EIBURS:
The History of European Infrastructure Finance

5th Annual Meeting of the EIB-Universities Research Action, 1st – 2nd of February 2012

Prof. Dr. Nico Grove

Luxembourg, 2nd of February 2012
Agenda

- Recent Updates
- Current Research Activities and Preliminary Results
- Next Steps
Agenda

- Recent Updates
- Current Research Activities and Preliminary Results
- Next Steps
We have completed researcher staffing.

Additional Staffing

- Damir Agic

- Luis Eduardo Ruiz Tejedor
Agenda

Recent Updates

Current Research Activities and Preliminary Results

Next Steps
Target is exploring a taxonomy of European infrastructure financing in the long run (XVIII-XX century).

Current Research Activities and Preliminary Results I/IV

Outline for Research Line I (UNIMI, BUW and LMU)

1. Exploring for a taxonomy of European infrastructure financing in the long run (XVIII-XX centuries)

   - Focusing on financing system of infrastructures in different European countries from 18th century up to nowadays
   - Developing dataset template consisting of most significant determinants with effect to financing of infrastructure provision
   - Analysis of most relevant case studies regarding infrastructure in Italy, Germany, France, Belgium
     - Researching through archival sources and literature
     - Template is work in progress
Developed framework is filled with data from selected case studies.
Current Research Activities and Preliminary Results II/IV

<table>
<thead>
<tr>
<th>Outline for Research Line I (UNIMI, BUW and LMU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Template determinants (affecting financing of infrastructure provision) then grouped into 4 main categories:</td>
</tr>
<tr>
<td>1. Institutional framework of main country (type of government, law system etc.)</td>
</tr>
<tr>
<td>2. Macroeconomic data (GDP, economic sector’s share etc.)</td>
</tr>
<tr>
<td>3. Financial features of country (fiscal system, public finance etc.)</td>
</tr>
<tr>
<td>4. Geomorphological characteristics*</td>
</tr>
<tr>
<td>- Focusing currently on transport sector (railroads, canals, steamships) in France, Germany and Belgium -&gt; Adding other infrastructure classes such as water service and supply, gas, energy, electricity, telecommunications etc.</td>
</tr>
<tr>
<td>- Hypothesis: Effectiveness of infrastructure financing system (divided per sector) correlated to a set of determinants embracing both supply-side and demand-side factors -&gt; Application of a regression analysis</td>
</tr>
</tbody>
</table>

* Overall objective: A framework for cross-temporal and cross-sectoral comparative analysis

* What impact do different landforms (geomorphological features) have on infrastructure financing: low-lying vs. higher ground
Infrastructure financing schemes across time, sectors, engagement, region, law and other framework conditions are identified and catalogueized.

Current Research Activities and Preliminary Results III/IV

Outline for Research Line II (UNICAN)

2. Identify and catalogue infrastructure financing schemes across time, sectors, engagement, region, law and other framework conditions

- Database compilation:
  - Identification of main sources of available information to analyze infrastructure finance in Europe, started Feb. 2011
  - Sources:
    - European Investment Bank
    - European Union’s historical Archive
    - OEEC – OECD
    - International Bank for Reconstruction and Development
Progress – Elaboration of a database containing detailed information related with financial aspects of infrastructure investment.

Current Research Activities and Preliminary Results IV/IV

Outline for Research Line II (UNICAN)

- Ongoing elaboration of a database (1958-2004) containing detailed information related with the financial aspects of the investment including:
  - Amount of loans
  - Project characteristics in terms of sector, subsector
  - Country(ies) and region(s).
  - Objectives (art. 130: a. less developed regions; b. modernizing and converting enterprises or strategic sectors for a common Market; c. projects of common interest to several member states such as TENs)
  - Private or public involvement in project
  - Financial institutions involved: National – international, commercial banks, development banks
    - interest rate, duration of loan, capital installments, exchange rate (units)
Agenda

Recent Updates

Current Research Activities and Preliminary Results

Next Steps
Special Issues under preparation.

Next Steps I/II

Pending Research Activities


- EIBURS Session Mainpaper:
  - European Infrastructure Financing: Infrastructure as an issue of the political agenda (Giuseppe De Luca, Nico Grove, Hans-Wilhelm Alfen, Arnold Picot)

- EIBURS Session Subpapers:
  - From local to trans-regional to trans-national infrastructure networks – historical impacts on drafting a political agenda for European infrastructure finance (Björn Wündsch BUW)
  - Role of the State in Infrastructure Provisioning: Telecommunications Infrastructure in Europe in the XIX and XX Century (Damir Agic LMU/BUW)
  - Decision making processes on infrastructure investments and their financing in the history of today’s transitional economies (Daniel Soric LMU)
World Economic History Forum Contribution.

Next Steps II/II

Pending Research Activities

- Special issue of the International Review of Applied Economics, based on selection of papers that will be presented at the 10th Milan European Economy Workshop “Quality of institutions and the performance of public service providers”, 2013

THANK YOU!
Appendix
Example of the dataset template 1/3.

Current Research Activities and Preliminary Results

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>COUNTRY</th>
<th>YEAR OF FOUNDATION</th>
<th>COMPANY/ORGANIZATION</th>
<th>TYPES OF PARTNERSHIP</th>
<th>PRIVATE</th>
<th>PUBLIC</th>
<th>PPP</th>
<th>COUNTRY FINANCIAL SYSTEM</th>
<th>PUBLIC FINANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>market oriented</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>bank oriented</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Public Debt/GDP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fiscal System</td>
<td></td>
</tr>
</tbody>
</table>
Example of the dataset template 2/3.

Current Research Activities and Preliminary Results

<table>
<thead>
<tr>
<th>INSTITUTIONAL FRAMEWORK:</th>
<th>GEOMORPHOLOGICAL CHARACTERISTICS</th>
<th>GOVERNMENT EFFECTIVENESS</th>
<th>CURRENCY AND PRICE STABILITY</th>
<th>PRIVATE PROPERTY</th>
<th>PARLIAMENTARY POWERS</th>
<th>RELIGION</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOVERNMENT</td>
<td>LAW</td>
<td>REPRESENTATIVENESS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>centralized</td>
<td>decentralized</td>
<td>civil law</td>
<td>common law</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Example of the dataset template 3/3.**

**Current Research Activities and Preliminary Results**

<table>
<thead>
<tr>
<th>GDP LEVELS (?)</th>
<th>URBAN/NON-AGRICULTURAL POPULATION</th>
<th>GDP GROWTH</th>
<th>GDP RATE OF REAL GDP</th>
<th>GOVERNMENT BUDGET DEFICIT</th>
<th>AGRICULTURE’S SHARE OF ECONOMY</th>
<th>INDUSTRY’S SHARE OF ECONOMY</th>
<th>SERVICES’ SHARE OF ECONOMY</th>
<th>TAX REVENUES</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>