

## **Ph D scholarship**

### Title

Innovation and market selection: an evolutionary approach

### Supervisor

Jean-Luc Gaffard Professor of Economics, University of Nice Sophia Antipolis and CNRS-GREDEG, Head of the Department for Research on Innovation and Competition (OFCE Centre de Recherche en Economie de Sciences-Po)

### Research project

Aggregate productivity growth is the outcome of incumbent firms adopting new and superior techniques and (or) entering firms replacing exiting firms with better technologies. This research project will concern market selection mechanisms by characterising innovation as a process of selection (or acquisition) of more productive technologies within firms and a process of selection of firms itself. It will analyse both what happens inside the firms and what happens between firms on the market when firms are engaged in innovative or imitative processes.

The first part of the research will be devoted to making a survey of empirical and theoretical analyses of industrial dynamics, which should focus on the relation between innovation and competition. The second part of the research will build a theoretical model of industrial dynamics in order to analyse rivalry and competition among heterogeneous firms. It will determine the market conditions that allow firms to capture productivity gains from past investments. These market conditions are critical to characterising the dynamic equilibrium, similar to a so-called natural market structure. The third and last part will consist in developing an empirical analysis of the determinants of firms' entry and exit, using French census data. In its conclusion, this research will address critical issues concerning the objectives and channels of industrial policies defined as policies that support development of firms and innovation.

### Requirements

The successful candidate must be familiar with basic economic modelling and econometrics (master level). Knowledge of English is required. Proficiency in English and the willingness to learn French are appreciated.

### Conditions

This is a PhD public scholarship for three years, starting from September 2008 onwards, with an annual pay of 16,000 Euros before income tax. The candidate will be hosted at CNRS/GREDEG and OFCE/DRIC. GREDEG (CNRS and University of Nice Sophia Antipolis) is a research group in industrial economics. OFCE-DRIC ([www.ofce.sciences-po.fr/index-uk.htm](http://www.ofce.sciences-po.fr/index-uk.htm)) is a department of the research centre in economics of Sciences-Po Paris, a leading French higher education institution. The Department for Research on Innovation and Competition (OFCE-DRIC), in association with the GREDEG, studies a broad set of topics related to structural change, innovation and trade. It has a strong emphasis on empirical approaches: (i) for the analysis of economic performances of firms and countries engaged in innovation processes or concerned with the entry in new markets; (ii) for the evaluation of public policies (competition and regulation policies, but also fiscal and

banking ones). Its researchers combine a good grasp of economic theory with various econometric methods applied to firm and plant level datasets.

Location

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Application

Applications will be received no later than June 30 2008. A master degree is required. To apply send a hard-copy of a cover letter, a full CV, a letter of recommendation, and a scholarly work or a research paper to:

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