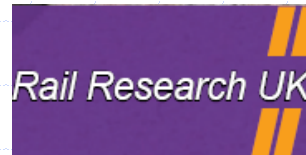


Can Railways Change for the Better? B.R. Privatization in Context

Transportation Research Group Discussion
University of Southampton
October 16, 2006

Louis S. Thompson, Principal
Thompson, Galenson and Associates, LLC
2804 Daniel Road
Chevy Chase, MD 20815, USA
lou.thompson@gmail.com



Caveats

- ◆ “Rational Railway Restructuring” is an oxymoron, especially with ownership change
- ◆ Feelings and convictions are strong
- ◆ Hindsight is closer to 20/20 (sometimes)
- ◆ This is **not** a political discussion
- ◆ My subject is restructuring **with** increased private involvement
- ◆ Railways hate change, but change **is** possible and there **are** alternatives
- ◆ No longer “whether,” but how

Why Restructuring?

- ◆ Railway a financial, managerial, political problem
- ◆ Competition in and/or for the market desired
- ◆ Fiscal benefits of private management or PPPs:
- ◆ Marketing “flair”
- ◆ Decentralization (national to regional or local)
- ◆ Lower cost for social services
- ◆ More effective regulation
- ◆ Clarify and ring-fence public involvement
- ◆ Transfer risk
- ◆ Ideological

Some Examples of Objectives

Objectives	U.K		S	NL	DE	Argentina		Brazil		Mex.	Jpn
	Pass.	Fr.				Pass.	Fr.	Pass.	Fr.		
Railway "Problem"	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes!
Competition in/for	For	In	For	For	For	For	For	For	For	For/In	For
Private management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
"Flair"	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Decentralization	No	No	Yes	Yes	Yes	No	No	No	No	No	No
Social service cheaper	Yes	No	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes
Effective regulation	Yes	No	No	No	No	Yes	Yes	No	Yes	No	No
Clarify/control public role	Yes	No	Yes	Yes	Yes	No	No	No	No	No	No
Transfer risk	Yes	Yes	Yes	Part	Part	Yes	Yes	Yes	Yes	Yes	Yes
Ideology	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes

Impact of Poor Objectives

- ◆ Hard to decide what to do without objectives
- ◆ No protection against unrealistic expectations
- ◆ “Compared to what?”
- ◆ Governments often prefer the “Ready, Fire, Aim” approach

Restructuring: Function Follows Form

Greater Private Role



Structural Change



Structure	Ownership		
	Public	Mixed	Private
Integral (Monolithic): infrastructure and all operations under unified control			
Dominant carrier integral with infrastructure, tenant carriers or operators separated but paying access charges			
Separation (accounting or institutional) of infrastructure from all carriers or operators			

Filling The Matrix

Structure	Ownership		
	Public	Mixed	Private
Integral (Monolithic)	China, India OLD BR	Indian Railway Container Corp, Latin American freight and passenger concessions	Smaller US freight railroads, East Japan, Central Japan and West Japan
Dominant carrier integral with infrastructure, tenant carriers separated	Amtrak and VIA, Japan Rail Freight, Russia, Island JRs	US freight and commuter railways in the Northeast Corridor, CN and CP	US Class I Freight railways with trackage rights
Separation (accounting or institutional) of infrastructure	"Standard" E.U. model	Some recent U.K. GC franchises, Network Rail in the U.K. Dutch, German, Swedish net cost franchises	First U.K. NC franchises, Railtrack (but not Network Rail), U.K. freight carriers. Argentine, Brazilian, Mexican concessions

Another Look At Structure: The Private Sector **Spectrum**



Type of Function	Traditional Public Roles		Franchising/Concessions		Privatization	
	Public Ownership/Mgt (Ministry/SOE)	Outsourcing or Mgt Contracting	Gross Cost	Net Cost or Commercial Risk	Partial or Total Divestiture	New Private Entry
Infrastructure						
Freight						
Passenger						
High Speed						
Intercity						
Rural/regional						
Suburban						

The Basic Franchising/Concessioneing Options

- ◆ “Gross Cost” – Public owner sets tariffs, service levels, investment programs and establishes demand parameters. Franchise collects revenues as agent and operates services at a specified cost. “Cost Risk” may be transferred.
- ◆ “Net Cost” (“commercial” or “concession”) – public owner may specify service levels, some tariffs, and some investments. Franchise sets many tariffs, and is responsible for demand, operating cost and investment forecast. “Commercial Risk” may be transferred.

The BR Progression

Type of Function	Traditional Public Roles		Franchising/Concessions		Privatization	
	Public Ownership/Mgt (Ministry/SOE)	Outsourcing or Mgt Contracting	Gross Cost	Net Cost or Commercial Risk	Partial or Total Divestiture	New Private Entry
Infrastructure	X		(Network rail?)		Railtrack	
Freight	X				X	X
Passenger						
High Speed	X			X		
Intercity	X		X	X		
Rural/regional	X	X	X	X		
Suburban	X	X	X	X		
Ancillary	X				X	X

Franchise Dimensions

- ◆ Size
- ◆ Period (short for passenger, long for freight)
- ◆ Disposition of assets (Stations, Rolling Stock, Infrastructure)
- ◆ Service specification (nc → gc)
- ◆ Tariff setting (nc → gc)
- ◆ Method of payment (for/to)
- ◆ Conditions of renegotiation

Risk Transfer from GC to NC Franchises: Anything Can Be Transferred – At A Cost

- ◆ Demand, price, revenue
- ◆ Operating costs
- ◆ Exogenous economic factors (GDP, energy)
- ◆ Policy/Government reliability
 - Multi-year commitments
 - Change in Government approach
 - Labor, environment, health & safety
- ◆ Investment risks
- ◆ Access charges
- ◆ Question: who is **really** best at managing risk?

The Special Case of Privatization

- ◆ Privatized freight well known (N.A., Aus, Latin America, Estonia): ~40% of world ton-Km
- ◆ Main Japanese passenger operators private: more passengers, ~same p-Km as E.U. Total private ~14% of world passenger-Km
- ◆ Infrastructure separation creates opportunity for **both** franchising and privatization
- ◆ The E.U. freight dilemma

Picking the Winner

- ◆ Direct negotiations (between public agencies, or for small operations)
- ◆ Open auction (rare)
- ◆ Sealed bids
 - Single step vs. staged
 - Money vs. weighting formulae
 - NPV
 - The consortium problem
 - Effect of specification of services (transparency vs. “flair,” GC vs. NC)

The Dilemma of Public Procurement: Can It Work for Rail Franchises?*

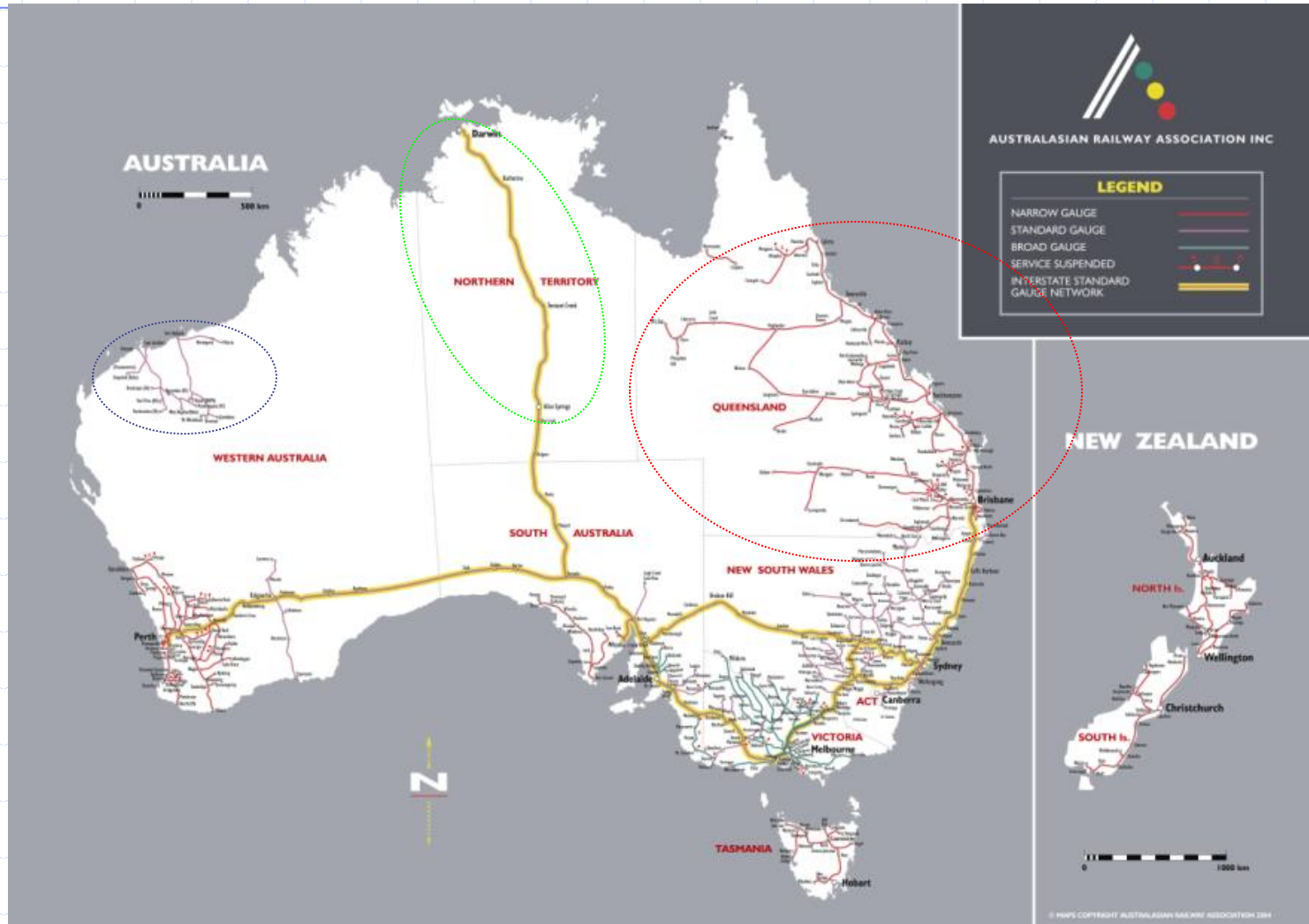
- ◆ Poor specifications
 - Unclear (what is “safe” and “clean,” “beauty” contests)?
 - Mis-defined (requiring assumption of existing practices)
 - Conflicting (increasing demand on congested line)
- ◆ Transparency and comparability vs. initiative
- ◆ Irrational exuberance by public **and** private parties
- ◆ Responsibility transfer for socially critical services

* When it doesn't work very well for anything else.

Franchising or Concessioning Experience Elsewhere

- ◆ Australia
- ◆ Latin America
- ◆ Emerging E.U. Experience (Netherlands, Germany, Sweden)
- ◆ *Then the U.K*

The Australian Rail Network



Source: by permission of the Australasian Railway Association

Current Australian Rail Structure: State Orientation

State	Infrastructure	Suburban and Regional Passenger Operations	Intercity Passenger Operations	Intra-State Freight	Interstate Freight
South Australia	ARTC owns interstate freight line, State owns local passenger lines	Trans Adelaide State operated	Privately operated by Great Southern ("hook and pull")	PN	PN, AP, G&W, NRG, SS, S&S, PP,P&O, Onesteel
Tasmania	Privatized: Pacific National Tasmania			Privatized: PN Tasmania	Privatized: PN Tasmania
Western Australia	WestNet (private), but ARTC has access to Perth	Transperth publicly operated suburban, Transwa public regional	Privately operated by Great Southern ("hook and pull")	PN, QR National, S&S, Pilbara, BHP Iron Ore	QR National, S&S
Queensland	QR Network Access (QRG)	Brisbane operated by QRG	QRG	QRG, Comalco	QRG, PN
Victoria	State, with interstate lines leased to ARTC	Suburban Franchised to Connex, V/Line passenger for regional	Privately operated by Great Southern ("hook and pull")	PN, QR national, SS, S&S, PP, P&O	Pacific National
New South Wales	State, with interstate line leased to ARTC	Public "Railcorp"	Privately operated by Great Southern ("hook and pull")	PN, QR National, GC, SS, S&S, PP, LV	QR National, PN
Northern Territory (Alice Springs to Darwin)	50 year BOT concession, incl lease of Alice Springs to Tarcoola line		Privately operated by Great Southern ("hook and pull")	FreightLink (AP)	FreightLink (AP)
ACT	ARTC				PN

PN=Pacific National; AP=Asia Pacific; G&W Aus= Genessee and Wyoming of Australia; NRG=NRG Energy; QRG=Queensland Rail Group; GC=Grain Corp; SS=Southern Shorthaul; S&S=Southern and Silverton; PP=Pacific Portlink; LV=Lachlan Valley

Overall Australia Assessment

- ◆ Passenger franchising:
 - Maybe a moderate success or maybe a dismal failure
 - Dependence on renegotiation
 - Shift from NC toward GC
- ◆ Intercity passenger privatization: success for now, future ability to raise capital not clear
- ◆ Freight operators: generally successful (both open access and integral)
- ◆ Alice Springs to Darwin PPP: demand questionable

Latin America:

(Argentina, Bolivia, Brazil, Chile, Peru, Mexico)

- ◆ All freight, and suburban passengers and Metros in BsAs and Rio concessioned
- ◆ Mostly integral or dominant integral structures (only Chile nominally has open access)
- ◆ All were commercial (NC) concessions: freight paid government, government paid the passenger concessionaires
- ◆ Freight tariffs unregulated, passenger tariffs had specified maximum
- ◆ Adequate competition for concessions
- ◆ Strong traffic (frt +59%, pax +50%), productivity up (2 to 4 times), costs and tariffs down (\$1 billion/yr)
- ◆ Generally successful (compared to doing nothing)

E.U. Experience So Far

- ◆ All relatively small passenger franchises
- ◆ All were regionally oriented (decentralization goal)
- ◆ Most were GC, a few NC (Germany)
- ◆ Availability of rolling stock a common issue
- ◆ Existing national carriers resisted (information, bidding, access to network and reservations)
- ◆ All realized savings (so far...)
 - Sweden: 90 tenders, ~24% of p-Km, 20-30% savings
 - Netherlands: 10 tenders, ~8% of p-Km, 0-10% savings on negotiated, 20-50% savings when competed
 - Germany: 37 tenders, ~7% of p-Km, 18-20% savings
- ◆ Many succeeded, but some failed
- ◆ Private, Open Access freight operators emerging
- ◆ Competition varied
- ◆ Approach still developing

Emerging E.U. Model?

Type of Function	Traditional Public Roles		Franchising/Concessions		Privatization	
	Public Ownership and Mgt	Mgt Contracting	Gross Cost	Commercial Risk	Divestiture	New Private Entry
Infrastructure	X	X	X			
Freight	X				X	X
Passenger						
High Speed	X			X		
Conv. Intercity	X		X	X		
Rural/regional	X	X	X			
Suburban	X	X	X			

	Today
	Long-term option
	Potential step or interim option

Access charge levels and structure will drive outcomes

Some Broad Lessons: With Benefit of Hindsight

- ◆ Clear, agreed objectives are crucial: maximize discussion, take time
- ◆ Structure consistent with objectives: competition!
- ◆ Franchise dimensions consistent with structure and objectives: keep them as small as reasonable to reduce complexity and political risk
- ◆ Define social and commercial services: GC where social dominates, NC for commercial services
- ◆ Clearly identify and allocate risks -- and pay the price
- ◆ Get incentives right: set, and impose, the penalties

Overall

- ◆ Sometimes privatization is better than franchising
- ◆ If infrastructure is separated, mix and match both structure and franchising types
- ◆ Competition **for** the markets matters: competition **in** the market is rarely an objective for passengers
- ◆ Franchising can work if:
 - Developed private sector
 - Politicians can make real choices
 - Legal system works
 - Social issues can be managed

U.K. Conclusions: With (Some) Trepidation...

- ◆ Passenger franchising was moderately positive (compared to doing nothing):
 - Demand is up strongly
 - Safety has improved
 - BUT: costs are up, and the system is not yet stable
- ◆ Why?
 - Too many franchises (information driven?)
 - Initial approach too rigid, both in franchising type (NC vs. GC) and in total separation
 - Overdependence on national approach rather than allowing at least some regional approaches
 - Exuberant bidding?
- ◆ B.R. may not have been that bad...

U.K. Conclusions: With (Less) Trepidation...

- ◆ Freight privatization a reasonable success
- ◆ Railtrack failed badly
 - Management did not understand the problem (overdependence on contracting, no control on costs, loss of expertise)
 - Imposed maintenance contracts caused major problems
 - Initial access charge regime caused conflicts between TOCs and Railtrack
 - Too much investment, too fast, under heavy traffic
- ◆ Network Rail making (enough?) progress
- ◆ ROSCOs plus direct leasing a reasonable success

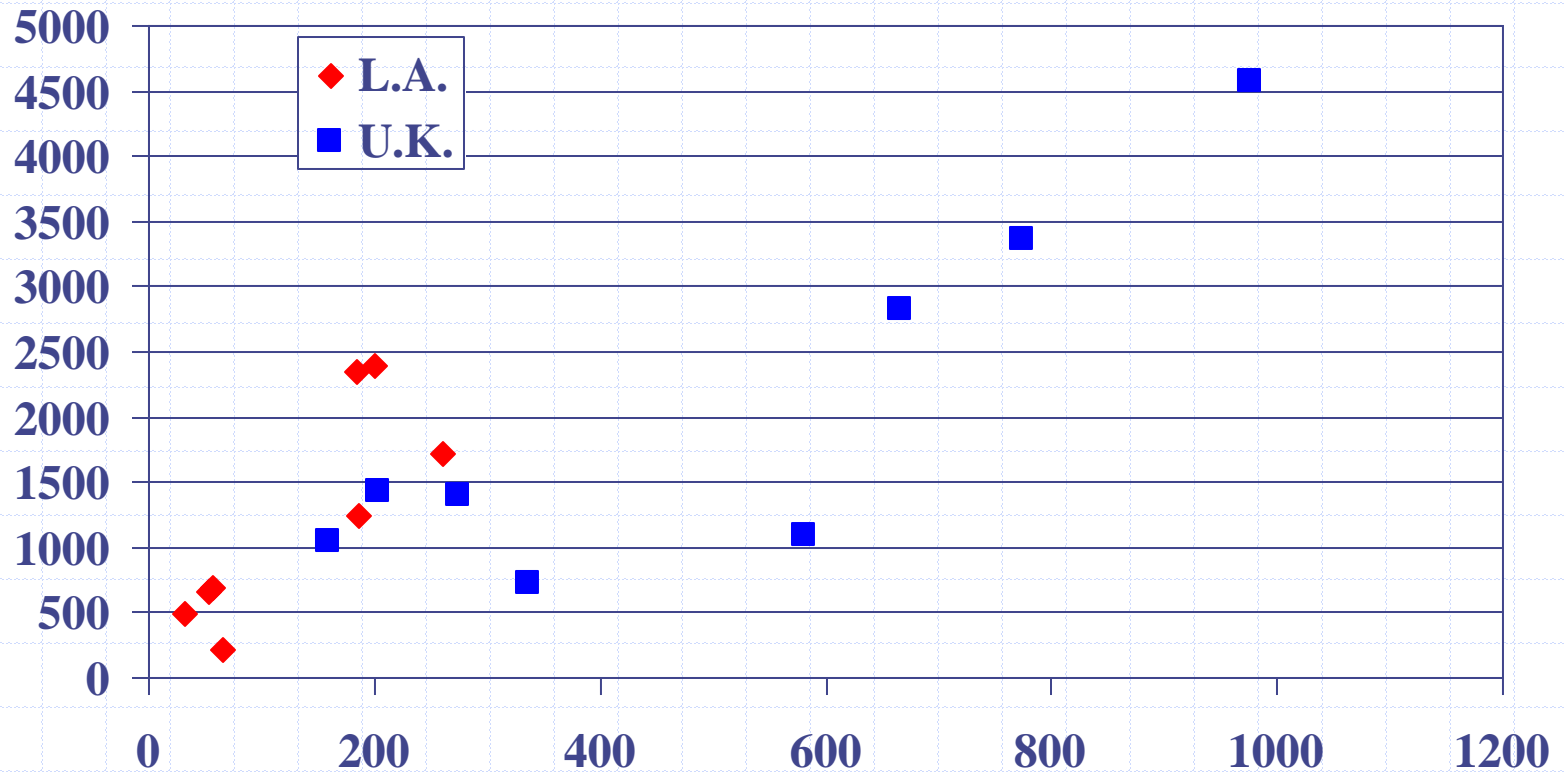
U.K. Conclusions: With (A Lot of) Trepidation...

◆ Government role:

- Restructuring and privatization in a hurry
- Sequencing issues not managed
- Too many franchises
- Strategic framework was wrong: growth unexpected, and no “fire and forget” solution
- Structure not consistent with actual competition objectives (competition for, not in)
- SRA approach was 5 years too late...
- Imposed maintenance contracts, and initial access charge regimes harmful

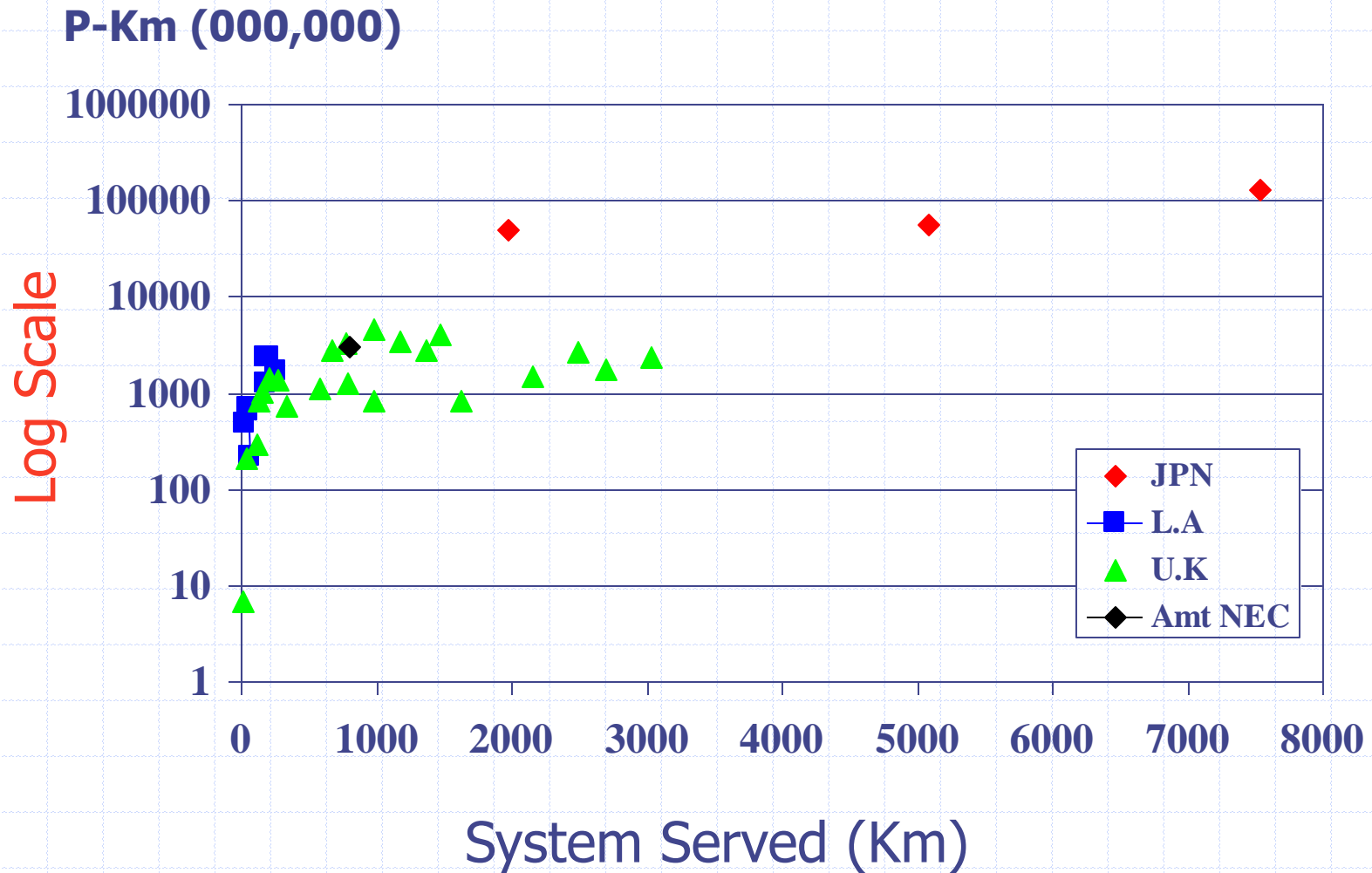
Sizes of U.K. LSE Franchises and Latin American Passenger Concessions

P-Km (000,000)



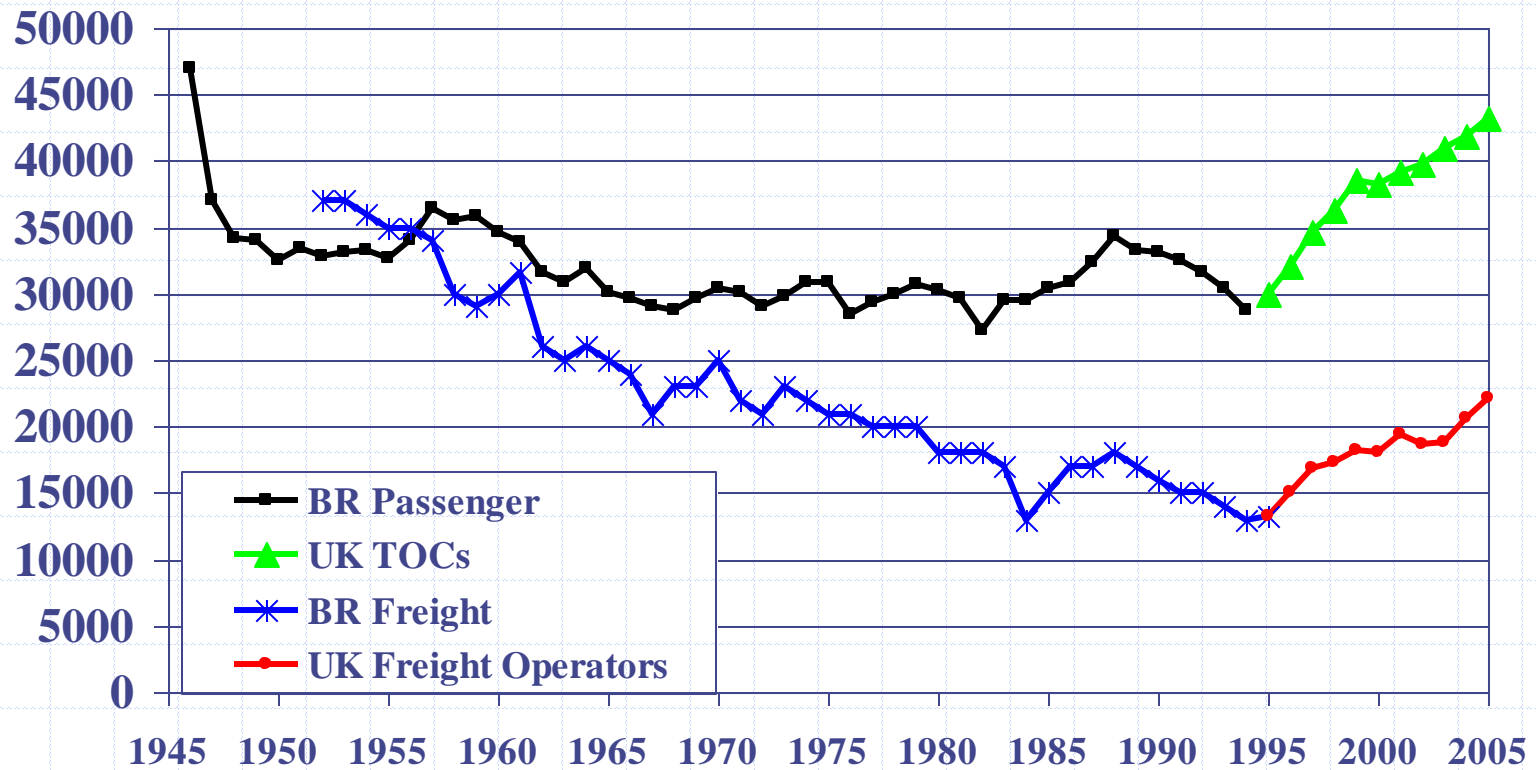
System Served (Km)

U.K., Japan, Latin American Rail Passenger Services



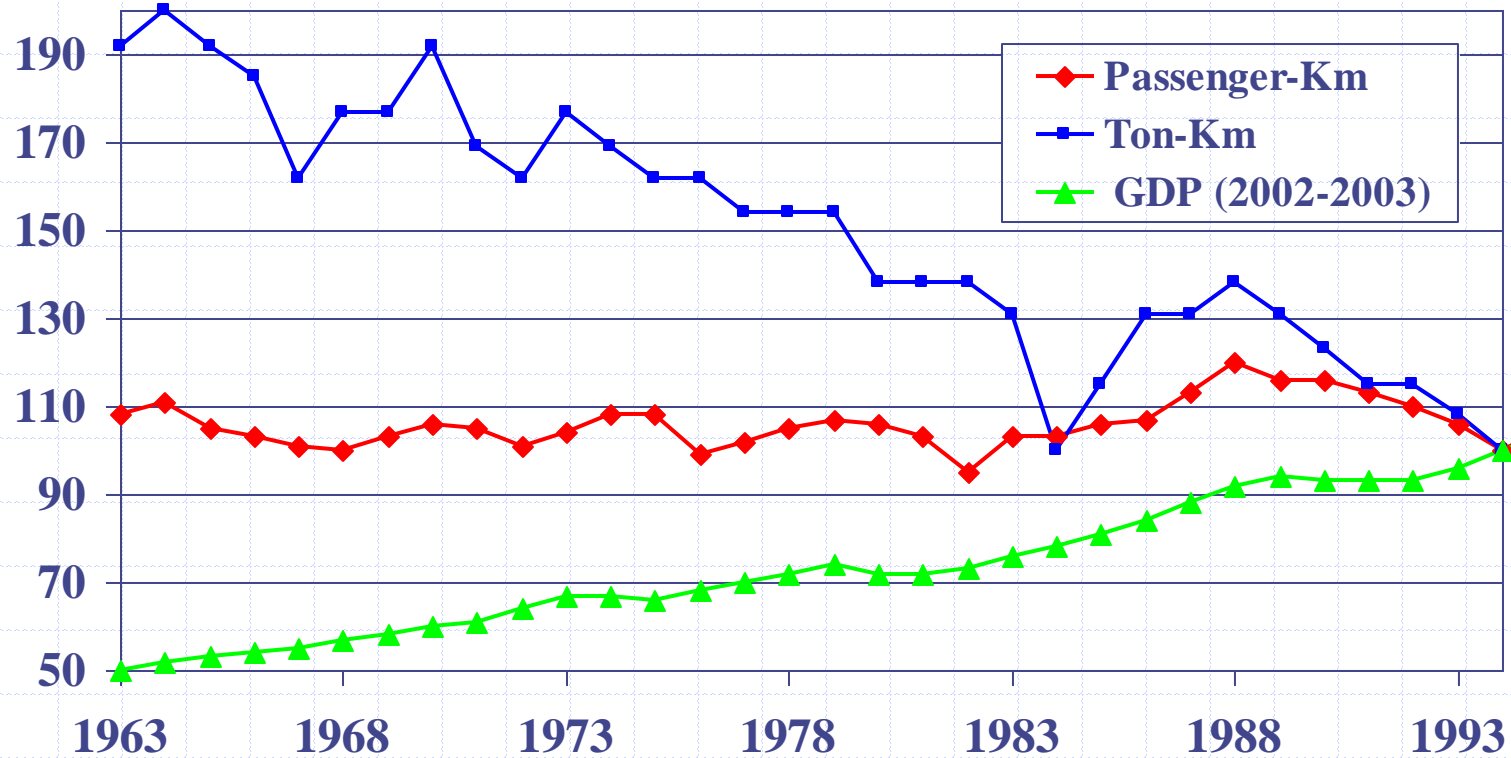
Rail Traffic in the U.K.

(000,000 passenger-km and ton-km)



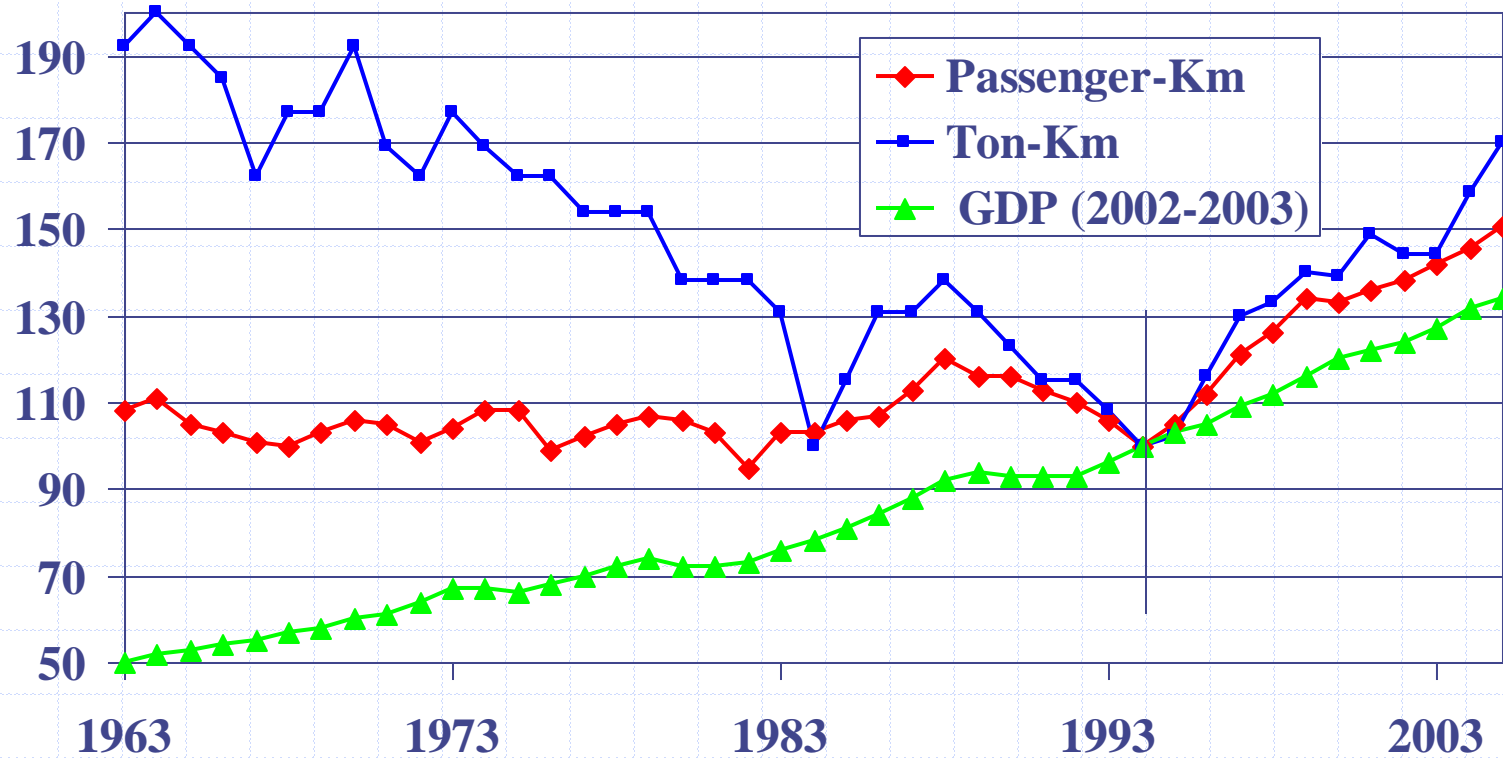
UK Passenger-Km, Ton-Km and GDP

(Index, 1994=100, GDP in constant £ 2002-2003)

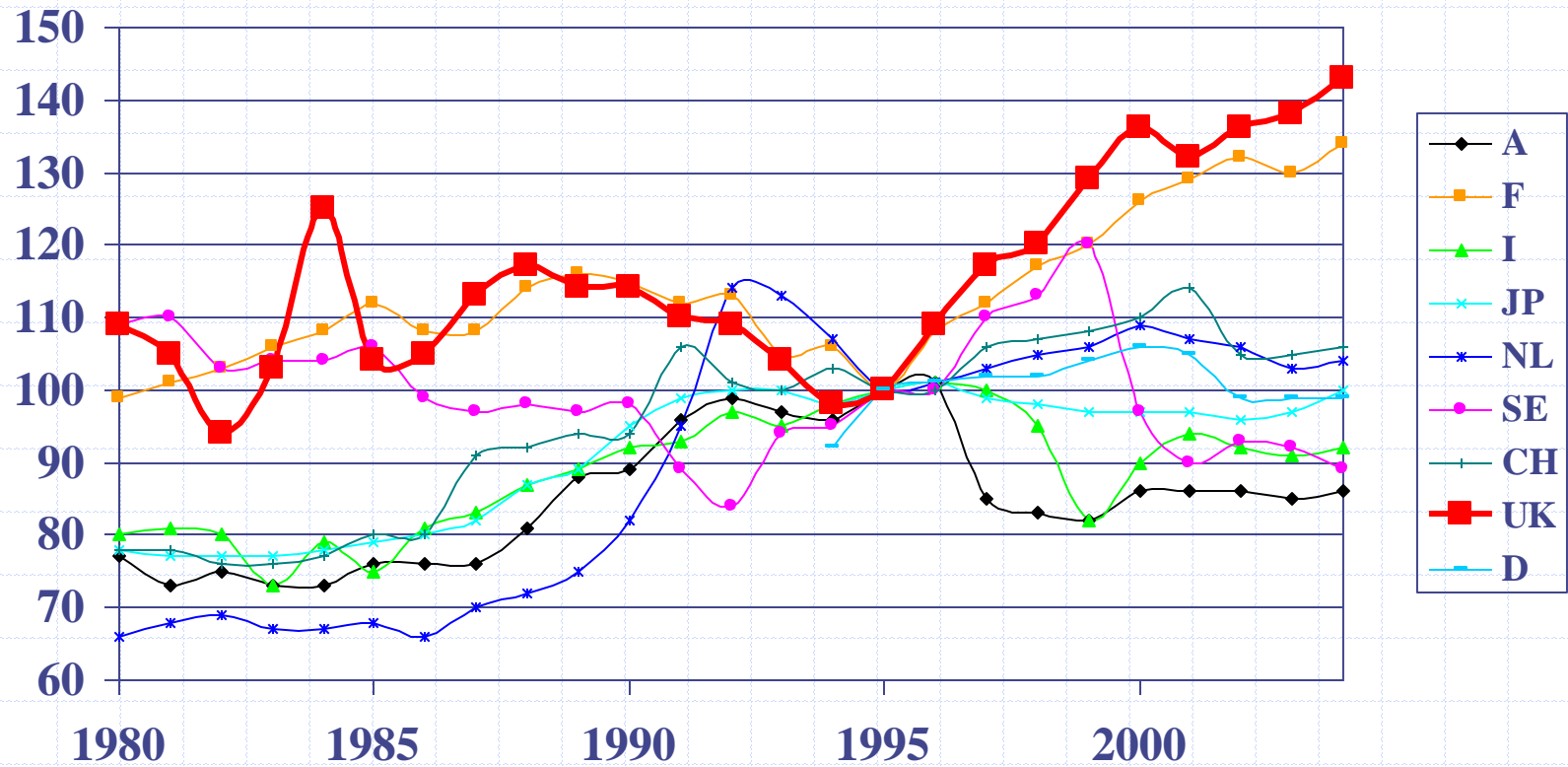


UK Passenger-Km, Ton-Km and GDP

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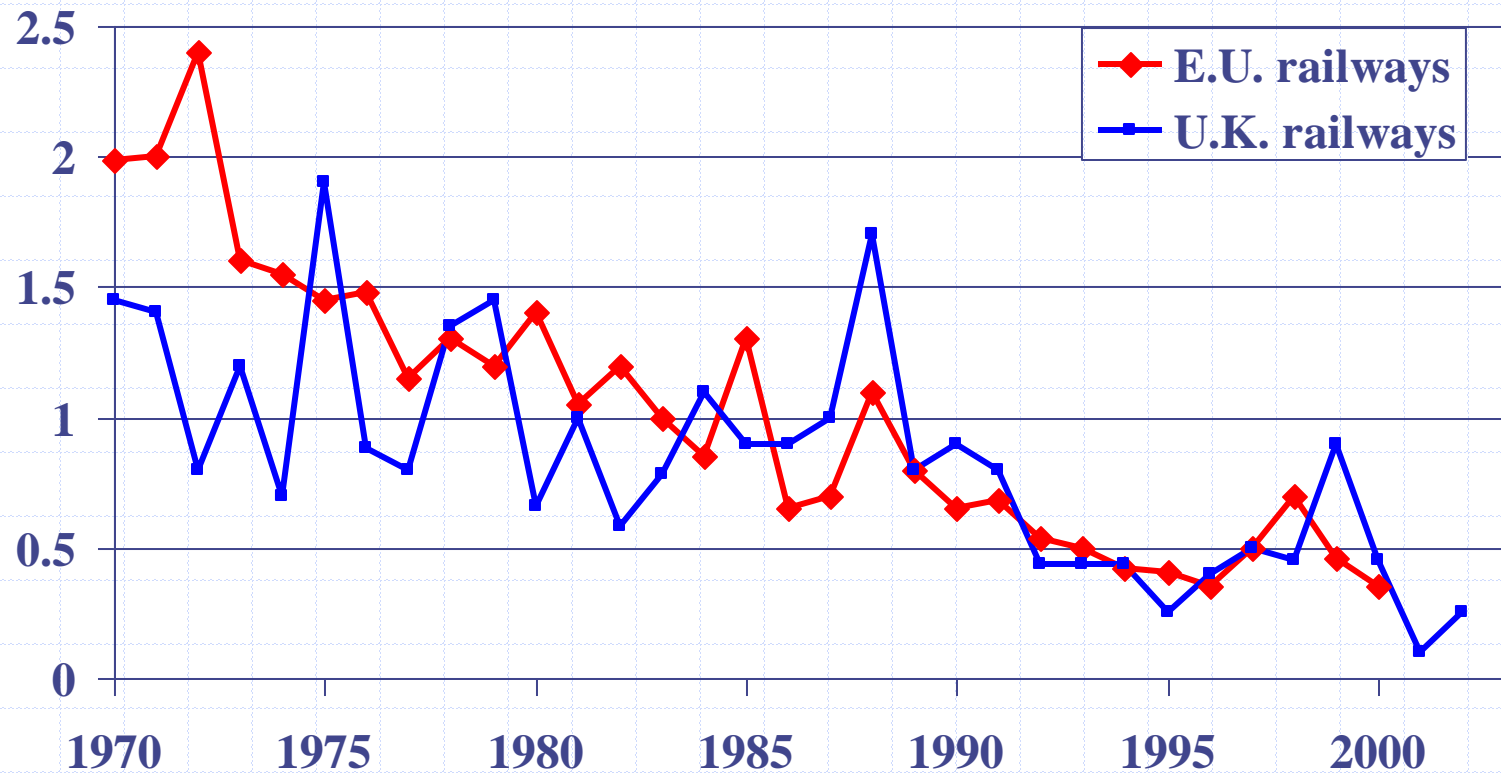


Rail Passenger Traffic Trends (1995=100)



Rail Safety in the U.K. and in the E.U.

(fatalities per billion passenger-km)



Passenger Service Quality

