

## 12. HOW OUTPUT DIVERSIFICATION AFFECTS BANK EFFICIENCY AND RISK: AN INTRA-EU COMPARISON STUDY

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### ABSTRACT

This paper examines how banks have been diversifying away from traditional financial intermediation activity into noninterest income business and how this shift has affected their efficiency and risk-taking behaviour. To this end, we construct a global best-practice efficiency frontier following the Stochastic Frontier Approach and relying on the technique of Battese and Coelli (1995), which permits the estimation of the frontier and of the coefficients of efficiency variables in a single-stage. We opt for an application of this model to the EU-27 countries performing an intra-Union comparison between the old and the new EU members that provides us with substantial information concerning the level of harmonization of the European banking systems. Results indicate that the diversification of bank output enlarges efficiency margins in both cost and profit terms without altering the way banks treat risk. Also, environment identically affects the performance of European banks. By and large, both old and new EU member states follow similar behavioural patterns that are not influenced by product diversification, which reveals a rather harmonized European banking market.

### 12.1. INTRODUCTION

Over the past couple of decades or more, the extensive regulatory changes and the technological advances have transformed financial systems to a great extent. Banks have reacted to the challenges posed by the new operating environment by creating new products and services and expanding the already existing ones, which allowed them to diversify the product mix of their portfolio. The traditional business of taking deposits from households and making loans to agents that require capital has thus declined in favour of a considerable growth in activities that generate noninterest (fee) income and are not necessarily reported on

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