Varieties of Capitalism within Telecommunications Policy: The Case of Broadband Diffusion in Denmark, Austria (*), Canada and Ireland

Economics of Exchange Commons: The Status, Functions and Utility of Infrastructure
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Agenda

- Previous Comments in 34th TPRC Conference, 2006 in Arlington, VA
- Introduction
- Theoretical Debate
- Our Main Question, contribution and hypothesis
- Methodology
- Comparative Analysis (preliminary data)
- Conclusions
Previous Comments in TPRC, 2006

- Why do we use the VoC theoretical Approach?
  - Reply in Theoretical Framework part
- Categories of the dependent Variable
  - From 2 categories (successful and non-successful) to 3 categories of cases (successful; medium and non-successful)
- Selection biased
  - Political Will indicators can be more related to Coordinated-Market Economies than Liberal Market-Economies
  - Work in progress...
- Austria is in the middle not in the unsuccessful cases
  - Selection of a new cases following the VoC classification: Republic of Slovenia (Buchen, 2005)

Introduction

- Nowadays, all the countries are concerned about broadband diffusion in order to improve their competitiveness and efficiency of public and social services. However, only some of them are successful in broadband user’s per capita rate.
- There is a debate about the most effective policies to drive countries to a successful broadband diffusion. Some authors support that liberal public policies can be more effective than interventionist public policies made by the States and viceversa.
- Empirical data do not show a clear evidence about that. By contrast, empirical data pointed out that different policies can be success in terms of broadband diffusion.
- Our proposal is to know more about institutional conditions which drive countries to a successful outcome in broadband diffusion in spite of making different types of policies.
Theoretical Framework (1/9)

- **What is the Varieties of Capitalism (VoC) approach?**
  - A new framework to understand the institutional similarities and differences in developed economies in a broad set of topics like innovation, vocational training, corporate strategy associated with legal systems and social policy development.
  - VoC tries to offer a new perspective to old questions explained for other perspectives like modernization approach, neocorporatism and social systems of productions.

Theoretical Framework (2/9)

- It is an actor-centered approach (individuals, firms, producer groups or governments) but in particular focused on firms as a basic actor of political economies.
- It has a relational conception of the firms. The work studies how the firms solve their problems of coordination (with other actors) in 5 different spheres: industrial relations, vocational training and education, corporative governance, system of intercompany relations and coordination between employees.
What does VoC suggest? What does VoC consist of?

VoC analyzes how companies resolve their problems of coordination in these spheres. VoC distinguishes two types of political Economies: Liberal-Market Economies (LME) and Coordinated-Market Economies (CME).

- In LME firms coordinate their activities primarily via hierarchies and competitive market agreements.
- In CME firms depend more heavily on non-market relationships to coordinate their endeavors with other actors.
- This different type of firms relationships varies systematically across countries.

<table>
<thead>
<tr>
<th>Type of Political Economies</th>
<th>Number of countries of OECD</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal-Market Economies (LME)</td>
<td>6</td>
<td>United States, United Kingdom, Ireland, Canada, Australia, New Zealand</td>
</tr>
<tr>
<td>Coordinated-Market Economies (CME)</td>
<td>10</td>
<td>Germany, Japan, Switzerland, Netherlands, Belgium, Sweden, Norway, Denmark, Finland and Austria</td>
</tr>
<tr>
<td>Ambiguous Position</td>
<td>6</td>
<td>France, Italy, Spain, Portugal, Greece and Turkey</td>
</tr>
</tbody>
</table>
Theoretical Framework (5/9)

- Basic concept: Comparative Institutional Advantage.
  - The Institutional Structure of a Political Economy provides firms incentives to take part in different activities.
  - Firms can produce some goods in a more efficient way than others for the institutional support that they receive.
  - Institutional support for each activity is not the same across countries

Theoretical Framework (6/9)

<table>
<thead>
<tr>
<th>Political Economy</th>
<th>Type of Assets</th>
<th>Type of Skills</th>
<th>Type of Innovation</th>
<th>Executive Power Concentration</th>
<th>Participation of groups in Policy-Making Process</th>
<th>Type of Public Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal-Market</td>
<td>Non-Specific</td>
<td>Non-Specific</td>
<td>Radical</td>
<td>High</td>
<td>Low</td>
<td>Market-oriented</td>
</tr>
<tr>
<td>Coordinated-Market</td>
<td>Specific</td>
<td>Specific</td>
<td>Incremental</td>
<td>Low</td>
<td>High</td>
<td>Coordinated-Market Oriented</td>
</tr>
</tbody>
</table>
Theoretical Framework (7/9)

- What is the current theoretical Debate in relation to VoC framework? What do the critics think about it?
  - According to Varieties of Capitalism theory, governments react in a different way in CME than in LME under the pressures of globalization. Governments are interested to keep the institutional advantages of their countries. As a result, Governments make different public policies.
  - According to Thatcher, in his study about liberalization of Telecommunications, under pressures of globalization, all the countries are following the same type of policies.

Theoretical Framework (8/9)

- What is the debate about broadband diffusion and public policies?
  - Some authors have suggested that a free market policy approach is necessary to overcome the digital divide in broadband. Crandall (2003).
  - Other authors support that the role of the government is basic for broadband development
    - An intensive and extensive cooperation between public and private players, with the leading role of the Government (Choudrie, Papazafeiropoulou and Lee, 2003; Frieden, 2005)
    - An specific mission and goals in Information Communication Technologies (ICT) with a clear regulation and the creation of infrastructures in geographically unattractive places (Frieden: 2005)
    - These mixed-policies consist of an adequate regulation joined with supply and demand policies (Frieden: 2005; Kosmidis: 2002).
Theoretical Framework (9/9)

- Why do we use this approach in our study?
  - Analytical Goals
    - Basically, we can reduce broadband policies in two basic types: Liberal-market policies and Coordinated-market policies.
  - Theory and Empirical data
    - There are different public policies towards a successful broadband diffusion
    - VoC explains well successful cases in countries where Governments usually use different type of policies. But it does not explain well non-successful cases in broadband diffusion.
  - Theoretical Debate
    - It is similar the theoretical public debate about public policies in broadband and Telecommunications and other policies (social and economic policies) under globalization influences

Our Main Question, Contribution and Hypothesis (1/5)

<table>
<thead>
<tr>
<th>Countries</th>
<th>Successful in Broadband</th>
<th>GDP per Capita</th>
<th>Institutional model</th>
<th>Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>Yes</td>
<td>31600</td>
<td>Coordinated</td>
<td>126</td>
</tr>
<tr>
<td>Canada</td>
<td>Yes</td>
<td>31500</td>
<td>Liberal</td>
<td>3,2</td>
</tr>
<tr>
<td>Repulic of Slovenia</td>
<td>No</td>
<td>21911</td>
<td>Coordinated</td>
<td>97</td>
</tr>
<tr>
<td>Austria</td>
<td>No</td>
<td>31700</td>
<td>Coordinated</td>
<td>98</td>
</tr>
<tr>
<td>Ireland</td>
<td>No</td>
<td>35800</td>
<td>Liberal</td>
<td>59</td>
</tr>
</tbody>
</table>
Our Main Question, Contribution and Hypothesis (2/5)

- Countries with similar public policies and institutions can achieve different outcomes in broadband diffusion.
- Countries with different public policies and institutions can achieve similar outcomes in broadband diffusion.
- Under what institutional conditions do liberal market-policies and coordinated-market policies drive countries towards successful broadband diffusion?
- Why could be this question important?
  - VoC literature debate about the type of policies made by the States under globalization
  - Useful for Policy-makers focused on Telecommunications

Our Main Question, Contribution and Hypothesis (3/5)

- Different public policies can drive countries to a successful outcome, even in broadband diffusion (Hall and Soskice, 2001).
- But how can we explain the non-successful cases with different type of broadband public policies?
- Our contribution explores under what conditions different public policies allow countries to be success in broadband diffusion and under what conditions not.
- We hypothesize that political will can be important in explaining the success of different types of policies in each context.
Our Main Question, Contribution and Hypothesis (4/5)

1. Under conditions of high political will, if a government creates broadband policy based on market-policy in a Liberal Market Economy country, this country will be successful in broadband diffusion.

2. Under conditions of high political will, if a government creates broadband policy based on coordinated-market policy in a Coordinated Market Economy country, this country will be successful in broadband diffusion.

Our Main Question, Contribution and Hypothesis (5/5)

3. Under conditions of low political will, if a government creates broadband policy based on market-policy in a Liberal Market Economy country, this country will be unsuccessful in broadband diffusion.

4. Under conditions of low political will, if a government creates broadband policy based on coordinated market-policy in a Coordinated Market Economy country, this country will be unsuccessful in broadband diffusion.
Methodology (1/5)

- Our Dependent Variable
  - Success in broadband diffusion (having a good outcome in the broadband per capita ranking)
  - We use three categories to classified countries: 1. Successful (1-33%); 2. Medium (34-66%) and 3. Non-Successful (67-100%).
- Our Independent Variable: The political will of the Government
- Could be Political Will explain the successful of different public policies in broadband diffusion?
- Advantages
  - Political Will is an informal analysis of the Government decisions, we do not analyze that Governments say, we analyze which Governments do

Methodology (2/5)

- Disadvantages
  - Voluntaristic approach. Political Will can drive to an obvious, conclusions: successful countries in broadband are because they Governments want.
  - It must be completed with Governments preferences to know for which reasons some Governments have Political Will and other do not.
- What do you think? Could be the commons concept a sophisticated idea of this vague idea of Political Will?
  - Dimensions of Political Will
  - Priority of the Broadband:
    - Knowledge about benefits of broadband, level of commitment of the statements, years of the plans, precision
Methodology (3/5)

- Coherency of the Strategy:
  - Feasibility of the goals, availability of economical and institutional resources and previous experience
- Cost of the Policies:
  - $ expenditure per capita
- Visibility in the Governmental Structure:
  - Location within the government
- Institutional Innovation:
  - Good practices in institutional terms: creation of specific agencies and organizations, regulation
- Complexity of the Policy Coordination
  - Number of actors that are involved in broadband policies

Methodology (4/5)

- We have used the following variables as a control:
  - GDP
  - SIZE (population and area: except Canada)
  - TYPE OF POLITICAL ECONOMY: CME AND LME
- Comparative Politics Method (small n)
- Focusing on National-States
- Number of cases: 3 OECD countries and Slovenia
Methodology (5/5)

- 2 CME (Denmark and Republic of Slovenia) and two countries which belong 2 LME (Canada and Ireland)

- SOURCE OF THE DATA:
  - OECD (Macro-Statistics)
  - ITU and (Macro-Statistics)
  - Pompeu Fabra University data base coordinated by Professor Francesc Miralles

Comparative Analysis. Preliminary results

<table>
<thead>
<tr>
<th>Country</th>
<th>Broadband</th>
<th>Priority</th>
<th>Coherency</th>
<th>Cost of Program</th>
<th>Visibility</th>
<th>Institutional Innovation</th>
<th>Complexity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>Yes</td>
<td>High</td>
<td>High</td>
<td>142</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Austria</td>
<td>No</td>
<td>Medium</td>
<td>Low</td>
<td>237</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Republic of Slovenia</td>
<td>No</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Canada</td>
<td>Yes</td>
<td>High</td>
<td>High</td>
<td>107</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Ireland</td>
<td>No</td>
<td>Medium</td>
<td>Low</td>
<td>41,22</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>
Conclusions

- Looking at the results, we can conclude that Political Will may be an important factor in order to achieve a successful outcome in broadband.
- In our study, countries with different institutional traditions can be successful, if Governments have a high political will. Otherwise, broadband policies will not be successful if Government have a low political will.