Regional Innovation policies and SMEs

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

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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

EU 27	Japan	France	Belgium	Sweden	Finland	Denmark	Switzerland
0.45	0.60	0.47	0.47	0.73	0.64	0.61	0.67

PRO INNO Europe paper N° 6, 2007

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

SME categories	Employee number	Annual turnover	Annual balance sheet total
Medium	<250	≤€50 million *1996 €40 million*	≤ €43 million *1996 € 27 million*
Small	<50	≤€10 million *1996 €7 million*	≤€10 million *1996 €5 million*
Micro	<10	≤€2 million *1996 not defined*	≤€2 million *1996 not defined*

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.

	Capital Size (million Y)	Nbr Employees
Manufacturing + Others	300 or less	300 or less
Wholesale	100 or less	100 or less
Retail	50 or less	50 or less
Services		100 or less

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

SMEs in Belgium: 365 769	SMEs in France: 2 103 795
90.2% < 10 employees 98.2% < 50 employees 99.7% < 250 employees SMEs provide 71.7% of jobs And generate 49.5% of value added	92.3% <10 employees 98.7% <50 employees 99.8% <250 employees SMEs provide 60.9% of jobs And generate 53.7% of value added

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 →

Creation rate
(per 10 000 inhabitants)

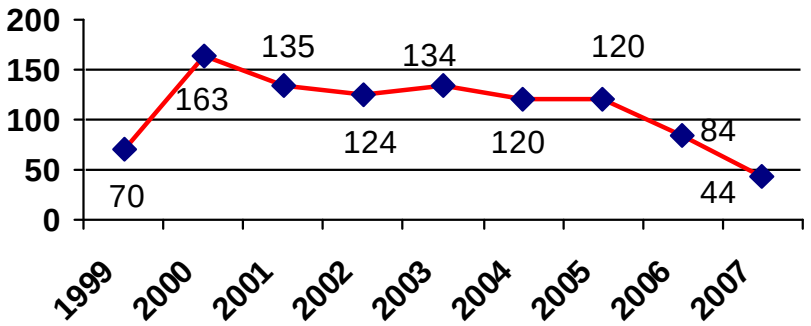
Spain	88
UK	66
Italy	64
France	44

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

number of firms created under national technology innovative firms creation supporting concourse



Cumulative total 994, 85% still in activity

Source: Rapport OSEO sur l'évolution des PME 2008

- 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

Innovative-type incubators

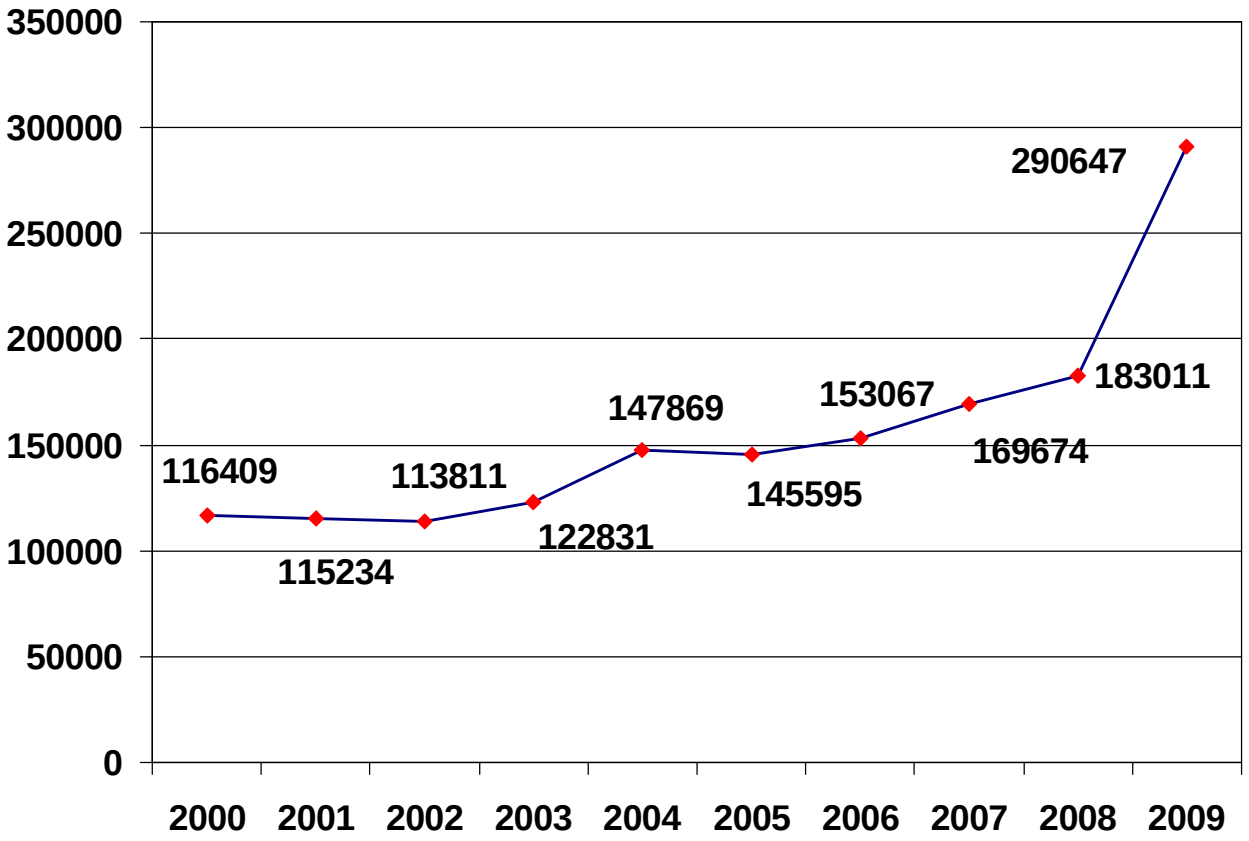
- Call for projects of incubation and seed capital of technological firms, 1999
  - ✓ 31 public innovative-type incubators created in each region; objective 865 creations in 3 years
  - ✓ 2003 evaluation : 964 projects had been coached; 29 incubators continuing, objective 776 creations more
  - ✓ 2006 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

Source: Ministère Enseignement Supérieur et Recherche juin 2007, Les incubateurs d'entreprises liés à la recherche publique, Etat de la situation et bilan au 31 décembre 2006

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 holyday
- 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

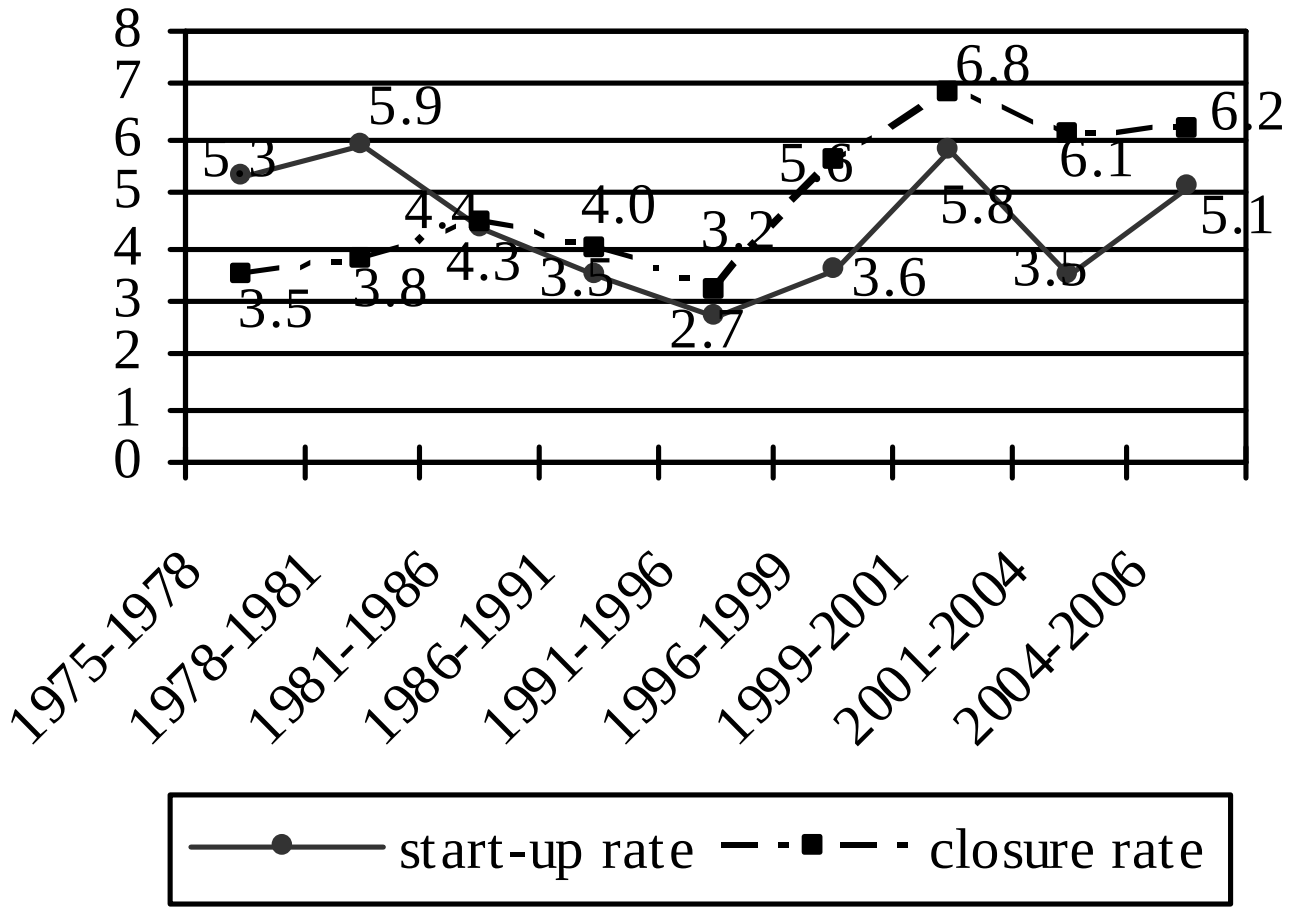


Source: APCE August 2009

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) $\Rightarrow$ 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



Source: White paper on SMES, 2008

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 for Facilitating the Creation of New Business: 1998
  - 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
  - Basic Law on Intellectual Property: 2002
  - 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)

conclusion

- 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