

**Location determinants in MNEs'  
international activities related to  
innovation:  
literature review and proposals for a  
working programme**

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# Why a literature review?

- Identify the major findings of the literature (academics+consultants+official reports)...
- ...As well as pending questions and/or methodological issues...
- ...In order to shed light on the future orientations of the WPGi's working programme

# Summary

- Why innovation-related activities internationalise?
- Location determinants for R&D, headquarters, high-tech industries
- Tools to analyse territorial attractiveness
- A critical view on the existing literature
- Proposals for a working programme

# Why R&D activities internationalise?

- Centrifugal forces gain momentum as against centripetal ones
- Three major driving internationalisation forces
- Complex and evolutive internationalisation patterns

# Global motives for R&D internationalisation

- A limited but growing trend (OECD, 2008, UNCTAD, 2005)
- Centripetal forces: national innovation system (Narula, 2002), need for coordination (Granstrand, 1999), transaction costs (Fish, 2003)
- Centrifugal forces: demand-driven, supply-driven (resources and costs) (Criscuolo, 2005)
- Enabling external factors (Cheng and Bolon, 1993)

# The relative importance of various motives

- Demand-driven motives have long been dominant (Kummerle, 1999; Vega, 1999)
- Supply-driven motives gain momentum (Ambos, 2005)
- The rising importance of cost-control (Armbrecht, 2003; Zhao, 2004)

# Complex and evolutive internationalization patterns

- Companies' strategies combine demand-driven and supply-driven motives (Ito and Wakasugi, 2007; Von Zedwitz and Gassmann, 2002)
- Creation of complex international R&D networks (Sachwald, 2008)
- A dynamic pattern: from adaptation to innovation? (Serapio and Dalton, 1999; Pearce, 1999)

# What are the main location determinants ?

- R&D
- Headquarters
- High-tech industries

# Location determinants for R&D activities

- Global analysis : role of proximity to market Shimizatuni and Todo, 2008), scientific infrastructure (Kumar, 2001), agglomeration effects (Defever, 2006), cost control (Ernst, 2003)
- Different location determinants depending on the type of R&D: adaptative, innovative, support (Sachwald and Chassagneux, 2007)
- Co-location effects: adaptation and support centres more prone to locate close to a production facility (Defever, 2006), innovation centres close to poles of scientific excellence.

# Location determinants for headquarters

- Various spatial levels of analysis : country-level (Hatemi-Py, 2008) vs city-level (Henderson and Ono, 2008)
- Role of agglomeration effects, specialized services suppliers, infrastructures (Strauss-Kahn and Vives, 2005) access to market and skilled labour, tax and legal issues, cultural proximity (Hatemi and Py, 2007)
- Analysis of trade-off between a location close to the main production facility and a location in a specialised metropolitan area (Davis and Henderson, 2004)

# Location determinants for high-tech industries

- The literature on the subject is unexpectedly scarce
- Two strands of literature: global approach (Goetz and Rupasingha, 2002) or focused on one specific industry (Le Gall on ITC in France, 2008)
- Insurprisingly, these activities are more sensitive to skills and scientific infrastructures than to labour costs (especially in pharmaceutical and biotech) – Serapio and Dalton, 1999; Abramowsky and al., 2007)
- Importance of market and agglomeration effects (Barrios and al., 2008)
- Differences in location behaviours depending in sub-sectors (Barry and Curran, 2004)

# Tools to analyse territorial attractiveness

- Attractiveness as a potential
- Attractiveness as a performance
- Attractiveness as a policy

# Attractiveness as a potential

- Definition: adaptation of the territory to the investors' needs and requests
- Global measures of attractiveness: WEF, IMD, AT Kearney, Ernst and Young...
- Global measures of innovation potential: WEF, OECD, UE, INSEAD...
- Some studies focus on attractiveness for innovation-related activities: KPMG, IBM/PLI, Ernst and Young

# Attractiveness as a performance

- Definition : amount of investment (or activities) attracted
- Data on investment projects: OCO, GILD, Ernst and Young, Thomson Financial..
- Data on FDI flows and stocks
- Data on the presence of foreign activities: AFA, FATS
- Few data on non-investment modalities
- A structural heterogeneity of sources

# Attractiveness as a policy

- Definition : implement measures aimed at improving the territorial attractiveness
- Diagnosis: the example of France (R&D, headquarters) : Marini, Huygue, Futuris, CAS reports
- Measures: many developed and emerging countries focus their attractiveness policies on innovation-related activities (Hatem, 2007)
- Impact: few and inconclusive studies on the matter (Appold, 2004)

# A critical view on the literature

- Concepts: « innovation », « investment », « foreign »
- Scope: geographical and industry levels of analysis
- Methods: each approach bears its advantages and shortcomings
- Data: some under-used sources of information

# Concepts

- Headquarters or decision-making process?
- Innovation in other fields than in high-tech
- Internationalisation modalities others than greenfield investment
- What about home-based companies?

# Focus

- How to integrate a non-OECD perspective?
- Studies at the country-level or at the local level?
- Feasibility of detailed industry-level studies on location determinants

# Methods

- Econometric and statistical analysis: scientific, but rigid, sometimes unfocused and/or opacious
- Surveys: flexible, but problems of scientific credibility
- Case-studies : interesting insights, but how to generalize the findings?
- Modelisation of the decision-making process

# Data

- Databases on investment projects: precise, up-to-date, but has the projects been really completed?
- AFA and FATS: high potential for econometric studies, but no data on non-OECD countries
- Private databases on location determinants: very useful sources of information, but costly
- Data on patents: an apparently good measure of innovation potential, but biased due to differences in patenting strategies

# Proposals for a working programme

- Priorities of the working programme
- Implementation issues and implications of the secretariat

# Proposals for the working programme

- Launch additional studies on **location determinants**, mainly in high-tech industries (survey among companies+ econometrics)
- Benchmark **attractiveness policies** of OECD (+ major non-OECD) countries (survey among governments + case studies on best practices)
- Collect systematic data on **attractiveness potential** (and performances) of OECD (and major non-OECD) countries. Build-up of an attractiveness scoreboard ??
- Improve the knowledge on **international investment market**: flows, investors, non-investment modalities

# Implementation issues

- Mobilisation of available resources
- Various options under consideration
- Planning and time schedule

# Mobilisation of available resources

- A two men-year programme
- Who does what inside of the WPGI ?
- Cooperation with other committees inside of OECD (investment, scientific and technological policies)
- Resources from the secretariat
- Cooperation with other institutions (Unctad, WEF? )

# Various options under consideration

- High option: two men-year; total completion of the programme
- Medium option: One man-year: see slide 22
- Low option : no additional resources: survey among governments+ one econometric study+ some comparative figures on attractiveness

# Planning and time schedule

- Report to be completed by the end of 2009
- Studies to be largely completed by summer 2009
- Terms of reference ready by the end of 2008
- What about the next steps of the project in 2010 and after?

- Thank you for your attention!!!