ANNEX A

PUBLIC SELECTION BASED ON QUALIFICATIONS AND INTERVIEW FOR THE AWARDING OF NO. 1 GRANTS 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 THE UNIVERSITY OF BERGAMO (ACADEMIC RECRUITMENT FIELD 13/B4 – FINANCIAL MARKETS, FINANCIAL INSTITUTIONS, AND CORPORATE FINANCE – ACADEMIC DISCIPLINE SECS-P/11 – FINANCIAL MARKETS AND INSTITUTIONS AS PART OF THE PLAN FOR EXTRAORDINARY RESEARCH CALLED ITALY® (TALENTED YOUNG ITALIAN ®ESEARCHERS) - YOUTH IN RESEARCH INITIATIVE FOR THE YEAR 2016 – TYPE D – CUP: F12I14000230008

announced with decree of the Rector Rep. no. 662/2016 of 20.12.2016 and posted on the official registry of the University on 20.12.2016

RESEARCH PROJECT

"Credit process quality and Non Performing loans for the Italian banks"

Project description

Credit risk and non performing loans (NPLs) play a pivotal role and represent crucial elements both for the macroprudential assessment (Jakubík and Reininger, 2013) and for the financial stability (Gonzáles-Hermosillo, 1999).

The lively debate on credit risk dynamics, emphasised by the academic literature, focuses, on one hand, on the implementation of systems of monitoring and alert able to anticipate possible distress situations and, on the other, on the study of the underlying business cycle components of the nonperforming loans (henceforth NPL). Among the macroeconomic variables, which influence the NPLs, the academic literature provides a substantial number of contributions for so-called bank specific variables. However, a gap among the latter seems to be regarding the credit process quality and its related monitoring activity.

This research is aimed at filling this gap in two ways: 1) develop an empirical measure of the quality of the credit process; 2) identify a threshold level of NPLs stock which, if exceeded, leads to a loss of credibility in the quality of the credit process.

Regarding the first point, an in depth analysis will be conducted in order to investigate the market of NPLs – across countries – and to assess obstacles to NPLs resolution. On the second point, the study will focus on the impact to the credit process through the implementation of the econometric technique, so-called "threshold effect" (Chan, 1993; Hansen, 1999), which allows the estimation (endogenously) of a threshold variable level – w.r.t. the NPLs – and its relationship with other explanatory variables, among others, the efficiency score related to the bank quality process of credit. The efficiency score will be obtained through the adoption of the non-parametric methodology Data Envelopment Analysis (DEA), identifying, as input and output variables, the following ratios: a) migration from performing loans to nonperforming loans status; b) degree of "seniority" in past-due loans; c) lack of collateral in granted loans; d) writebacks customers over credit risk adjustments; e) ratio between exposures without rating and total exposures; f) a proxy of loan pricing.

The threshold variable is captured from the nonperforming loans ratio (i.e., the ratio between gross nonperforming loans and gross outstanding loans) in each bank and lagged one period backwards at time t-1. The inclusion of lag of the NPLs ratio in the model, compared with the quality of the credit process – lagged on one, two and three periods backwards respectively, is crucial.

In particular, the reason relies on the explanatory capacity of the quality of the credit process to occur – with some delay – to the quality of the loans portfolio of each bank. Therefore, the effectiveness of the monitoring activities is necessary to the strengthening of credit quality.

The empirical analysis will be carried out through a static and balanced panel data model. The sample vill be composed of Italian banks, split up into: commercial banks (S.p.A.), cooperative banks (Popolari) and mutual banks (Banche di Credito Cooperativo) and extrapolated from the ABI BANKING data. The time period will cover nine years, from 2006 to 2014.

The research objectives will be achieved in approximately 12 months and, in particular, via the following actions: a) 3 months for the review of academic literature; b) 3 months for collecting data and modelling the empirical model; c) 6 months for presentation and discussion of the project results in the academic community (e.g. conference presentations, brief and major papers in academic journals).

Description of the major expected results:

The international comparison of the nonperforming loans should stress, on one hand, new best practices – among banks – which comply to make themselves more effective and credible and, on the other, encourage the introduction of new specific tools to overcome obstacles to NPLs solutions. Moreover, the credit process appears important for at least two reasons. The first, merely theoretical and anchored to the bank skills, relies on the delegated and costly monitoring activity assigned to banks (Diamond, 1984; Fama, 1985). The second, more pragmatic, relates to the fact that both the quality of the screening and credit control appear less pregnant during the recent financial crisis (Keys et al., 2013). Viceversa, a strong and meticulous credit control plays a crucial role in achieving a sound and efficient banking management. In fact, if the nonperforming loans can be generated by different factors or combinations of factors, the poor quality of monitoring activities can considerably affect their growth.

The expected relationship between NPLs ratio and the quality of the credit process is negative. An increase in the quality of monitoring activity has a positive impact on NPLs ratio. However, when the NPLs ratio exceeds a certain threshold level, the bank management will dilute this level by making additional loans (i.e. a higher loan growth ratio) although new borrowers lack of an acceptable credit standing. In this way, it is expected that the credit process and the relative monitoring get worse. For these reasons, it might be noted a positive sign between the quality of the credit process and the NPLs ratio, recently increased beyond a certain threshold. The identification of a threshold level has an immediate effectiveness in terms of activation of the control activities of the Supervisory Authority. In addition, it could also have an effect in the medium term, since it could encourage a best practice among banks.