ctd.)

- From a crisis on the cost side to a crisis on the revenue side
- Result: after 6 years of net industry losses only 1 profit year, i.e. no balance sheet reparation

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Global airline industry (ctd.)

Potential consequences:

1. Further bankruptcies
2. Further mergers and takeovers, with effects on existing alliances
3. Consolidation
4. Fundamental structural changes
5. New business models (cf. new high-operating-cost environment)

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Future expectations?

Uncertainty concerning some endogenous and exogenous key issues

Endogeneous

Yields
Cost structure (*e.g. hedging*)
Financial performance (*high debt levels*)
Overcapacity (*e.g. Middle East*)
Mergers & acquisitions

Exogeneous

Economic activities
Fuel prices
Newbuilding and lease prices

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Legacy carriers

→ Global network players:

- ☞ consolidation in limited number of competing networks
- ☞ mergers (e.g. Delta Air Lines and Northwest Airlines) and financial participations (e.g. Lufthansa in several European airlines) leads to more pronounced concentration than before

→ Niche players also become a target (e.g. VLM, acquired by AF/KLM)

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Legacy carriers (ctd.)

- Alliances and mergers/acquisitions: similar aims
 - ☞ Improving operating and marketing efficiency
 - ☞ Better financial results
 - ☞ Scale increase, scale economies and barriers to entry
- Mergers and acquisitions: effect on composition of alliances (e.g. Continental/United)
- Uncertainty: do we get inter-continental integration? (cf. British Airways, American Airlines and Iberia)

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Low cost airlines

- A number of bankruptcies (e.g. in the States companies like Aloha, Skybus, ATA, Frontier; Oasis Hong Kong in Asia)
- Mergers (e.g. Vueling with Clickair, i.e. the LCA of Iberia)
- Volatility and aggressivity (e.g. Ryanair closing bases like Valencia and Maastricht, opening some others like Alghero and Cagliari)
- Partnerships (e.g. in India between Jet Airways and Kingfisher Airlines)

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The LCA dilemma

- Aim of partnerships, mergers and acquisitions: huge cost savings and revenue enhancement opportunities
- Future dilemma becomes: how to raise revenue and continue to stimulate demand?

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Joint problems for legacy carriers and LCA's

- Less revenue because of lower demand, combined with higher costs
- Stock market decreases
- Difficulty to borrow money and to raise capital
- Deferring deliveries because carriers can't raise the cash
- Capacity reductions (e.g. United Airlines 17-20%)
- Hedging consequences

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Evolution in stock market prices

Source: Marketwatch.com



Airbus list prices 2008

Million USD

A319	70.3 (63.3-77.3)
A320	76.9 (73.2-80.6)
A321	90.3 (87.7-92.8)
A330-200F	184.2 (180.6-187.7)
A330-300	200.8 (195.9-205.7)
A340-600	249.4 (245.0-253.7)
A350-1000	269.6 (267.0-272.2)
A380-800	327.4 (317.2-337.5)

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Hedging

Take the case of Southwest Airlines

- From 1991 consecutive profitable quarters
- 2008: forced into a third-quarter deficit
- Reason: fuel hedges, i.e. mark-to-market adjustments on the future period fuel hedge portfolio

Similar case for Northwest, United (\$519 million) and Continental

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Hedging (ctd)

What do we learn? Hedges may be risky and disturb the bottom line

Consequence of lower oil prices are different:

- High fuel prices in summer
- Carriers were unable to build up their cash reserves
- Demand weakens in the winter
- Dollar has strengthened

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Aircraft lessors

- Confronted with market demand decrease and clients with cash problems
- Lessors urged Airbus and Boeing to slow down production
 - ☞ Cf. availability of capital to finance aircraft
 - ☞ Cf. Boeing forecast for 2009: more than 900 planes produced (compared to 674 in 2008)

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Airports

- Antitrust intervention (e.g. concern over BAA's dominance leads to sale of one or more airports)
- Interesting new initiatives, e.g. the plans for a long-term collaboration between CDG and Schiphol, as a dual hub; 8% equity shareholding in one another
- Strategic decisions to be taken (e.g. Brussels Airport, concerning low budget terminal;
- Privileged relationship with local airlines?

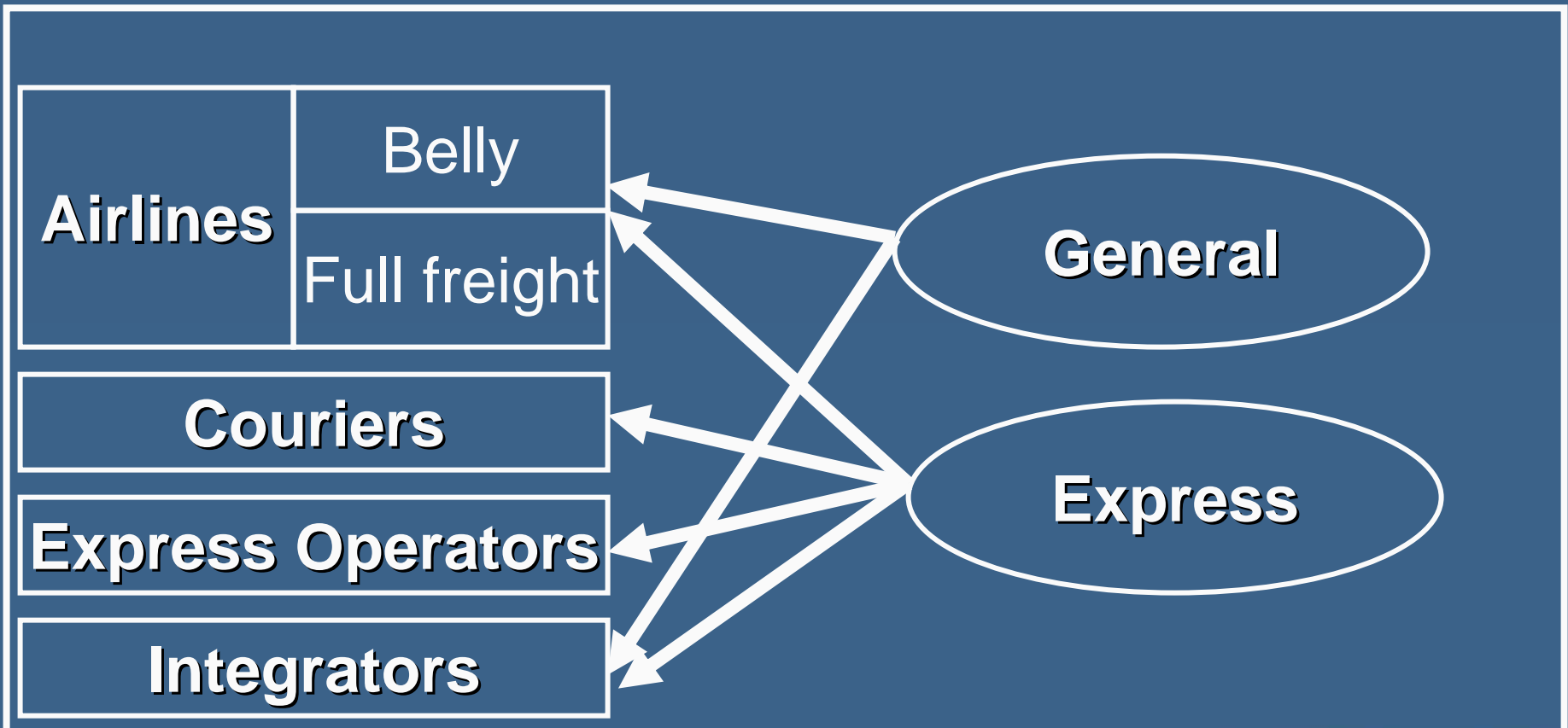
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Cargo

- Bankruptcies (e.g. Gemini Air Cargo)
- Transpacific partnerships (e.g. block space agreements between DHL and Polar Air Cargo)
- The important role of express carriers (e.g. consequences of DHL outsourcing some U.S. operations)
- Safety issues (e.g. Kalitta Air)
- Heterogeneity of the cargo market

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The heterogeneous airfreight business



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Trend towards oligopolies?

New potential entrant



Reaction of incumbents:

- Dropping prices
- Adding capacity



Newcomer retreats



Reaction again

- Capacity drops
- Fares rise

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Regulatory issues

- US-EU Open Skies Air Transport Agreement
- Auctioning of flight slots
- Emission trading
- Airliner recycling ('from skies to scrap')
- Continuing deregulation, with two exceptions:
 1. Over-reliance on the public sector for the provision of the (basic) infrastructure;
 2. Avoiding abuse of monopoly positions with respect to pricing, allocation of landing slots, or access to terminals.

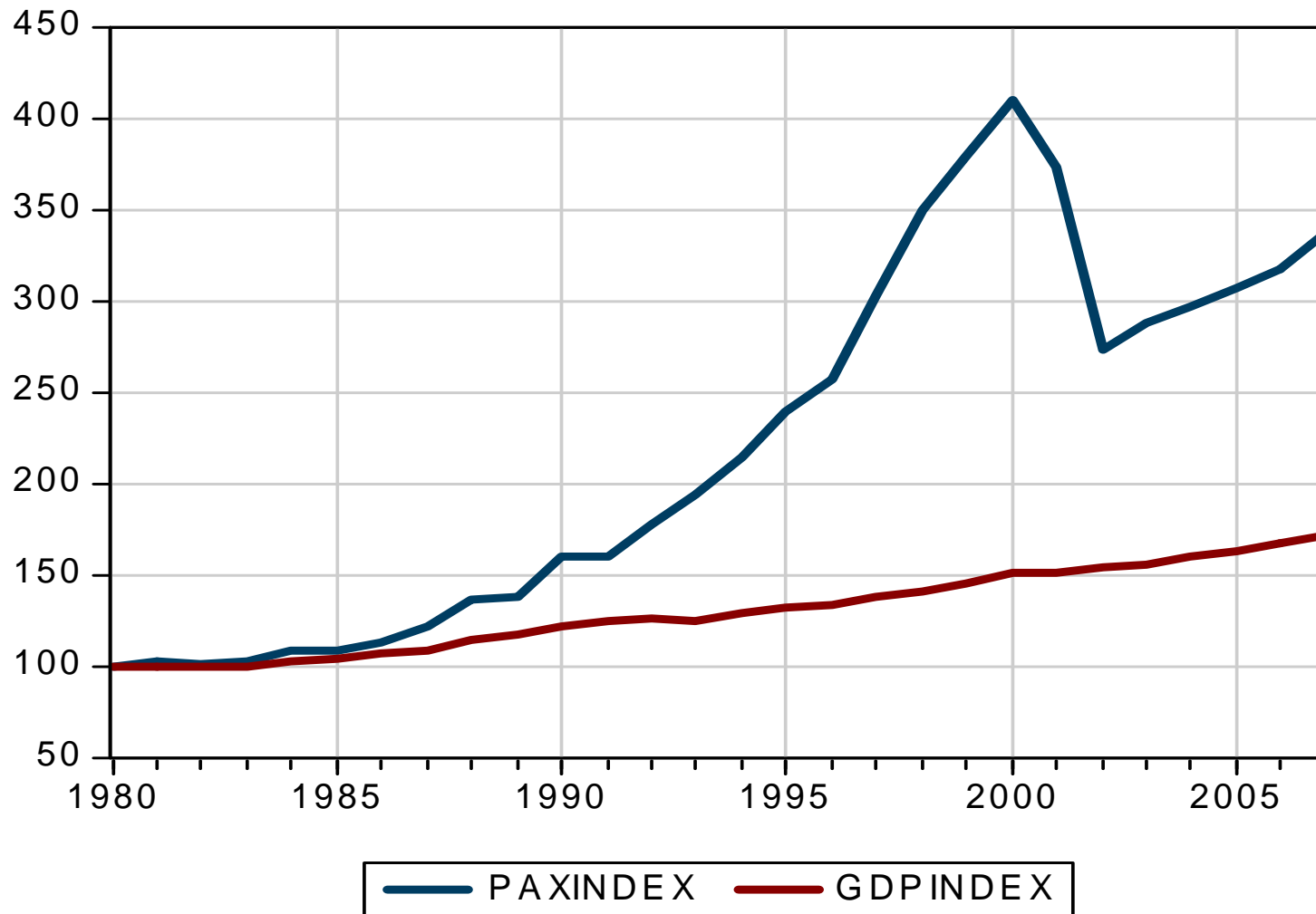
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Entry of new actors with new capital

- First step: disintegration, i.e. back to core business
- Second step: removing and selling catering, handling, maintenance, ...
- Third step: entry of foreign capital (e.g. 3i in Aviapartner, Macquarie in Brussels Airport, bid of Ferrovial on BAA)
- Next step (and a potential danger?): venture capital syndrome

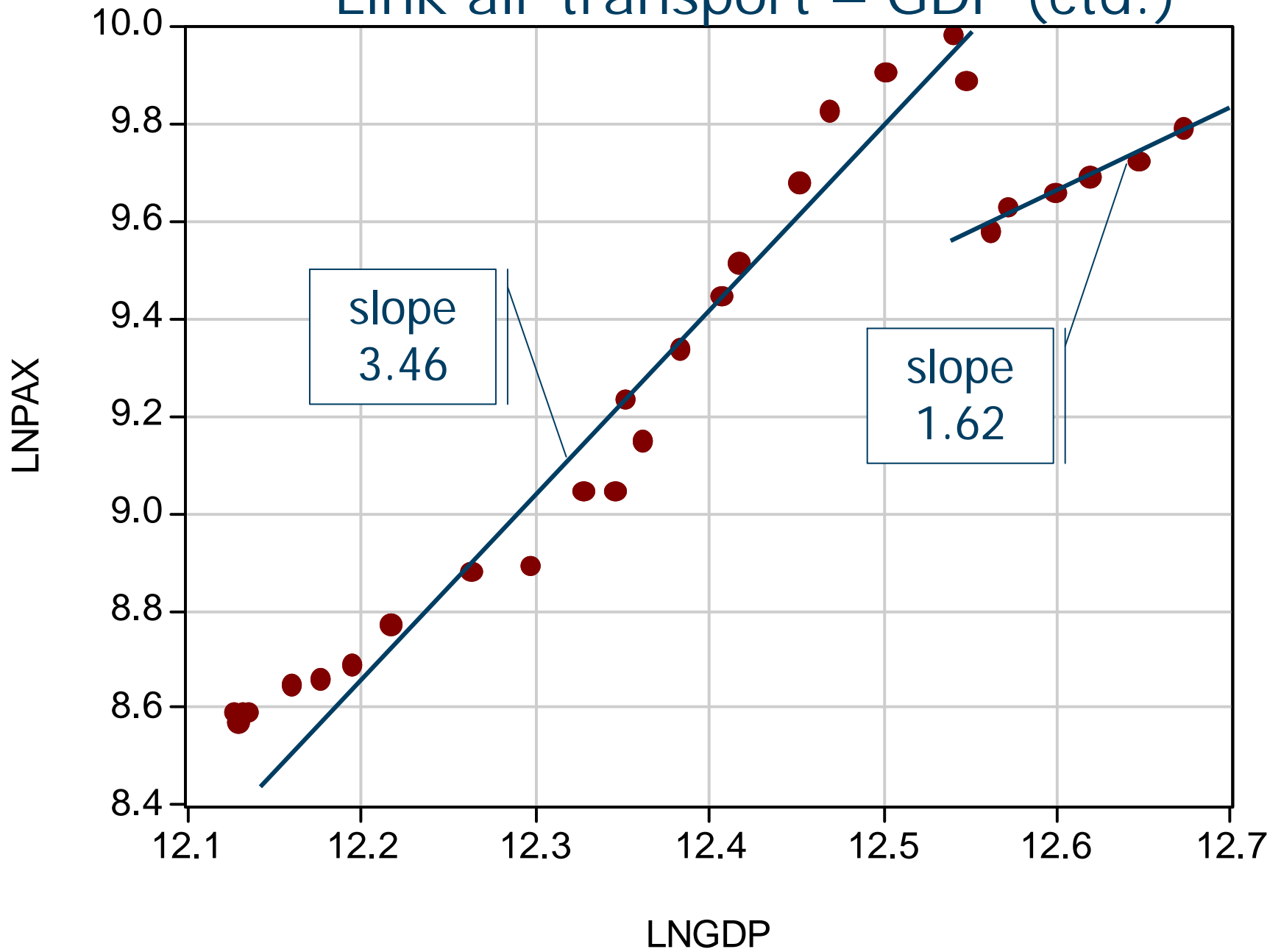
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Link air transport - GDP 29



Number of passengers Brussels and Belgian GDP (1980=100)

Link air transport – GDP (ctd.)

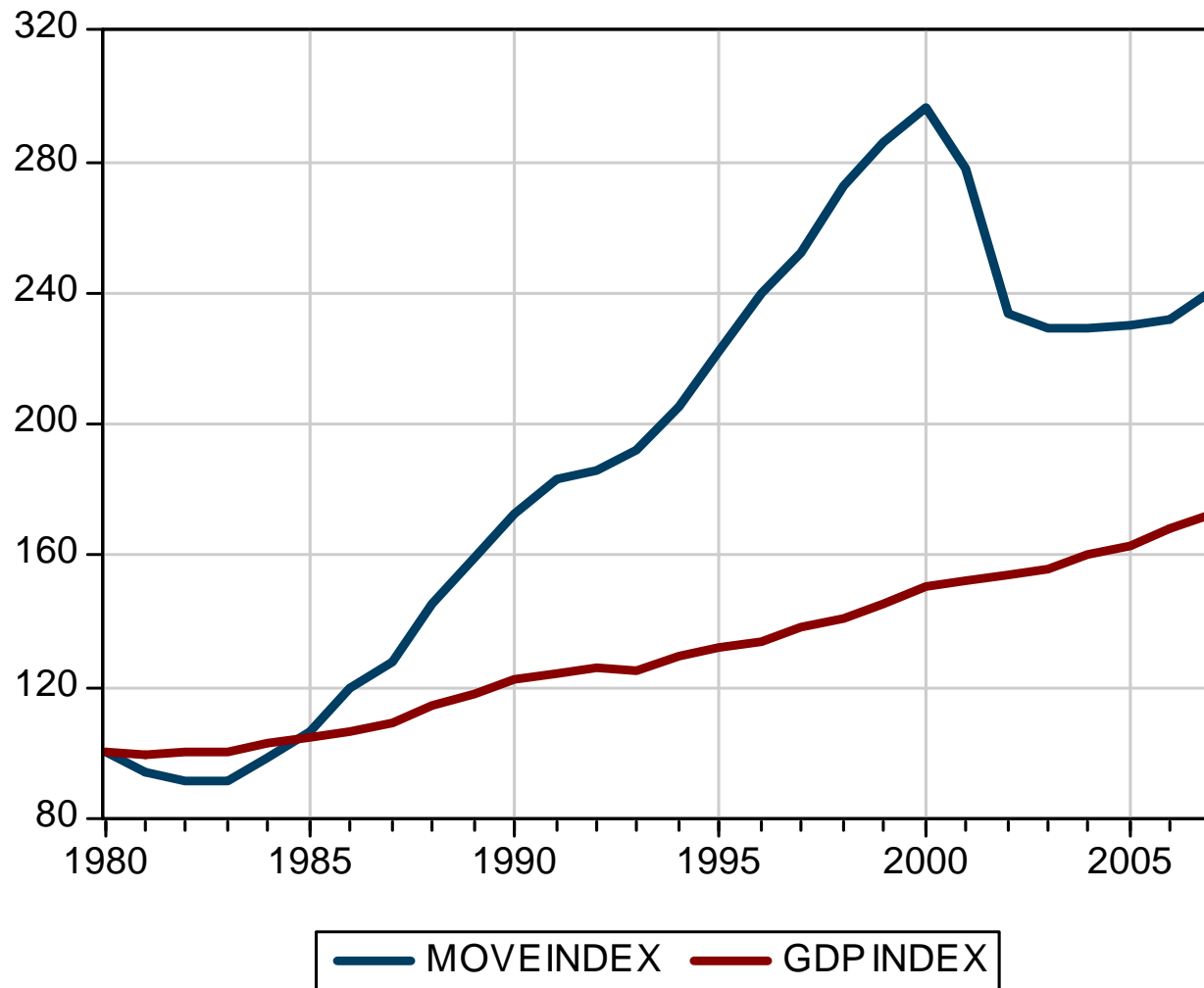


Forecasts PAX Brussels

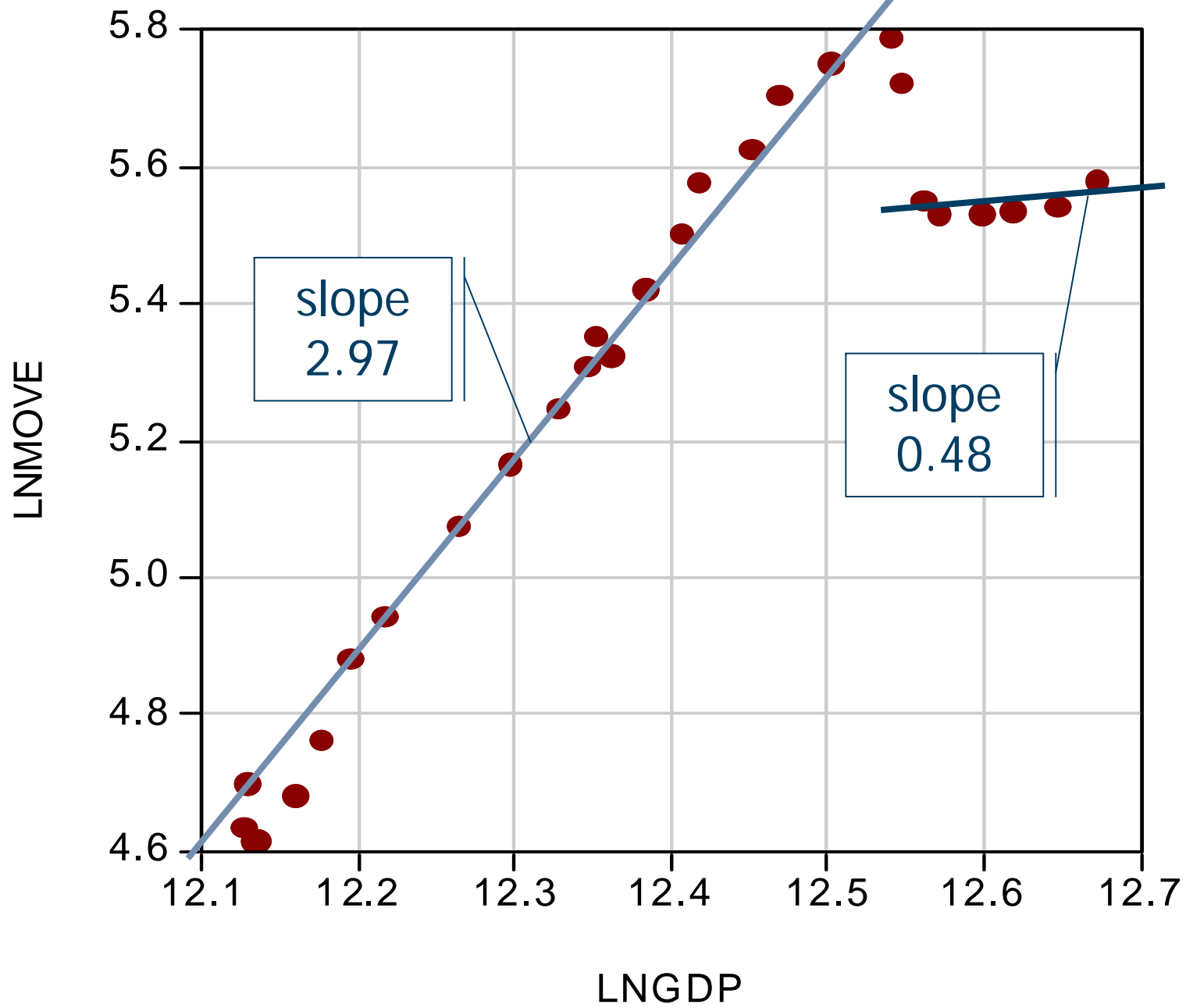
Scenario	%change GDP		%change PAX		#PAX(x1000)	
	2008	2009	2008	2009	2008	2009
Basic: same GDP growth as 2007	2.6%	2.6%	4.2%	4.2%	18408	19192
OECD Economic Outlook Nov2008	1.5%	-0.1%	2.4%	-0.16%	18091	18062

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Link air transport – GDP (ctd.) 32



Number of movements Brussels and Belgian GDP (1980=100)

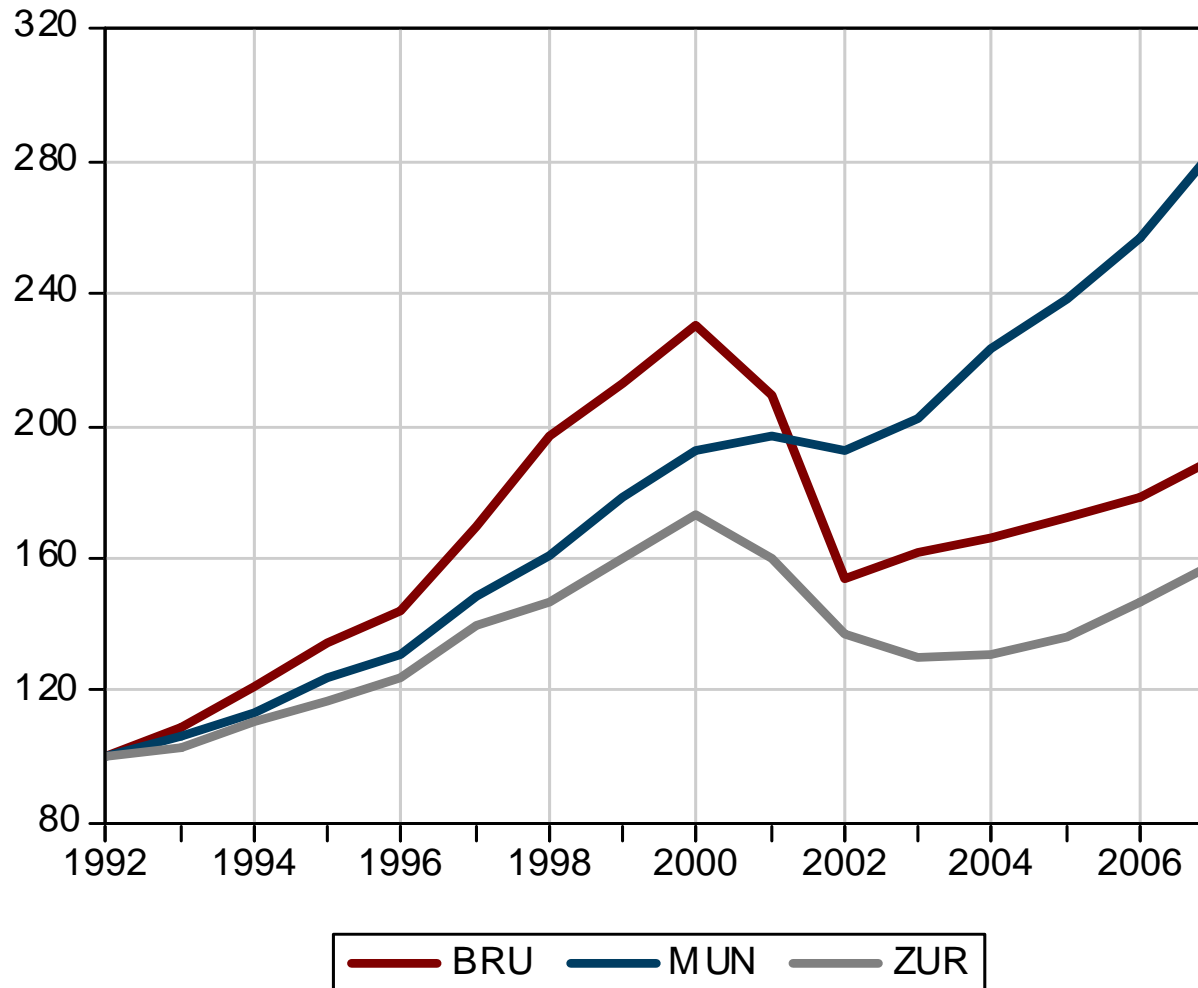


Forecasts MOVEMENTS Brussels

Scenario	%change GDP		%change MOVEMENTS		#MOVEMENTS (x1000)	
	2008	2009	2008	2009	2008	2009
Basic: same GDP growth as 2007	2.6%	2.6%	1.2%	1.2%	267	270
OECD Economic Outlook Nov2008	1.5%	-0.1%	0.72%	-0.05%	266	265.8

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Regional airport comparisons ³⁵



Evolution #PAX (1992=100)

To conclude: where do we land?

- Consolidation, i.e. less airlines
 - ☞ Bankruptcies
 - ☞ Mergers & Acquisitions
- More private, less public
 - ☞ New capital from outside air transport sector
 - ☞ New initiatives ('laboratory function!')
 - ☞ More focus on management tools

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To conclude (ctd.)

- The potential scenarios and strategies will be determined by the combination of a number of variables:
1. Cash reserves (and cash availability)
 2. Hedging contracts
 3. Scale increase, concentration and antitrust
 4. Involvement of other actors