

# Evaluating European railway deregulation using different approaches

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## **Discussant**

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## **Aims of the paper:**

1. Compare efficiency levels derived from alternative approaches: DEA (CRS and VRS) & Battese-Coelli.
2. Estimate the impact of deregulation process on efficiency.

Continues previous research (JTEP, 2010).

## **Results:**

1. Different methods provide different efficiency measures, but the rankings are similar.
2. Franchising passenger systems is the main driver of efficiency gains. Other papers have stressed the role of liberalising freight.

# Discussion

## 1. Data.

JTEP 2010: 16 countries, 1985-2005.

Here: + 7 countries (BL,CZ,HU,PL,RO,SL,SV), 2001-2010.

Which would be the results for the full sample, 1985-2010?

Unbalanced panel, but no changes in frontier definition.

Lack of data for the UK:

Deregulation need not imply losing system-wide information.

Regulators' task?

## **2. Comparability of efficiency determinants.**

Main explanation of more efficient systems:

→ opening freight market to competition.

In the JTEP 2010 paper: → passenger tendering.

Difference explained by the use of a different sample.

Could it be due to the changes in the model specification?

### 3. Endogeneity of deregulation variables?

Selection effect if countries with more efficient rail systems are more likely to deregulate.

$$\textit{efficiency} = f(X, \textit{deregulation}) + \varepsilon \quad (1)$$

$$\textit{deregulation} = g(\textit{institutions}, \textit{ideology}, \textit{efficiency}) + v \quad (2)$$

Duo and Roller (Econ.Lett., 2003), productivity in telecoms:  
OLS in (1) without taking into account the effect of (2) leads to 50% bias of deregulation effect on efficiency.