Regional Innovation policies and SMEs
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Regional Disparities and Innovation policies: SMEs and new firms’ creation in France and Japan

Yveline Lecler
Research Fellow, Institut de Recherche Français à l’Etranger (UMIFRE 19, MAEE-CNRS)
Maison Franco-Japonaise Tokyo
and
Invited researcher at the Institute of Social Sciences, University of Tokyo

University of Lyon, Institute of Political Studies
Institute of East Asian Studies (ENS, CNRS)
To introduce the symposium

➢ All these issues that gave birth to the symposium organization will be largely debated during the 2 days sessions and round tables

➢ In this introductive presentation:
  ■ Explain the choice of the issues
  ■ some elements of definition
  ■ briefly draw the landscape innovation policies
    ✓ taking the French case as European example
    ✓ and new firms’ creation challenge to illustrate
The background of the symposium

- **Japan: Science and Technology Basic Law (1995)**
  - 3 successive basic plans,
  - 3rd one lasting in 2010,
  - to make the country an advanced science and technology-oriented nation

- **Europe: Lisbon European Council (2000)**
  - Research expenditures at 3% of GDP
  - EU to become the most competitive and dynamic knowledge-based economy in the world by 2010

- **Fostering innovation became a priority on Japan and European countries’ agenda**

<table>
<thead>
<tr>
<th></th>
<th>EU 27</th>
<th>Japan</th>
<th>France</th>
<th>Belgium</th>
<th>Sweden</th>
<th>Finland</th>
<th>Denmark</th>
<th>Switzerland</th>
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</thead>
<tbody>
<tr>
<td><strong>0.45</strong></td>
<td>0.60</td>
<td>0.47</td>
<td>0.47</td>
<td>0.73</td>
<td>0.64</td>
<td>0.61</td>
<td>0.67</td>
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From innovation to open innovation

- A complex and multifaceted process
  - often measure in terms of national/regional/firms R and D expenditures

- But today the Open Innovation concept developed by Henry Chesbrough largely expanding
  - In a context of globalised knowledge
  - firm cannot base its competitiveness only on its own R and D
  - Need to acquire research results from other actors
    - Patents
    - Licenses
    - Research-based start-ups acquisitions
  - Firms cannot exploit all its R and D research
    - Allow use by others: licenses, spin-off
Open innovation and clustering

- Open innovation implies research-industries linkages, large firms-SMEs linkages etc.
  - In Europe (France, Belgium) or in Japan does not emerge spontaneously → public authorities have to promote it

- Clusters = “one best way” to promote linkages or networking between actors localized in the same geographical area
  - master pieces of innovation policies
Clustering in Europe and Japan

- In Japan: industrial cluster plan (METI, 2000); knowledge cluster initiative (MEXT, 2001)
- Walloon region started in 2001: networks of enterprises and clusters, 2005 competitiveness cluster (pôle de compétitivité)
- France: competitiveness cluster strategy in 2004
- In 2006, clusters identified as one of the 9th priority for innovation by European Competitiveness Council
  - enlarged innovation “towards world class clusters”
  - European clusters alliance created to promote mutual learning through experience sharing between European clusters
But, clusters as a tool to promote open innovation
- not enough for Silicon Valley to emerge everywhere
- National institutions might favor or break open innovation

Results obtained in Europe and in Japan but:
- Lisbon objective far to be reached
- Still a lot of difficulties in Japan

As for example R. Boyer stated although not speaking of clusters or innovation:
« Reforms efficient in a certain form of capitalism might not work adequately in another form »

Necessity to study in different societal context actions undertaken
SMEs European definition

- European member states had their own definition until mid-90s when EU tended to harmonize
  - For ex. France usually used to consider 500 employess as the limit (depending on measures though)

EU definition:
* adopted in 1996
* revised in 2005

<table>
<thead>
<tr>
<th>SME categories</th>
<th>Employee number</th>
<th>Annual turnover</th>
<th>Annual balance sheet total</th>
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</thead>
<tbody>
<tr>
<td>Medium</td>
<td>&lt;250</td>
<td>≤€50 million</td>
<td>≤€43 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1996 €40 million</td>
<td>1996 €27 million</td>
</tr>
<tr>
<td>Small</td>
<td>&lt;50</td>
<td>≤€10 million</td>
<td>≤€10 million</td>
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<tr>
<td></td>
<td></td>
<td>1996 €7 million</td>
<td>1996 €5 million</td>
</tr>
<tr>
<td>Micro</td>
<td>&lt;10</td>
<td>≤€2 million</td>
<td>≤€2 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1996 not defined</td>
<td>1996 not defined</td>
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</table>
Japanese SMEs definition

SME definition

- was fixed a long time ago through the SMEs basic law of 1963
- only a little bit renewed under the revision of the law in 1999

Statistics categorisation within the SMEs distinguish micro-firms (- 20 employees in industries and - 5 in commerce and services), enterprises of 20-99, 100-299 etc.

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<tr>
<th></th>
<th>Capital Size (million Y)</th>
<th>Nbr Employees</th>
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<tbody>
<tr>
<td>Manufacturing + Others</td>
<td>300 or less</td>
<td>300 or less</td>
</tr>
<tr>
<td>Wholesale</td>
<td>100 or less</td>
<td>100 or less</td>
</tr>
<tr>
<td>Retail</td>
<td>50 or less</td>
<td>100 or less</td>
</tr>
<tr>
<td>Services</td>
<td>50 or less</td>
<td>100 or less</td>
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An impossible comparison:
no cut at 250 employees in Japan
no distinction according to sectors in Europe
SMEs in Europe

- SMEs in Europe (27 countries)
  - some 20 million enterprises (99.8%) providing around 75 million jobs (67%) and generating 57% of value added

<table>
<thead>
<tr>
<th>SMEs in Belgium: 365 769</th>
<th>SMEs in France: 2 103 795</th>
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<tbody>
<tr>
<td>90.2% &lt; 10 employees</td>
<td>92.3% &lt;10 employees</td>
</tr>
<tr>
<td>98.2% &lt; 50 employees</td>
<td>98.7% &lt;50 employees</td>
</tr>
<tr>
<td>99.7% &lt; 250 employees</td>
<td>99.8% &lt;250 employees</td>
</tr>
<tr>
<td>SMEs provide 71.7% of jobs</td>
<td>SMEs provide 60.9% of jobs</td>
</tr>
<tr>
<td>And generate 49.5% of value added</td>
<td>And generate 53.7% of value added</td>
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Non financial economy, 2004 numbers
Eurostat: European Business, facts and figures 2007
SMEs in Japan

- SMEs in Japan
  - are 4,197,719 (99.7%)
  - provide 69.4% of jobs
  - In manufacturing industries, SMEs (4 to 299 employees) contribute for 53.2% of the industry value added

SMEs white paper 2008
Spatial distribution: France and Japan

- In both countries SMEs have an heavy weight in all regions including metropolitan ones
  - **In Japan:**
    - Only Tokyo, Osaka and Aichi (Nagoya) prefectures = SMEs employment contribution below national average
    - Even Kanagawa (Yokohama and Kawasaki) or Fukuoka (Kita Kyushu and Fukuoka city) prefectures are above
  - **In France:**
    - Only Paris and Nord-Pas-de-Calais are below national average
    - Even 2nd industrial region, Rhône-Alpes is above average
The turning point in focusing firms’ creation in France

- SMEs rather neglected although their weight is important: Building national flagship large companies = a priority for competitiveness

- Increased unemployment after 1973 oil crisis
  *(regular increase since end 60s but 2-3% until crisis; faster pace increase after, pick at 12.3% in 94 and 97)*

  ↓

  Consciousness of necessity to support new firms’ creation action low to be implemented
  But 1 million unemployed in 1977 (4.9%); 2 millions level reached in 1982 (7.7%); 3 millions in 1993 (11.7%)

80s-90s: Increased interest for new firms’ creation
Proliferation of measures and structures engaged in their support, differing to some extend between regions
The new firm creation issue: France

- The system lacked of consistency and of efficiency
  - too many institutions or organisms (competitors in creators’ attraction), no coordination, heterogeneity of services offered, great regional differences, variety of counters to go to → landscape rather unclear to creators

- End of 90s: new firms’ creation rate lagging behind European neighbours

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<th>Creation rate (per 10,000 inhabitants)</th>
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<tr>
<td>Spain</td>
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<tr>
<td>UK</td>
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<tr>
<td>Italy</td>
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<tr>
<td>France</td>
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Source: from Cornu G. 04-05
The need of innovative technological firms

From firms’ creation to new innovative technological firms’ promotion:

- National technology innovative firm creation concourse, 1998
  - 450,000 €, for best selected projects

- Law on innovation and research, 1999
  - Mobility of public researchers to enterprises
  - Cooperation public research/enterprises (incubators, technology transfer)
  - Fiscal and legal framework dedicated to innovative firms

Source: Rapport OSEO sur l’évolution des PME 2008
Innovative-type incubators

- Call for projects of incubation and seed capital of technological firms, 1999
  - 31 public innovative-type incubators created in each region; objective 865 creations in 3 years
  - 2003 evaluation: 964 projects had been coached; 29 incubators continuing, objective 776 creations more
  - 2006 evaluation: 1732 projects entered into incubation, 881 led to firm creation, 40 about to lead to creation, 76 reoriented to technology transfer
    - huge regional disparity: 4 leading regions (Rhône-Alpes, Ile-de-France, Provence-Alpes-Côte d’Azur, and Nord Pas-de-Calais = 46.88% of all incubated projects
  - Main sectors concerned: life science and biotech, TIC, engineering sciences
  - 86% of firms created (901) still in activity at the end of 2006, contributing to 4198 persons employed

Promote firms innovative creation

- Young innovative enterprise status, 2004:
  - Support to independent enterprises <8 years with R&D expenditures = 15% of total charges (2004: 864 firms for some 4800 research jobs benefited from 45 M€ social charges holiday)

- Creation of OSEO (regrouping BDPME and ANVAR) in 2005 with 3 main missions:
  - Support to innovation, Funds insuring and guarantee (bank etc.), Fund raising for investments and/operation, in partnership with banks and other institutions

- Law on Modernization of Economy (LMD, 2008)
  - Modernization of capital risk tools, experimentation of special treatment to SMEs for public markets etc. and auto-entrepreneur status
    - new firms creations registered a huge increase
Firms’ creation in France

Source: APCE August 2009
Reasons for new policies in Japan

- SMEs protected under the “developmental State-type” industrial policy
- But since the 80s-90s, globalization and competition of emerging Asian economies
  - Loss of sub-contracting job
  - Net decrease of SMEs (graph) ⇒ difficulties of territories where agglomerated
- Need to support SMEs
  - To free from subcontracting by developing new high value added products or activities
- Need to support new firms’ creation to revitalize declining areas and restore competitiveness
firms entry and exit rate in Japan

Regional innovation through relocation

- Several laws enacted such as the Law for accelerating Regional Development based on High-Technology Industrial Complexes, or Technopolis Act, 1983
  - relocate research institutions in regions to promote new technologies industries spin-off and emergence of new poles of growth: 46 technopolis created
  - Relative failure most generally attributed to a certain miss match between central and local authorities: rather irrational choices of localization etc.

  Abandoned in 1998
The turning point of the 90s: towards open innovation

- In Japan too a lot was done but results were not as expected
- Since the end of the 90s, Japan implemented a lot of laws and conducted reforms
  - Law Promoting Technology Transfer from Universities to Industry (TLO Law): 1998
  - Revision of the SMEs Basic Law: 1999
  - Law to Strengthen Industrial Technology: 2000
  - University-based Structural Reform Plan for Revitalizing Japanese Economy: 2001
  - SMEs’ New Business Activity Promotion Law: 2005

Without forgetting cluster policies
A complex structure with good results

- Although all this led to numerous structures creation:
  - TLO, IP divisions, incubators at Universities, academy-industry linkages promotion divisions or institutions etc. making the whole lacking transparency

- Achievements are rather good in numbers:
  - Number of firms created from universities growing
    - Since TLO creation: around 20/year in 1st half 90s, 30 to 50 in 2nd half, > 100 early 00s, 200 recently (stagnation to 113 from march 2006 to march 2007)
    - Since 2001 « 1000 University-Originated Ventures Plan » of METI, + clusters policies: cumulative number multiplied by 3, from 598 in 2001 to 1590 in march 2007

Results, close to USA 10 years after Bayh Dole Act, but
 Creation rate 2004-2006 = 5.1% ; Closure rate 2004-2006 = 6.2%
(R. Kneller, 2007)
In France and Japan, new firms’ creation increased thanks to reforms and measures

But both countries start-up seems as sharing the same problems
- Funding, Human resources availability, Marketing and sales channels finding

All these issues will be analyzed during these 2 days
- In session 1: a more precise view of present policies
- In session 2 and 3: the new firms creation challenge will be addressed in all the related dimensions
- In session 4: firms strategies will be more directly focused
- But as science-pushed innovation are not the whole, session 5 will also consider numerous pre-existing SMEs that innovate differently with a special attention to human resources

Hoping it will help us to understand problems at stake and find solutions
Thank you for your attention and for participating