Rail Restructuring in Central and Eastern Europe (and Elsewhere): Subsidies, Access Charges, and Modal Shares

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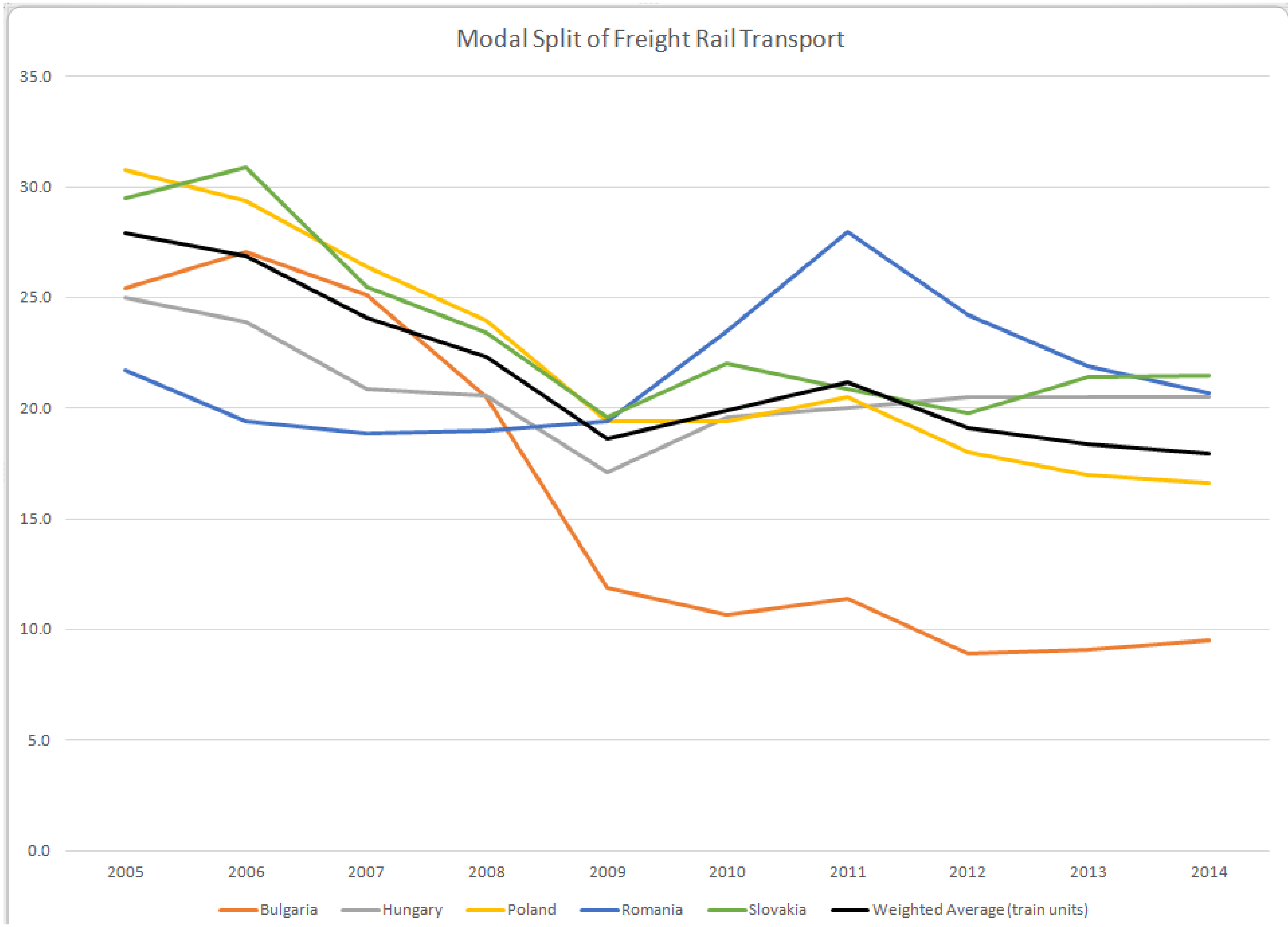
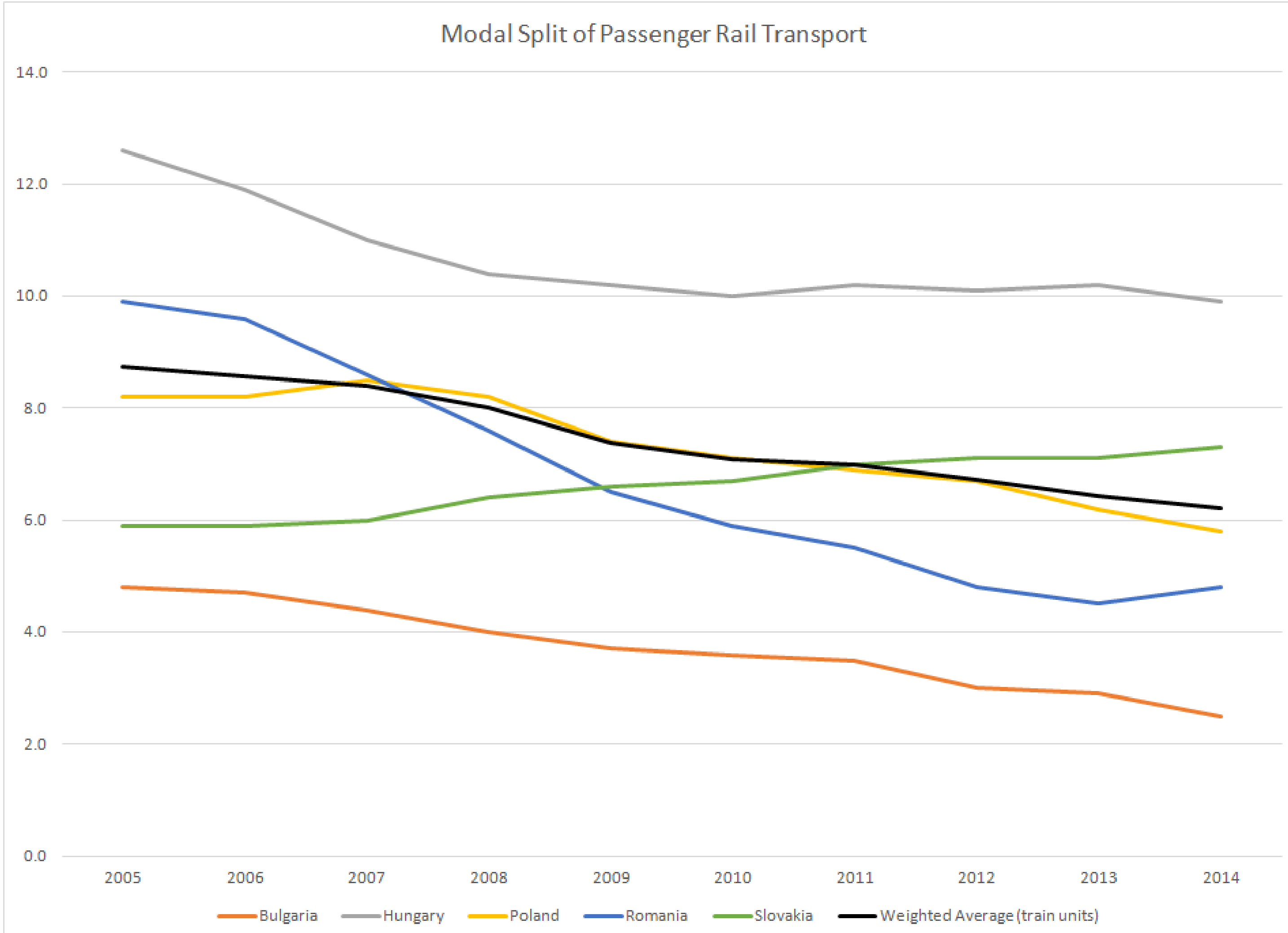
The views expressed are not purported to reflect the views of the U.S. Department of Justice.

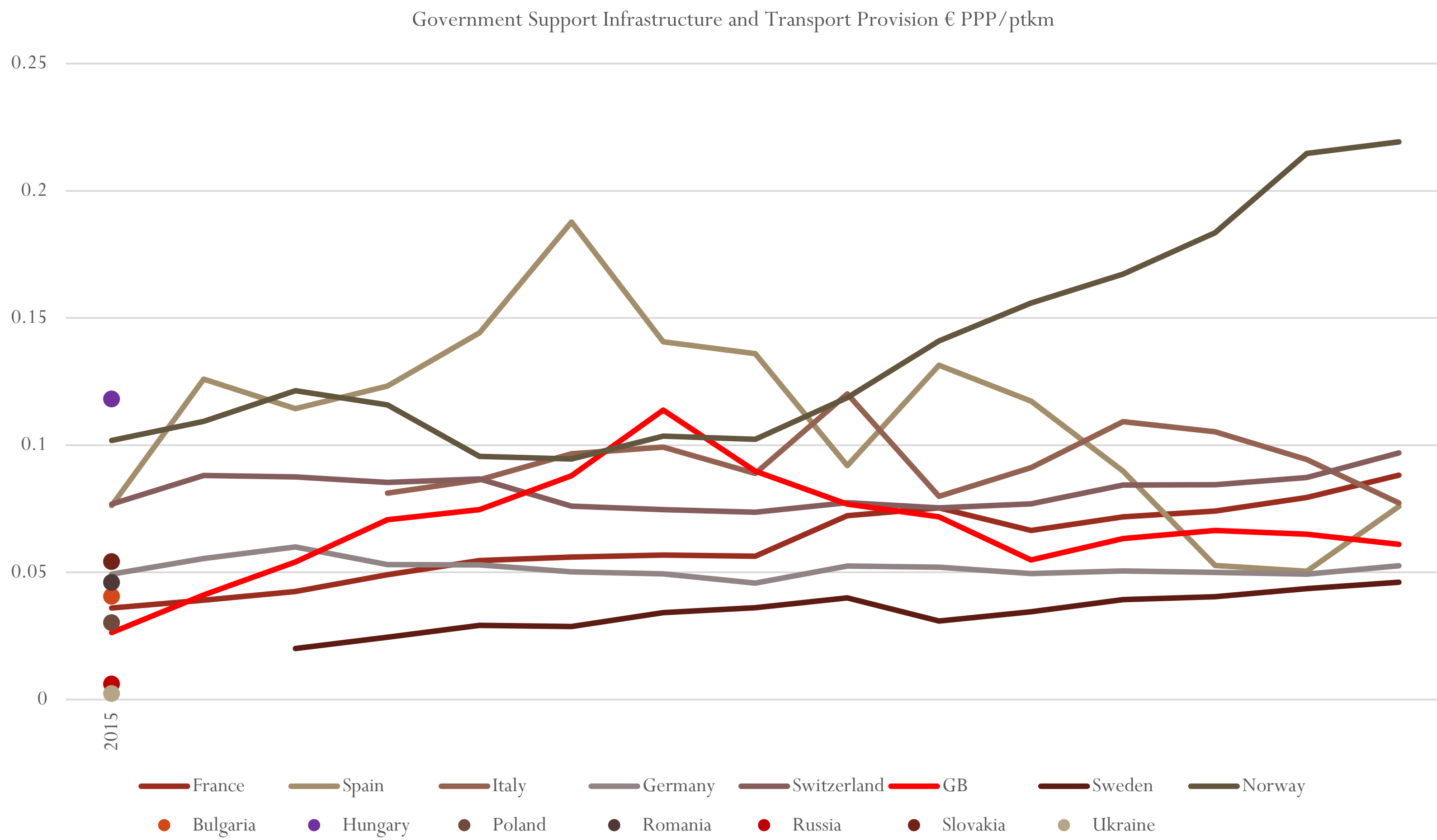
Rail Modal Share of Freight in CEE countries



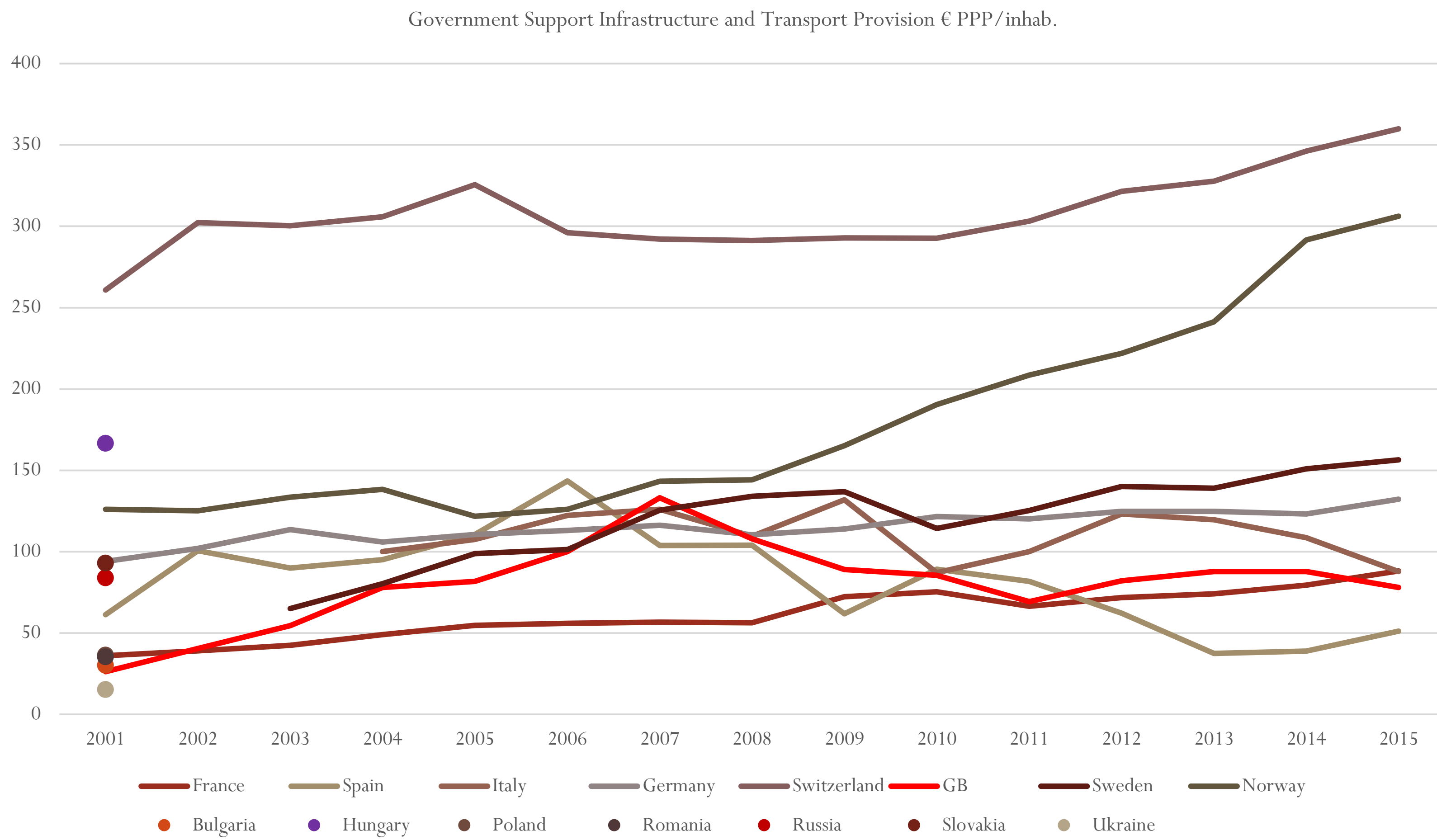
Rail Modal Share of Passengers in CEE countries



Government support for rail infrastructure and passenger transport (per train unit)

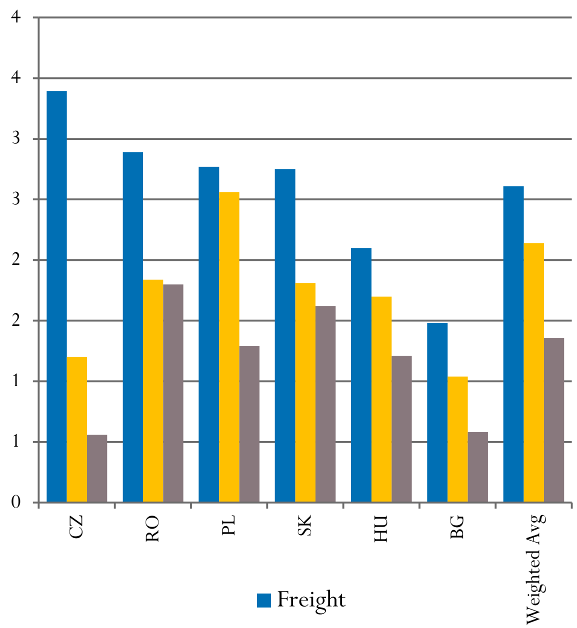


Government support for rail infrastructure and passenger transport (per population)

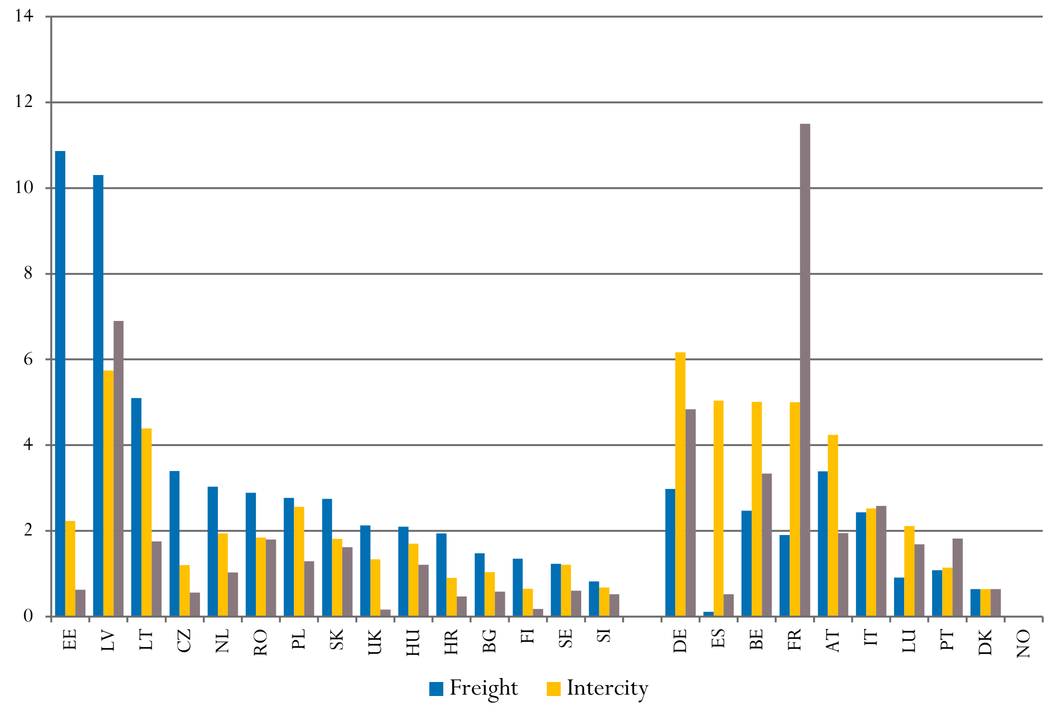


Track access charges for different train types (EC RMMS Report)

CEE countries

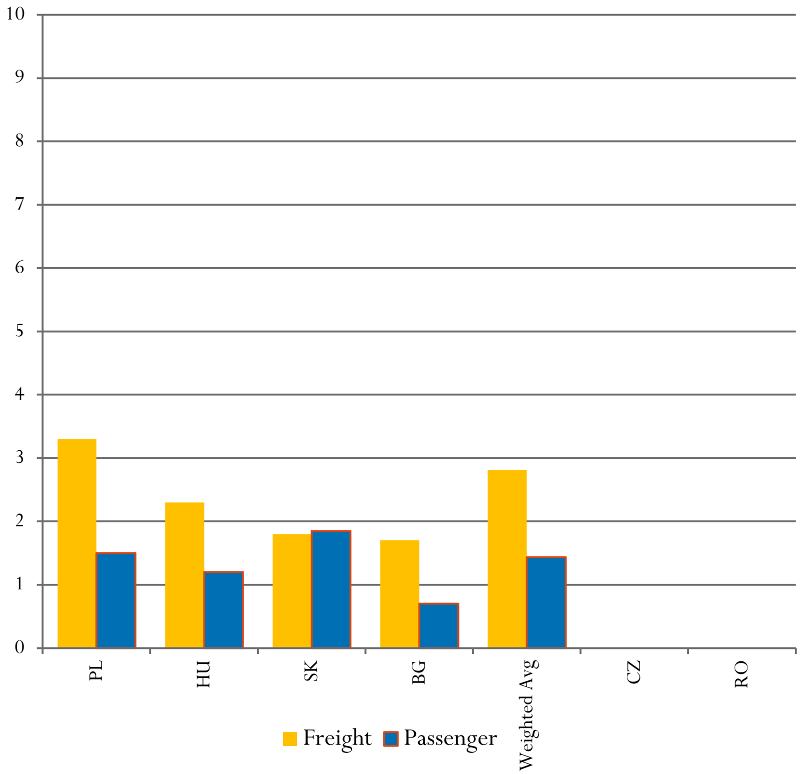


EC countries

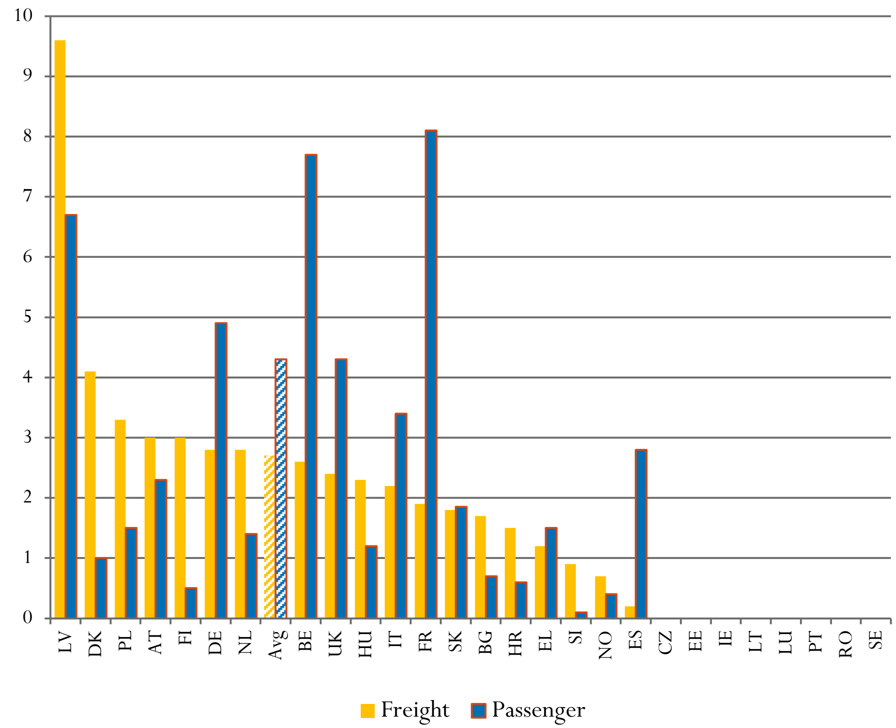


Average revenue from access charges (EC RMMS Report)

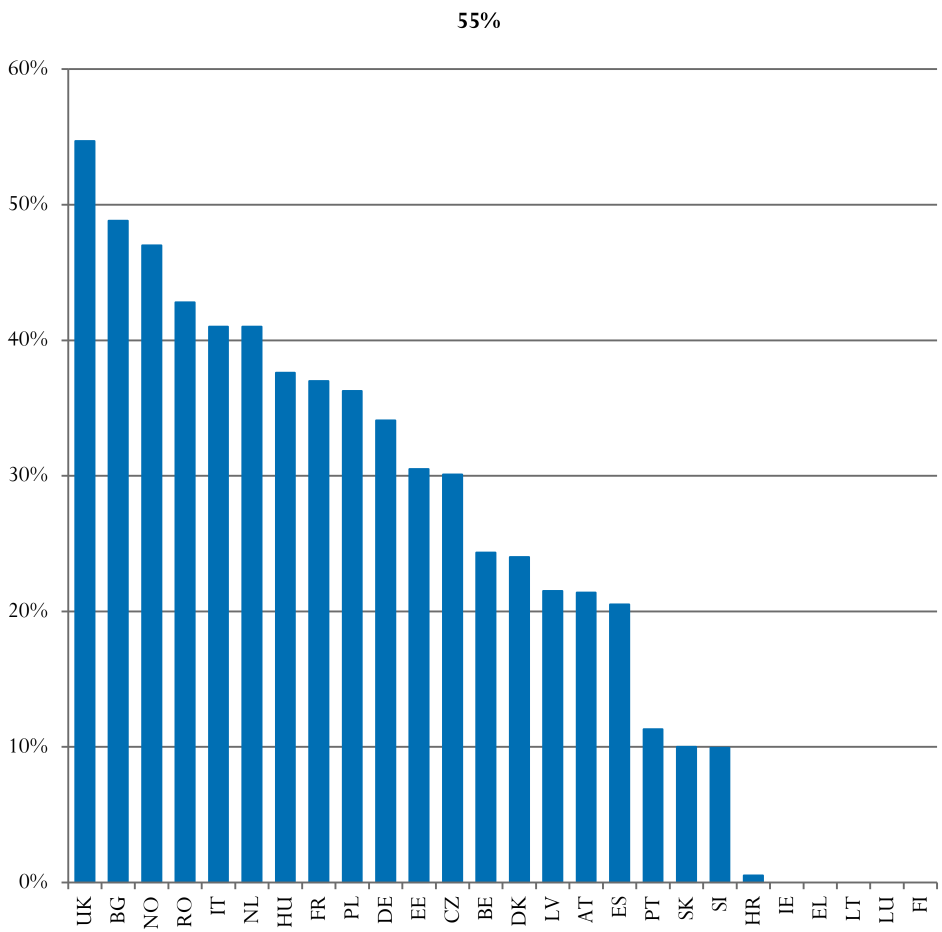
CEE countries

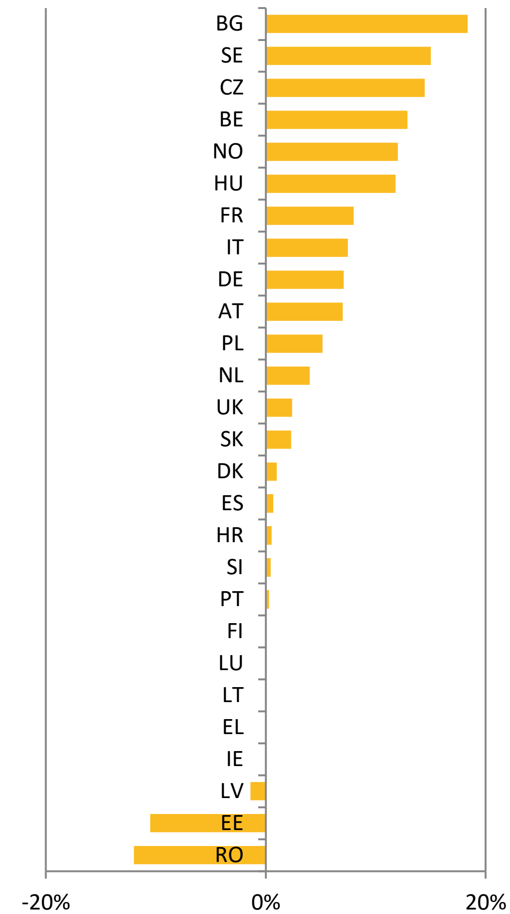


EC countries



Share of independent TOC's in freight markets (5th RMMS, Figure 66)





Restructuring and finance: Some preliminary thoughts

- Generally four options for competition-oriented restructuring:
  - Vertical separation
  - Third party access
  - Horizontal separation I: passenger operations separate from freight operations
  - Horizontal separation II: competing vertically integrated train/track companies
- Each has enjoyed some success and some disappointment; empirical literature suggests importance of specific local conditions:
  - Higher density
  - Higher freight/passenger ratio
  - Size of country?

An important issue: Access pricing

- First three options – vertical separation, third party access, and horizontal separation I – require setting of price and conditions for access to infrastructure
- Infrastructure pricing asked to perform a variety of functions:
  - Encourage efficient usage
  - Cover costs
  - Price congestion
  - Price environmental externalities
  - Encourage competition via non-discrimination
- Austrailian BTRE Report, 2003: Impossible!

How reach the best imperfect solution for access pricing?

- P = MC
  - Efficient in the short run
  - But requires government subsidies, which a) have their own opportunity cost, and b) may harm efficiency in the long run
- P = AC
  - Remove need for government subsidies
  - But inefficiently deny access to TOC's able to pay their MC
  - Method of distributing mark-ups over MC inherently arbitrary
- P = Multipart tariffs or Ramsey pricing
  - Economists' preferred "second best" solution
  - Some regulators, including US Surface Transportation Board, encourage as a matter of policy
  - But by definition discriminatory (2^{nd} or 3^{rd} degree, respectively, by Pigou's criteria), so competition agencies may not approve

Takeaway 1: Underappreciated virtues of Horizontal Separation II

- Well known: Maintaining vertical integration preserves vertical economies
  - "Where steel meets steel"
  - Empirical estimates vary
- Less well known: Demonstrated success of Horizontal Separation II in attracting private investment
  - US, Canada
  - Mexico and Brazil: US$100K per track-km *for the franchise rights* – massive investments afterwards
- Even less well known: Demonstrated success of Horizontal Separation II in institutionalizing discriminatory pricing with a minimum of distortion to competition
  - Integrated railway knows what is in cars, can discriminate by commodity
  - More difficult, less common when infrastructure separated
    - Thompson: only 3 European countries have commodity-specific access charges
    - Australian BTRE: in practice, less rent seeking with discrimination by integrated railway than with discrimination by infrastructure operator

Takeaway 2: Underappreciated virtues of road pricing

- Why are rail subsidies "normal"?
  - Chris Nash in keynote address: "'Railway finances' is to a large degree about subsidies."
  - But private financing is not uncommon, including private financing for infrastructure
- Freight rail should be self-supporting, including infrastructure
- Are subsidies to passenger operations and/or passenger-centered infrastructure inevitable?
- Japanese solution: Make roads pay for themselves
  - High road user charges, with some intramodal cross-subsidization
  - As a result, most passenger rail not subsidized

Let's fantasize: What if economists ran the world? Arguably first best solutions

- Option 1: Horizontal separation II. Freight rail competition among vertically integrated firms
  - Long-term success in the US and Canada
  - More recent success in Mexico, Brazil
  - Serious discussion in Russia and China
  - Why not cross-border firms in Europe? Cross-border TOC's already
- Option 2: Both road and rail charge MC+
  - Surcharges for both to reflect congestion, noise, air pollution, carbon emissions, oil import dependence
  - Require some intramodal cross-subsidization to provide low-cost passenger alternatives?
  - Continue government subsidies for low-income passengers? But often bus service is more efficient.