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High Speed Rail and Long-Distance Passengers Transport in France: the End of a Golden Age

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2) Competition, demand, costs… the new challenges

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The stages of HSR story in France

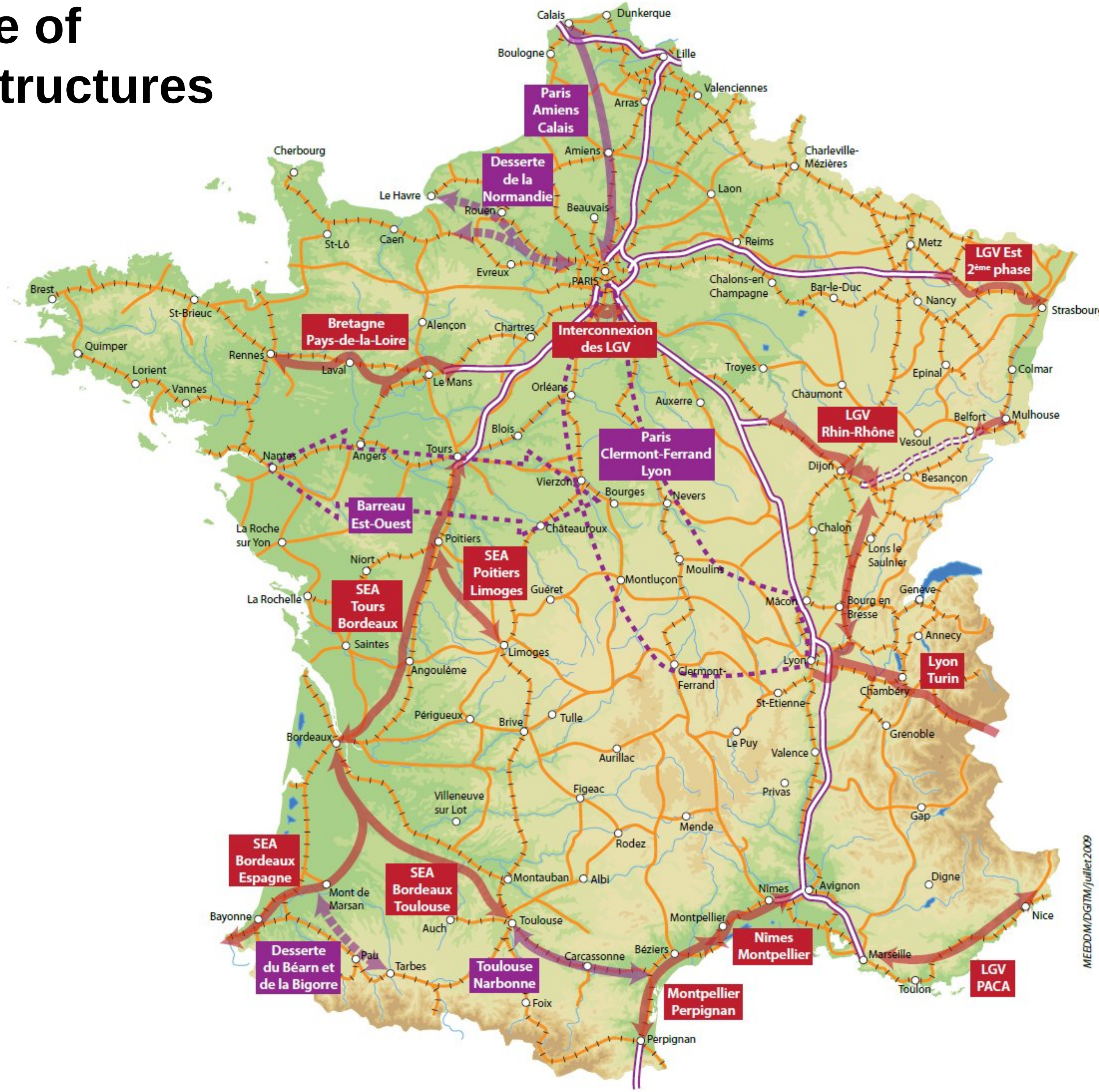
- 1975-1983 : an unexpected success
- 1983 – 2002 : a careful development
- 2003-2012: The climax “TGV everywhere”
- 2012-2017: The time of disenchantment
- 2018 and then…..

30 years of HSR France

- **1981**: opening of the Paris-Lyon
- **1989-1990**: opening of the Paris-Tours line (serving the south-west and Brittany).
- **1993**: opening of the Paris-Lille line (serving northern France, Brussels and London).
- **2001**: opening of the Lyon-Marseille line
- **2007**: opening of the first section of Paris-Est line (serving Lorraine, Alsace, Luxembourg and Germany). The second section has been opened in 2016
- **2011**: opening of the first section of the Rhine-Rhône line (first section not linked directly to Paris).
- **2017**: Opening of Bordeaux-Tours and BPL

National Scheme of Transport Infrastructures *(2009)*

- 2500 km of new HSR lines within 2020 ???
- To be compared with the HSR network in 2009 = 1875km



HSR Traffic in Europe

Thousand M pkm	1995	2000	2005	2010
France	21.43	34.75	43.13	51.89
Germany	8.70	13.93	20.85	23.90
Spain	1.29	1.94	2.32	11.72
Italy	1.10	5.09	8.55	11.61
Sweden	0.42	2.05	2.33	3.10
Belgium	-	0.87	0.98	1.06
UK	-	-	0.45	1.01
Others	-	0.17	1.50	1.75
Total	32.94	58.80	80.11	106.04
% of all rail	9.4	15.9	21.2	26.3

Source: DG TREN, D. Banister and M. Ghivoni 2012

SNCF RÉSEAU
TRAFIC DES TRAINS APTES À LA GRANDE VITESSE

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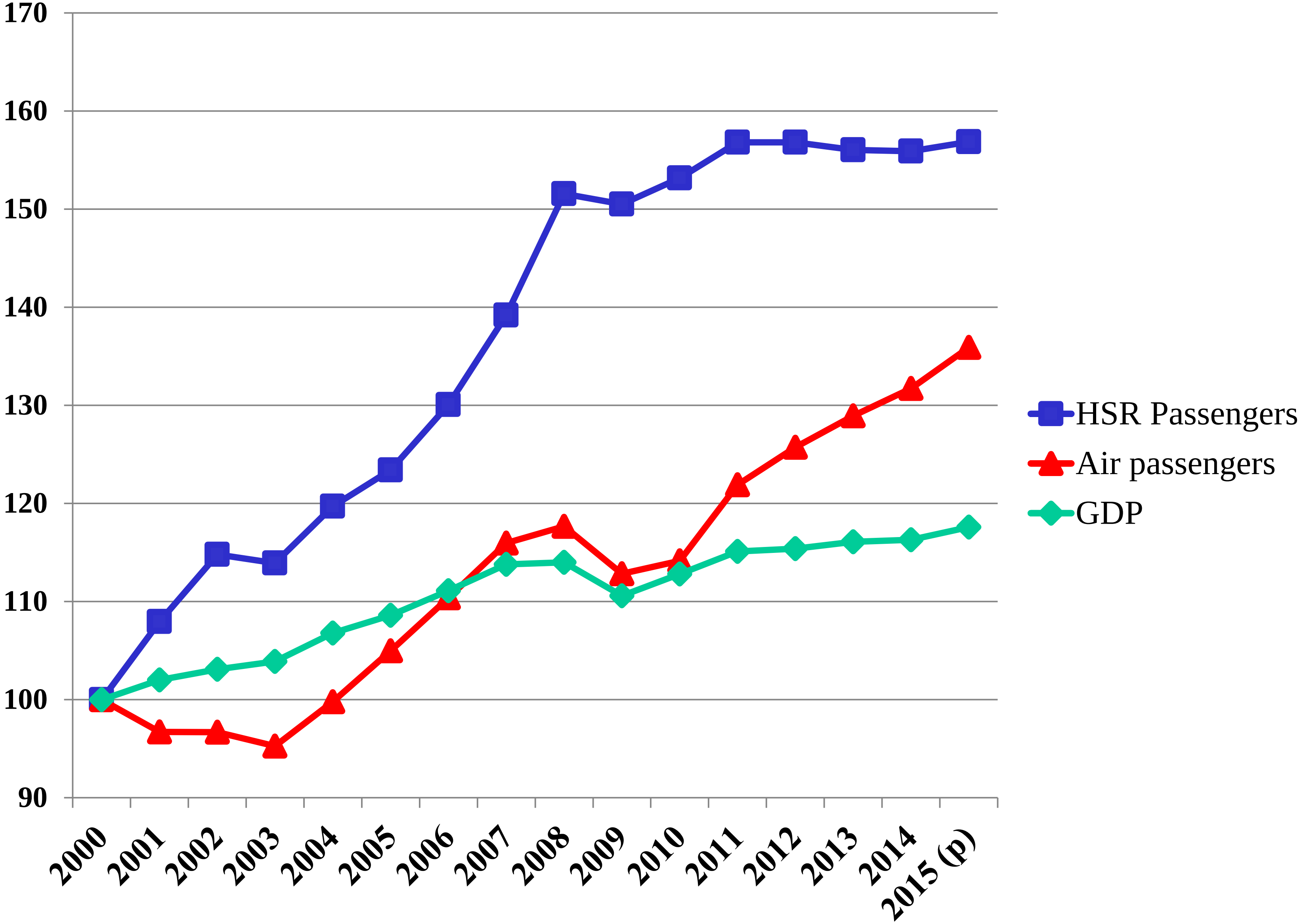
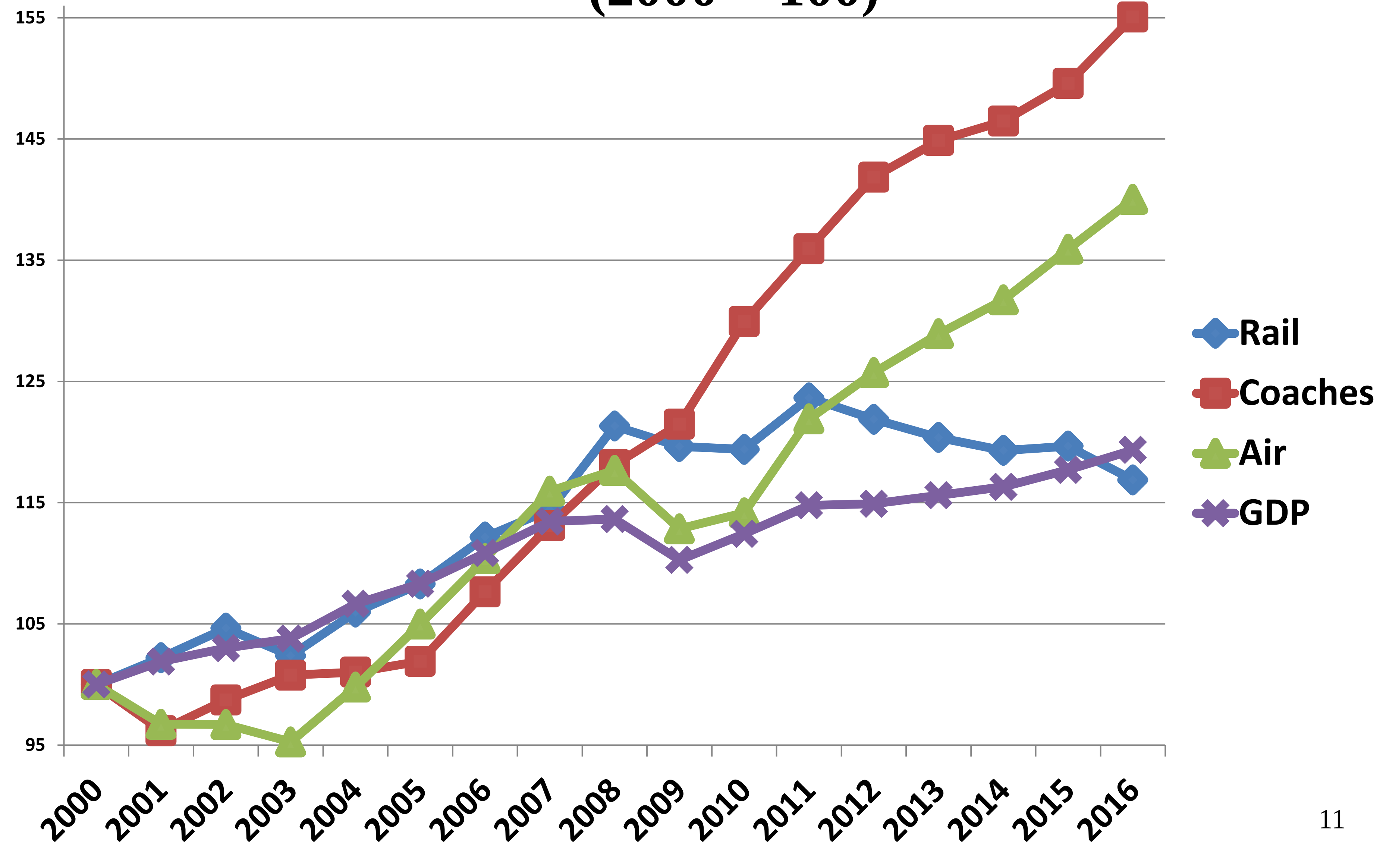
New competitors

- Collaborative economy
  - Ridesharing « Blablacar » =1 million trips/month = about 20 empty TGV train sets / day…
  - Car sharing
- New entrants
  - Bus on road and motorways, competition open at the end of 2015
- Rebound of private car due to a lower price of gas
- Low cost airlines offering a wide spectrum of destinations

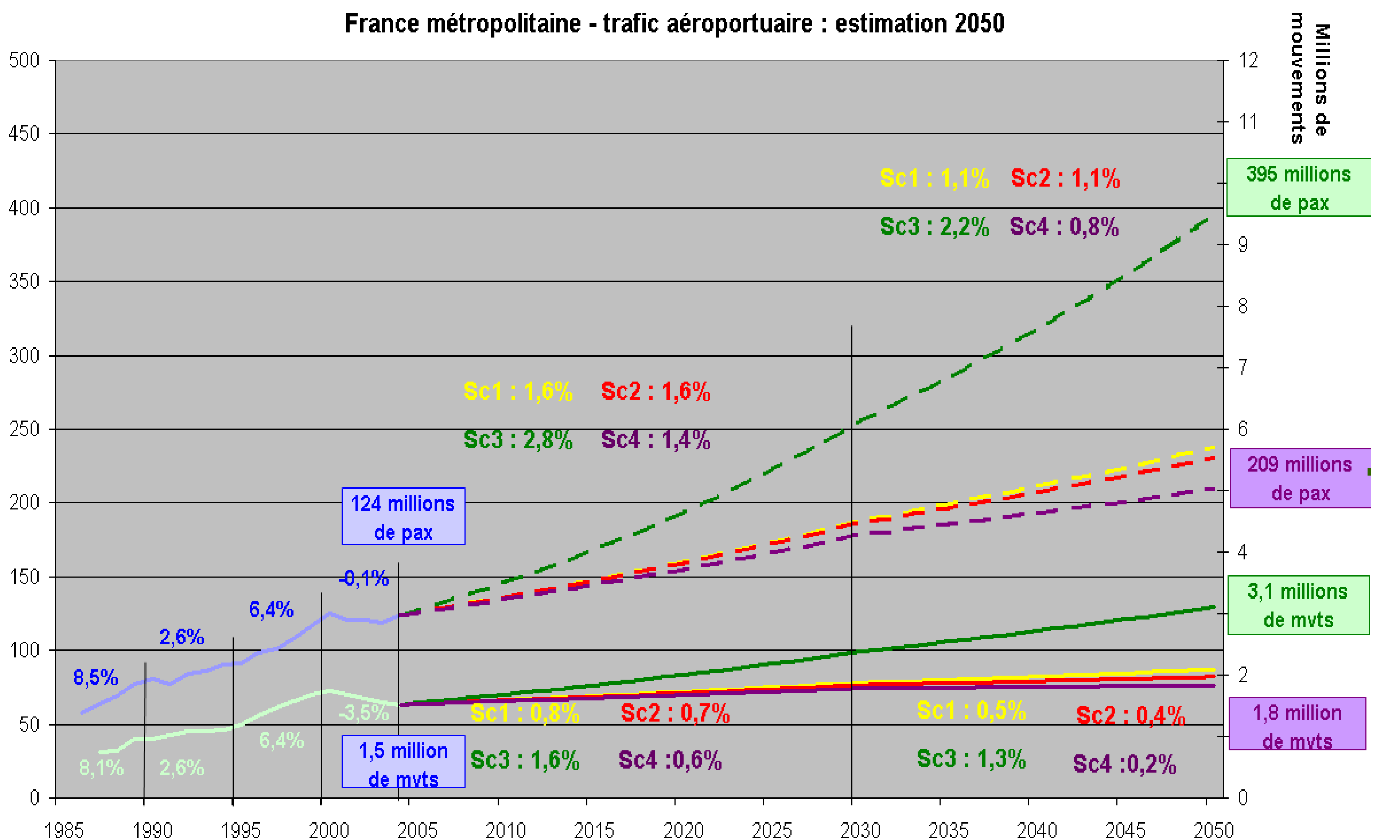
High speed rail: the disenchantment



GDP and long distance passenger traffics in France (2000 = 100)



Air passengers in France



Rail passenger traffic: a strange fact (Eurostat)

Traffic Growth 2006 - 2015

- **Italy + 4%**
- **Spain + 21%**
- **France + 15%**
- **Germany +16%**

Traffic growth 2006-2015

- **United Kingdom + 40%**
- **Austria + 35%**
- **Sweden + 32%**
- **Switzerland + 30%**

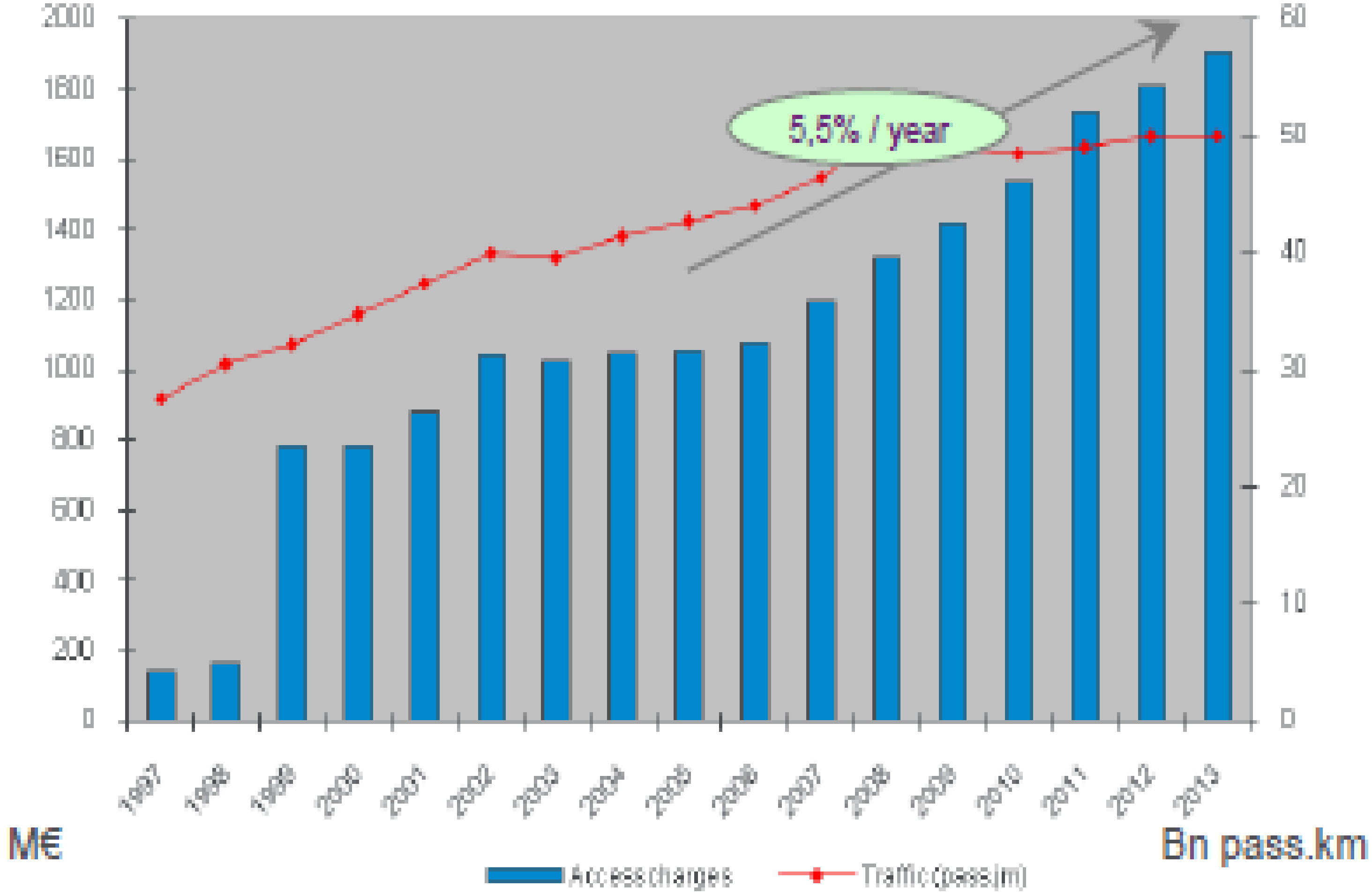
CBA: “Economic IRR”

	Ex ante	Ex post
LN 1 (Sud-Est)	16.5%	15.2%
LN 2 (Atlantique)	12.0%	8.5%
LN 3 (Nord Europe)	13.0%	3.0%
Interconnexion	10.8%	6.9%
LN4 (Rhône-Alpes)	10.4%	6.1%
LN5 (Mediterranée)	8.0%	4.1%

Source: J. P. Taroux (op. cit.).

CBA: « socio-economic IRR »

	Ex ante	Ex post
LN 1 (Sud-Est)	28.0%	?
LN 2 (Atlantique)	23.6%	14.0%
LN 3 (Nord Europe)	20.3%	5.0%
Interconnexion	18.5%	15.0%
LN4 (Rhône-Alpes)	15.4%	10.6%
LN5 (Mediterranée)	12.2%	8.1%



5,5% / year
M€
Bn pass.km
Access charges
Traffic (pass.km)

4 new high speed lines (2011-2017) and public subsidies

	EAST	BPL	CNM	SEA	Total
Total cost (million euro)	2000	3300	1800	7800	14900
Length (km)	106	182	80	303	671
Cost/km (million euro)	18,9	18,1	22,5	25,7	22,2
Paid by RFF (million euros)	520	1400	0	1000	2920
Paid by central government (million)	680	950	1200	1500	4330
Paid by local government (million)	640	950	600	1500	3690
Paid by EU + Luxembourg	160	0	0	0	160

HSR from profit to public subsidies?

- For Tour-Bordeaux, 4 billion of public money for 20 million of passengers per year
  = 4 euros/p/day/50 years...
- But for Marseille-Nice, 15 billion of public money for 10 million of passengers per year
  = 48 euros/passenger/day/50 years...
- For Bordeaux-Toulouse, 6 billion of public money for 4 million of passengers per year
  = 30 euros/passenger/day/50 years...

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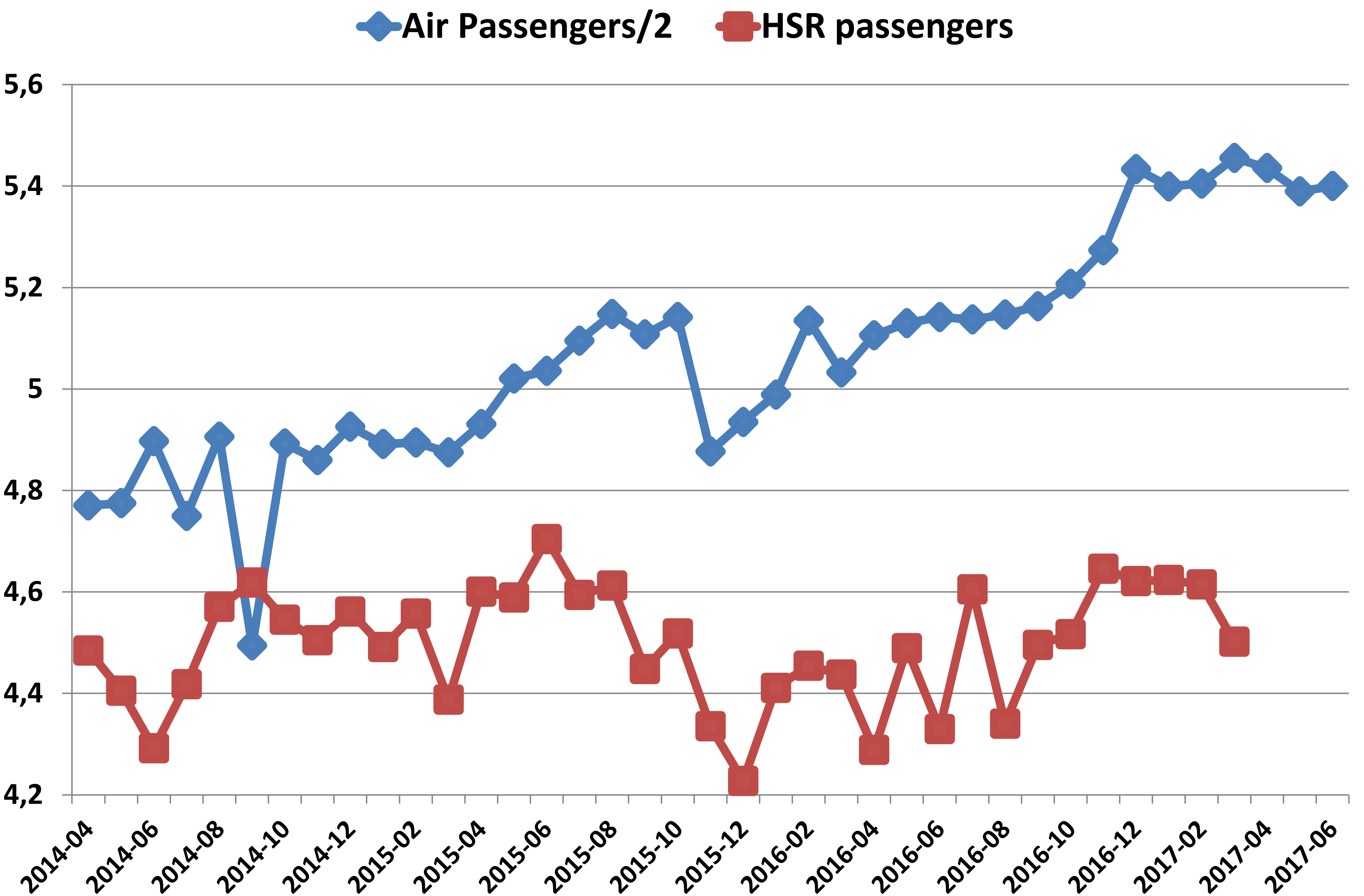
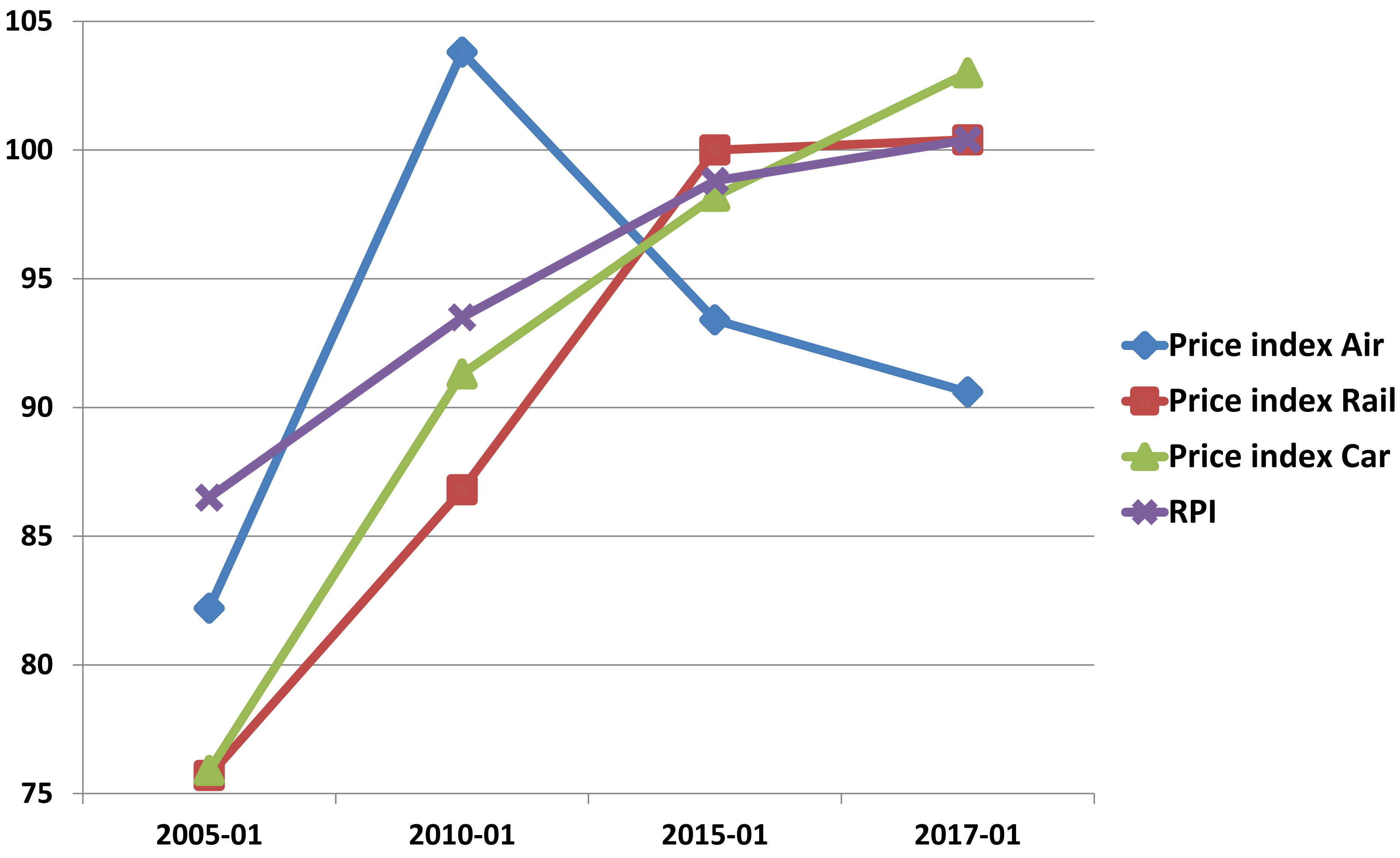
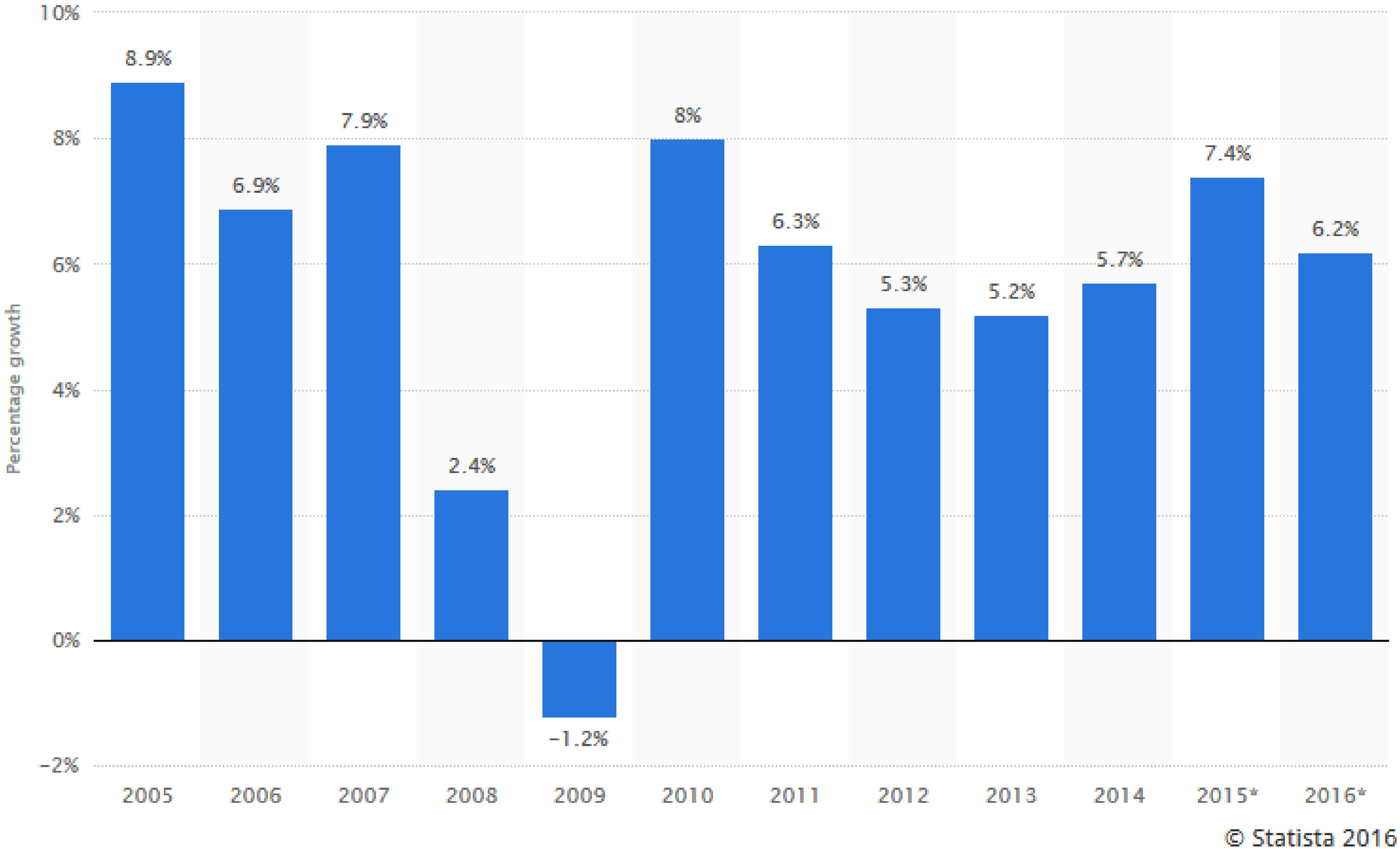

Air Passengers/2
HSR passengers
5,6
5,4
5,2
5
4,8
4,6
4,4
4,2
2014-04
2014-06
2014-08
2014-10
2014-12
2015-02
2015-04
2015-06
2015-08
2015-10
2015-12
2016-02
2016-04
2016-06
2016-08
2016-10
2016-12
2017-02
2017-04
2017-06



105
100
95
90
85
80
75
2005-01
2010-01
2015-01
2017-01
Price index Air
Price index Rail
Price index Car
RPI

Air traffic growth in EU

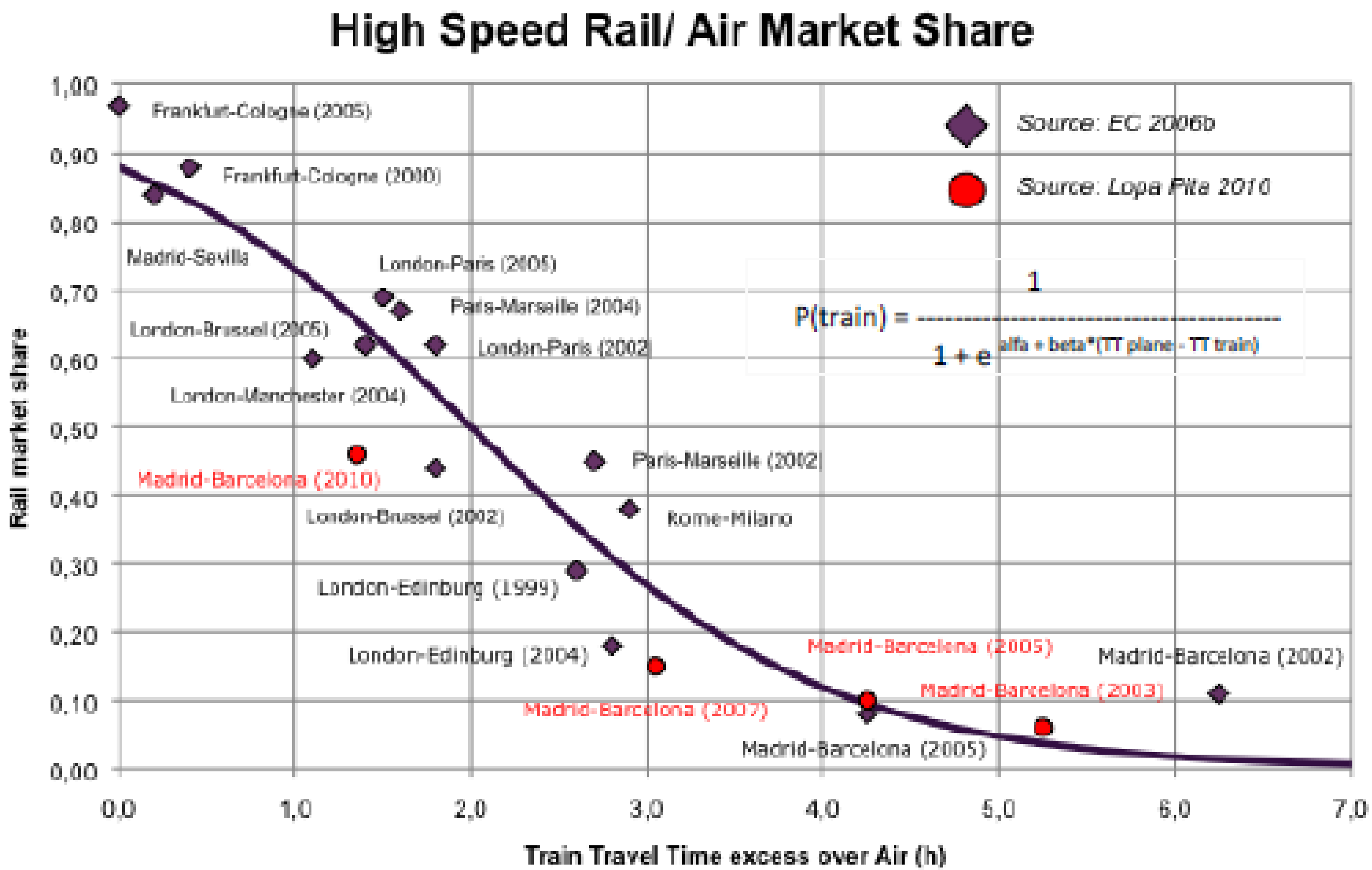


New consumer behaviours?

“While the EU economy did not even grow by +3% between 2008 and 2015, passenger traffic at EU airports increased by +13,6% over the same period. Such a wide gap is pointing to a lasting discontinuity in the usual relationship between GDP growth and passenger traffic performance. This is reflective of new market dynamics, changing consumer behaviours and the increased importance of air transport for the European economy.”

Olivier Jankovec, Director General ACI EUROPE (5 February 2016)

HSR: a « niche market »?



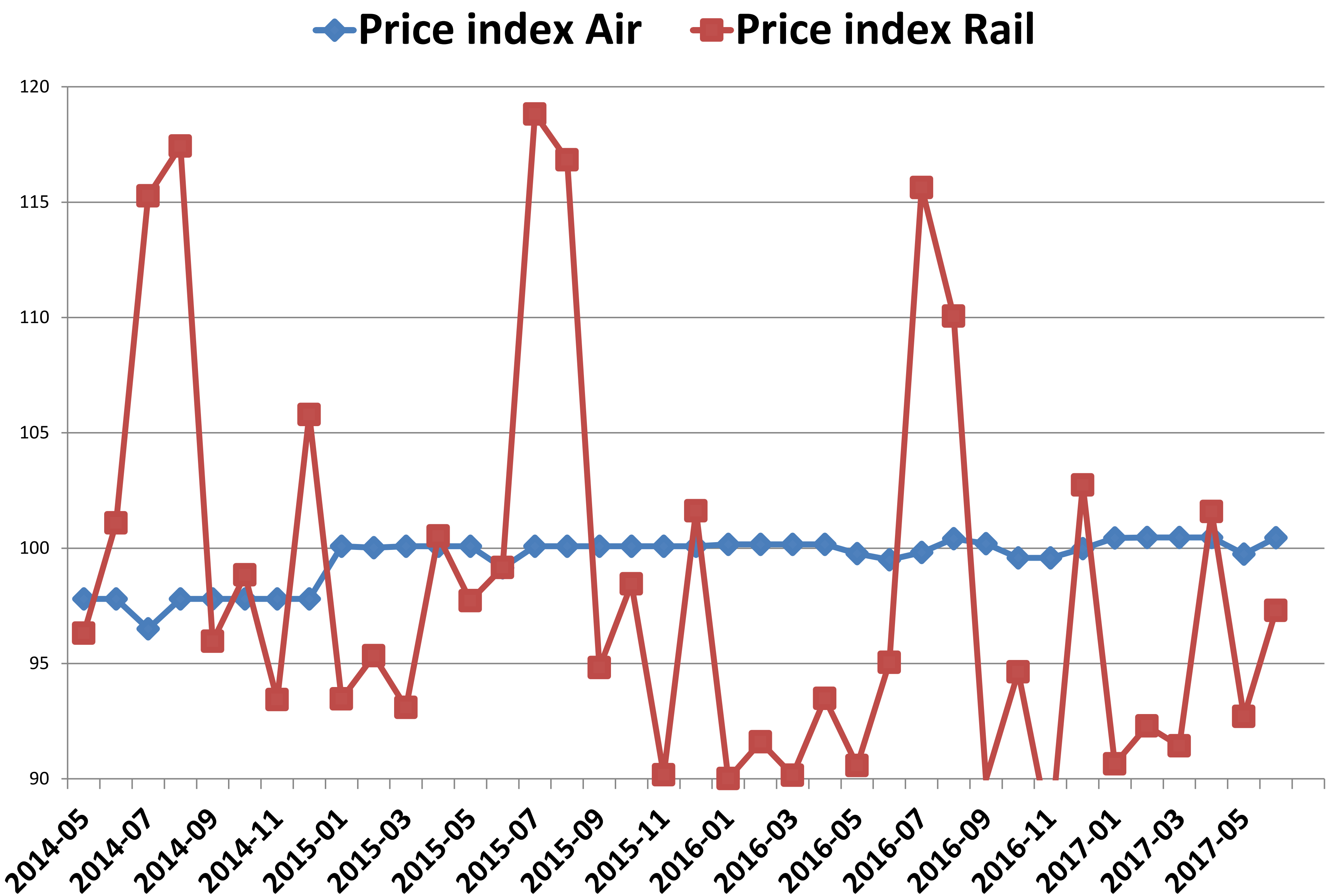
How to intensify HSR ridership (1)?

Less train-km

- Lower frequency on some poor relations
- Lower frequency on some new relations (Tours-Bordeaux)
- From 6/2015 to 6/2017, 8% less HSR train-km
- Higher load factor

Yield management

- More and more special offers (ex. 25 euros)
- Monthly lump sum tickets for people under 28.
- 79 euros per month, during at least 3 months
- As many trips as you want, except during peak period



Price index Air
Price index Rail
120
115
110
105
100
95
90
2014-05
2014-07
2014-09
2014-11
2015-01
2015-03
2015-05
2015-07
2015-09
2015-11
2016-01
2016-03
2016-05
2016-07
2016-09
2016-11
2017-01
2017-03
2017-05

How to intensify HSR ridership (2)?

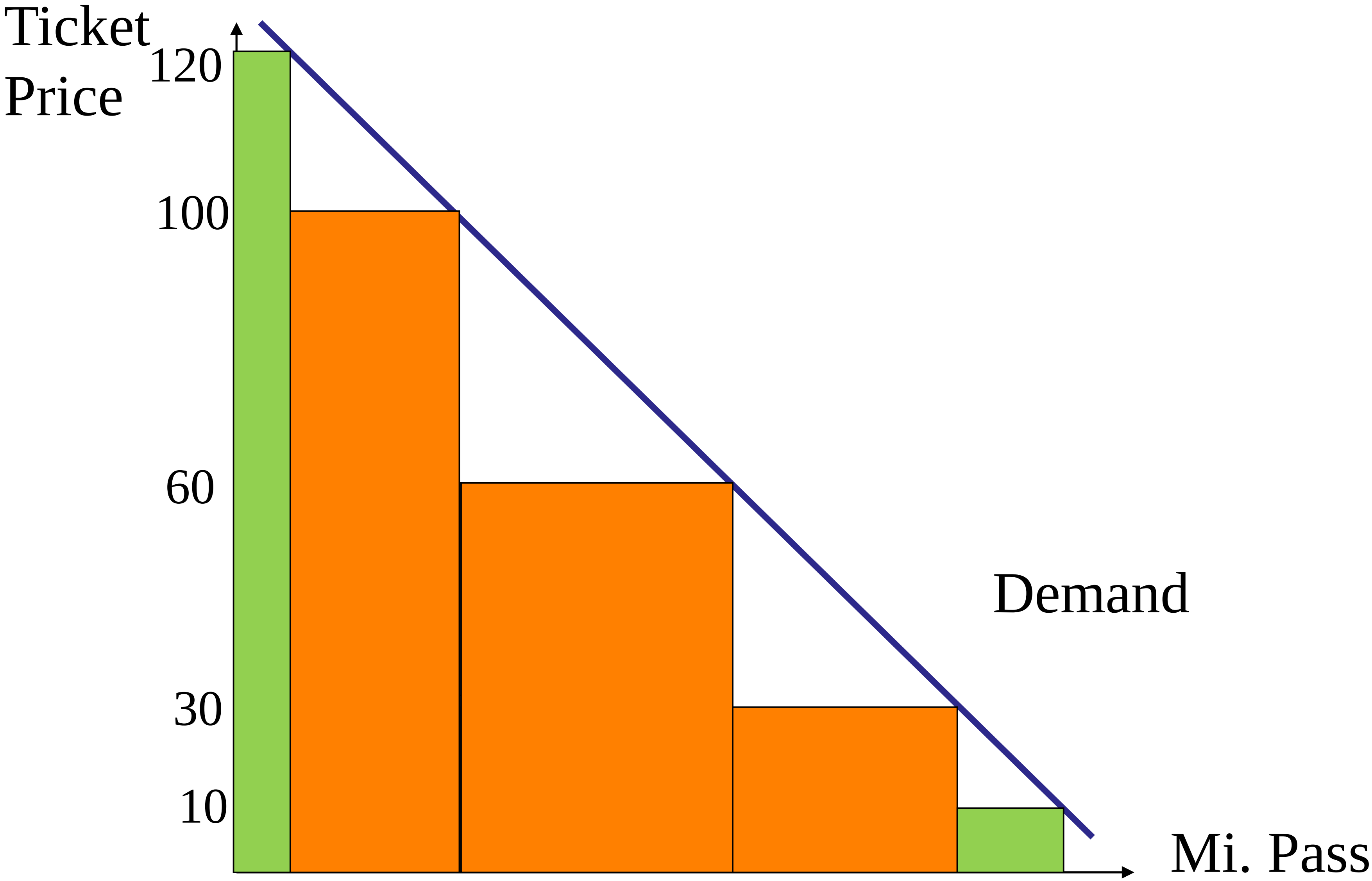
Low cost services

- Special trains, OUIGO
- More seats, No service
- Low fares (10 or 15 euros)
- Fees for heavy luggages
- Starting and arriving in peripheral rail stations (Massy, Roissy, Miramas, Lyon Airport…)

Traffic gains, but…

- 1st semester 2017: 28,5 Mi passengers
- +8,4% /2016
- But + 4,8% / 2015 (27,3)
- Traffic increase is only coming from OUIGO (+20% => 5,4%) and TGV max +1,8 Mi. pass.

Intensification of yield management



Conclusion
The strategy of the new government

- High speed rail projects: a break
- No new project within the next 5 years
- Priority to MAAS (mobility as a service) and new mobility providers (shared mobility)
- What about the ail tunnel between Italy and France?
- We stop the costly projects but we keep the very costly projects?