

## Post-doctoral fellowship (12 months)

**Topic:** Product Innovations, environmental claims and French firms competitiveness

### Background and objectives

The increasing competition in markets and consumers' higher requirements as far as food is concerned reinforce the need to deeply examine firms' strategies and their products' offer. To improve their sustainability, food firms must be able to innovate and improve the quality of their products while restraining their costs. This post-doc project focuses on French firms' performance both on international and domestic markets by taking into account the diversity of innovation types, market segmentation and product claims.

The empirical literature linking innovation and firm performance is widely developed in industrial economics and more recently in international economics (Aghion et al. 2019). In the trade literature, firm performance is measured with the productivity. If this productivity is above a given threshold, then the firm can access to foreign markets... Only the most productive firms are able to bear the costs of entry on these markets (Mayer and Ottaviano, 2007). The access to foreign markets is described both with the extensive (the probability to access to markets) and the intensive margins (exported value, exported quantities, number of destination markets). In some paper, innovation is a determinant of exports (Van Beveren and Vandenbussche, 2009; Damijan et al., 2010). However, debates remain about the effect of competitive pressure on innovation strategies either on foreign markets or on the domestic one that copes with foreign competition.

The post-doc aims at characterizing product innovation (as seen by consumers) which is offered by French dairy companies. Two questions will be studied

- How claims on innovation help firms to differentiate themselves from their rivals by taking into account the market structure of the domestic market?

First, the objective is to characterize product innovations on the French dairy market by distinguishing the innovations offered by French companies from those from their rivals. Then, based on this characterization, the objective will be to show how a specific claim (e.g. environmental) of product innovations can change the behavior of French firms when foreign competition is high.

- The export strategy of French dairy firms once they innovate using specific claims

We would like to study whether a specific claim of product innovations can be a determinant of competitiveness of French dairy firms (productivity, extensive and intensive margins).

## **Data**

The empirical study will be based on econometric analyses using French datasets. The database gathers several datasets the SMART-LERECO research unit already uses.

- INSEE database about detailed firm characteristics (FARE),
- PRODCOM database which describes the French firms' production,
- CIS database about product and process innovations and,
- French customs database (value and quantity by firm-product-country).

The last database is the MINTEL GNPD database which gives information on innovating products: for each product on a market, information on the innovation type (new product, new packaging, new variety, new formulation, re-launch), the product claim (high quality, environment, health, convenience, ...), the selling strategy (big retailers, specialised shops, ...) is provided. This database allows us to determine the product innovation intensity on a market and its diffusion on different destinations (domestic and foreign markets).

## **Location:**

The post-doc is located at Nantes. It will start on January 1st and end on December 31, 2021. The supervisors are Sabine Duvaleix and Karine Latouche.

## **Skills:**

The candidate should have strong skills in trade economics and in econometrics. Skills in industrial organisation will be appreciated.

## **Contacts:**

Interested candidates should send their application to [karine.latouche@inrae.fr](mailto:karine.latouche@inrae.fr) and [sabine.duvaleix@agrocampus-ouest.fr](mailto:sabine.duvaleix@agrocampus-ouest.fr). The deadline for applications is October 15th, 2020. Please include a cover letter, a CV, a copy of the PhD diploma, the PhD dissertation, and published articles if available.