PUBLIC SELECTION BASED ON QUALIFICATIONS AND INTERVIEW FOR THE AWARDING OF NO. 1 GRANT LASTING 12 MONTHS FOR CONDUCTING RESEARCH IN ACCORDANCE WITH ART. 22 OF LAW OF 30.12.2010 NO. 240 AT THE DEPARTMENT OF MANAGEMENT, ECONOMICS AND QUANTITATIVE METHODS OF THE UNIVERSITY OF BERGAMO (ACADEMIC RECRUITMENT FIELD 13/A4 – APPLIED ECONOMICS - ACADEMIC DISCIPLINE SECS-P/06 – APPLIED ECONOMICS, AS PART OF THE PLAN FOR EXTRAORDINARY RESEARCH CALLED ITALY® (TALENTED YOUNG ITALIAN ®ESEARCHERS) - YOUTH IN RESEARCH INITIATIVE FOR THE YEAR 2016 - TRANCHE II – TYPE D – CUP: F12I14000230008

announced with decree of the Rector Rep. no. 626/2017 of 07.11.2017 and posted on the official registry of the University on 07.11.2017

## **RESEARCH PROJECT**

## TITLE: "Creativity and Failure: how firms learn from abandoning or failing innovative projects"

The goal of the project is to assess whether the failures in innovation projects at the firm level help to strengthen firms' innovative capacity and even sometimes make more radical their innovativeness, or if they run out firms' efforts and resources devoted to innovation within entreprises failure in innovation projects. Starting from the seminal work of Cyert and March (1963), the theoretical and empirical contributions agree that the learning patterns of enterprises are key to explain their innovation capacity. Learning is the main tool to redefine existing processes, to broaden their knowledge and skills and to modify and restructure the company's routines.

Since the innovation activities is inherently uncertain and risky, it sometimes results in failure. The literature initially pointed out that in case of failure, the only goal that businesses pursue is survival. The failure is therefore seen only as extremely negative experience.

However, the role of failure in organizational learning has been highlighted as an important element to engender creative answers (Coe and Barnhill, 1967) and therefore failure can result in a learning process that may take firms towards more radical innovativeness, provided that firms try to understand the reasons of their failures (Haunschild & Sullivan, 2002; Dorfler & Baumann, 2014; Madsen & Desai, 2010; Leoncini, 2016).

The failures show in fact where and how firms have not been able to cope with the technological and economic challenges of the market, generating new knowledge about the opportunities and possibilities previously unexploited. In fact, if firms are conceived as a "learning organization", their learning models are certainly more stressed if put under pressure by negative results. While enterprises persist in their organizational routines and knowledge if they are successful, on the other hand they are stimulated to change if their routines are not able to produce positive results. In this perspective, the only case in which the organizational routines (especially innovative ones) are thoroughly investigated is when they cannot systematically produce satisfactory performance. Therefore, the failures seem to be relevant in guiding the innovative activities, since they operate in a complementary and synergistic way to build skills and knowledge able to face successfully the market.

This project aims to provide new empirical evidence on two European countries, Italy and the Netherlands, which are characterized by a significant difference in their industrial structure, as well as in their sectoral specificities. The Netherlands is in fact characterized by a greater number of large companies (multinationals or not) primarily active in high-tech sectors, while micro-firms, active mostly in traditional and low-tech sectors, do not play such a vital role as in the Italian production system. Comparing various "models" national industrialization, based on homogeneous data and methods, is a valid mode to start thinking about the strengths and weaknesses of firms' innovation management methods and on the structural and contextual factors that can affect the efficiency of different types of innovation policies and supports by the various public institutions.

For both Countries we will use longitudinal data bases constituted by the merge of multiple CIS (Community Innovation Survey) waves, combined with demographic data obtained through the union of CIS data with the data of the National Business Registers made available by the respective National Statistical Offices.

Stages and times (T0 = Starting month; T12 = Ending month)

T0 - T1: bibliographic review and positioning of relevant research questions within the literature

T2 - T4: Preparation of databases for Italy and the Netherlands

T5: Identification and development of the theoretical model of analysis

T5 - T10: Identification of statistical and econometric methods and data processing

T11 - T12: Elaborations of the results and the implications for management and economic policy

T5 - T12: Dissemination and discussion of the results in the international context: from the fifth month to the end.

The expected results are of great theoretical and empirical relevance because they take into account extensive representative samples of two European countries with highly differentiated industrialization models. The data come from the CIS that is an investigation initiated and coordinated by Eurostat, every two years, whose purpose is to systematically collect information on innovative activities of European firms.

The proposer of this research could have access to the databases for Italy at the Regional Office of Istat in Milan, and has an actual access to the databases for the Netherlands through remote access from her University office to the Centraal Bureau voor de Statistiek - CBS of the Netherlands.

The research project fallout on knowledge on these issues will be significant. As highlighted in the project description, the current literature lacks empirical research so far-reaching both for Italy and for other European countries and not. The research results are of great importance for the possible applications ranging i) from the identification of critical areas in the innovation process, on which firms should focus their efforts and their ability to learn in order to improve their innovation performance and decreasing the likelihood of dropping or failing an innovation project; ii) to conducting internal or external strategies to benefit from failure rather than seeing it as a negative stigma. It will be possible to provide some guidelines in order to address the main obstacles that can slow down or completely stop the innovative activities, thus affecting productivity, profitability and firms survival. The research could also provide industrial policy implications, such as alternative forms of support to innovation, in order to improve the innovative capacity of firms. The research results, in the form of papers (in English) to be submitted for publication in international refereed journals, will be presented in various workshops and international conferences. The proponent is part of an international research network that ensures checks and comparisons as part of a qualified scientific environment.