ACCHANGE

Union Bargaining model in ATC

TRANSPORT & MOBILITY LEUVEN

האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

moving dot

Core-Invest n.v.

SESARWPE
LONG TERM AND INNOVATIVE RESEARCH

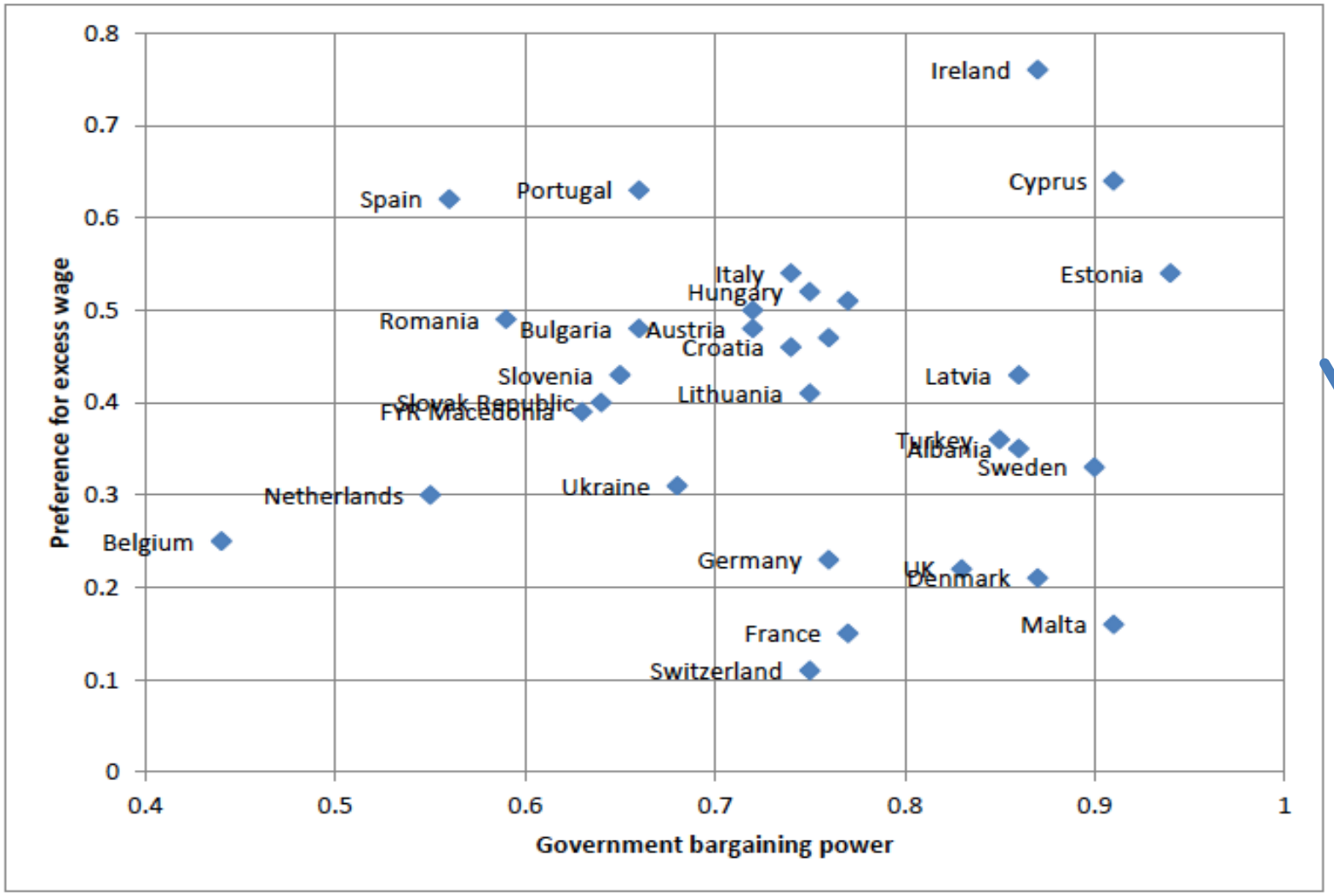
Motivation

- present ATC system in EU is composed of 37 national providers
  - compared to FAA, EU system is 34% more costly (2011)
- barriers to cost efficiency:
  - ownership form: governmental organizations
  - fragmentation: missing economies of scale
  - protectionism: power of labor unions & national interest
  - weak regulation: failure to implement FABs or strict price-caps
- barriers to increasing capacity:
  - opposition to change
  - fear of technology
  - relatively low congestion currently

Empirical Illustration

- Data for 31 European ANSPs including output, value added, wages, labor productivity
- *Union power* is difficult to measure directly as strikes are not a good indicator, rather it is the threat that counts
- Wage mark up (w-w°) can be estimated by comparison with wages in other sectors for similar qualifications
- Excessive employment (L-L°) is estimated by comparing with the most efficient ANSP
- Maximum willingness to pay for flight control services is estimated by using the highest price in Europe per composite flight hour
- Generates estimates of relative bargaining power of government and preferences of the unions

Bargaining Power and Union Preferences



LESS EFFICIENT CONTROLLERS

LOWER PRICE FOR AIR TRAFFIC CONTROL

Results

- Large differences across countries
- Union power
  - High union bargaining power in Belgium, NL, Spain
  - Low union bargaining power in Sweden, Denmark, Ireland
- Union power is used differently:
  - High wages in Ireland, Cyprus, Portugal, Spain
  - High employment in Belgium, Germany, France

compair

Competition for Air Traffic Management

TRANSPORT & MOBILITY LEUVEN

NOMMON

האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

Slot consulting

can cost efficiency & technology adoption be encouraged simultaneously?

- changes in ownership form
  - horizontal integration
  - vertical integration
  - privatization
- changes in pricing regulation
  - strict individual price-caps
  - peak / off peak charges
  - no regulation
- changes in capacity
  - SESAR technologies

General conclusions

- Single European Skies Initiative:
  - Lower costs
    - defragmentation via FABS
    - price regulation
  - Increase capacity
    - SESAR
- How to achieve these goals? **auction ATC provision en-route** to create demand for the market
  - similar to that of airport terminal provision in Spain, Sweden, UK…
  - likely to lead to defragmentation of European airspace
    - around 5 companies will survive if market share cap of 20%
  - charges as much as halved
    - potentially removes need for price regulation

Conclusions

- Auction Rules:
  - Very important: multiple bidders
  - Pressures on capacity thus need to set minimum levels
  - Could permit charges to increase/decrease as function of service levels
- Regulation:
  - Safety regulators (EASA, NSA…) need to continue
  - Data collection (STATFOR) would need to continue to check capacity levels
  - Economic regulator (PRB) may be less necessary
- Ownership form:
  - For Profits: most effective solution
  - Non-Profits: provides a solution between current equilibria outcome and for-profit potential solution

Air traffic control provision: The last element of the aviation supply chain to be liberalized

Thank you very much for your attention!

This project has received funding from the SESAR Joint Undertaking under the European Union's Horizon 2020 research and innovation programme under grant agreement No 699249

SESAR JOINT UNDERTAKING

Founding Members

EUROPEAN UNION EUROCONTROL