

# What types of innovation contribute to performance in financial services?

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## Literature review (1/3)

- Innovation refers to "the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations" (OECD, 2005, p. 46)
- This definition suggests the delineation among product (good and service), process, marketing, and organisational innovations
- Innovation in financial services is attributed with specific features such as presence of regulation, problems with appropriability, propensity to cooperation, and incremental nature of innovation (Mention and Torkkeli, 2012)

## Literature review (2/3)

- Effects of innovation on the performance of financial services firms were addressed in several empirical studies
- Tufano (1989) provides an evidence of a positive impact of financial innovation on their developers in terms of a market share
- Those financial institutions that are more active, consistent, and diversified in innovation activity show superior financial performance (Roberts and Amit, 2003)
- First movers in product innovation benefit from improvement of profitability, while the ones in process innovation gain from positive profitability and efficiency effects (Abir and Chokri, 2010)
- Propensity to financial innovation is correlated to a decline in the cost-to-income ratio of innovators (Rossignoli and Arnaboldi, 2009)
- An introduction of technology-enabled innovation results in a better profitability (Ciciretti et al., 2009)
- There seems to be an inverted U-shaped relationship between the degree of innovation novelty and financial performance (Avlonitis et al., 2001)

## Literature review (3/3)

- Our understanding of the effects of financial innovation on performance would not be thorough without accounting for the types of innovation
- To some extent, this has been tackled in the preceding studies (e.g. Abir and Chokri, 2010); however, the entire picture remains incomplete
- The role of organisational and marketing innovation in the performance of financial institutions represents a particular research interest
- Furthermore, until nowadays, none of the existing studies addressed this issue from a multiple cross-country perspective in a context of significant economic shock

## The research question

- This study aims at exploring the role of various types of innovation in the performance of financial services firms.
- Specifically, this paper answers the following research question:
- What types of innovation are associated with superior performance of financial services firms in the context of financial crisis?

## Research Context and Design

#### Sample

 26 countries (EU Member States, EU Candidate Countries, and Norway), Cross-country analysis

#### **Datasets**

- EU Community Innovation Survey (Eurostat)
- Annual National Accounts (Eurostat)

#### **Sector**

 Financial service activities, except insurance and pension funding (NACE K64; Rev. 2)

## Time frame

- Years 2006-2008
- Years 2009-2010 to account for a possible time lag of the impact

#### Method

Bivariate correlation analysis

# Results (1/2)

Variables		Net operating surplus and net mixed income, Ratio (average 2010-2009 to average 2006-2008)	Gross value added (at basic prices) - Millions of national currency, chainlinked volumes, reference year 2005 (including 'euro fixed' series for euro area countries) - Ratio
Technological innovation only (product,	Pearson Correlation	0.123	0.322
process, on-going or abandoned)	Sig. (2-tailed)	0.637	0.193
Non-technological innovation only	Pearson Correlation	0.536*	0.071
(organisational and/or marketing innovation)	Sig. (2-tailed)	0.027	0.780
Enterprises that developed service	Pearson Correlation	-0.285	0.000
innovation	Sig. (2-tailed)	0.238	0.999
Enterprises that developed process	Pearson Correlation	0.328	0.045
innovation by improving methods of manufacturing or producing	Sig. (2-tailed)	0.252	0.868
Enterprises that developed process	Pearson Correlation	-0.043	0.001
innovation by supporting activities for processes	Sig. (2-tailed)	0.864	0.996
Enterprises that developed process	Pearson Correlation	0.253	0.223
innovation by improving logistics, delivery or distribution methods (Lg10)	Sig. (2-tailed)	0.295	0.345
Enterprises that introduced organisational	Pearson Correlation	0.212	-0.240
innovation (Lg10)	Sig. (2-tailed)	0.383	0.308

## Results (2/2)

Variables		Net operating surplus and net mixed income, Ratio (average 2010-2009 to average 2006-	Gross value added (at basic prices) - Millions of national currency, chain- linked volumes, reference year 2005 (including 'euro fixed' series for euro area countries) - Ratio
Enterprises that introduced new business	Pearson Correlation	-0.242	-0.351
practices for organising procedures	Sig. (2-tailed)	0.367	0.183
Enterprises that introduced new methods	Pearson Correlation	0.130	0.594**
of organising work responsibilities and decision making	Sig. (2-tailed)	0.608	0.007
Enterprises that introduced new methods of	Pearson Correlation	0.419	0.241
organising external relations	Sig. (2-tailed)	0.083	0.319
Enterprises that introduced marketing	Pearson Correlation	-0.028	-0.316
innovation	Sig. (2-tailed)	0.910	0.174
Enterprises that introduced significant	Pearson Correlation	0.115	-0.096
changes to the aesthetic design or packaging	Sig. (2-tailed)	0.651	0.697
Enterprises that introduced new media or	Pearson Correlation	0.138	0.594**
techniques for product promotion	Sig. (2-tailed)	0.586	0.007
Enterprises that introduced new methods for	Pearson Correlation	0.125	0.302
product placement	Sig. (2-tailed)	0.621	0.208
Enterprises that introduced new methods of	Pearson Correlation	-0.090	-0.284
pricing goods or services	Sig. (2-tailed)	0.730	0.238

## **Main findings**

- Those financial services sectors characterised with a higher share of non-technological innovation (organisational and/or marketing innovation) over the period of 2006-2008 benefited from the increase in the net operating surplus and net mixed income indicator in 2009-2010
- Those financial services sectors attributed with a higher involvement to the introduction of new methods of organising work responsibilities and decision making showed better performance in terms of gross value added two years afterwards (2009-2010)
- Those financial services sectors where incumbent firms were characterised with a higher involvement to introduction of new media or techniques for product promotion benefited from an increase in the gross value added indicator in 2009-2010

### **Conclusions**

- This study contributes to the domain of literature devoted to the understanding of the impacts of innovation activity on performance of financial services firms (Abir and Chokri, 2010; Ciciretti et al., 2009; De Young et al., 2007)
- Results of this study echo preceding research enquires in the aspect that higher rates of innovation activity may lead to higher financial performance (Roberts and Amit, 2003)
- Until nowadays, the composition of dependent and independent variables used in this study has not been tackled in the extant literature
- Implications of this study will be of interest mainly to policy makers. They may benefit by improving their understanding of the factors that make financial sector resilient amid a financial crisis
- Further studies in other national and regional contexts could advance our understanding of the phenomenon

## Thank you for your attention!

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