

INNOVATION AND EXPORT PERFORMANCE: EVIDENCE FROM LUBLIN VOIVODESHIP

Aneta Karasek

Maria Curie-Skłodowska University, Poland

aneta.karasek@umcs.pl

Abstract:

Innovation has long been considered an important factor for creating and maintaining the competitiveness of nations and firms. In this paper we examine whether innovation performed by small and medium-size enterprises (SMEs) from Lublin Voivodeship enhances their exporting potential. This study is based on an analysis of research done among 1,680 companies from Lublin Voivodeship. Regarding exporting activities, the Lublin region occupies the 14th position out of the total of 16 provinces. At the same time, as regards the level of innovativeness, Lublin Voivodeship was classified as a low-innovator in the latest European Regional Innovation Scoreboard (RSI). Such a low position of the province in both rankings illustrates the influence of the innovation level on the level of exports. In the opinion of the respondents, the low innovation level of the products offered by their companies does affect the development of the company's exports and determines undertaking exporting activities. The research suggests that low innovation level occurring in a company is important for the development of the company's exports and has become the reason for its decision not to become involved in exporting activities.

Keywords: *innovation, export, SMSs.*

The article was financed by Ministry of Science and Higher Education in Poland (National Science Center) Grant NN 115419840.

1. INTRODUCTION

Innovation has long been considered an important factor for creating and maintaining the competitiveness of nations and firms. The relationship between innovation and exporting has been investigated in many countries. However, there is a paucity of research in Poland with respect to this issue.

In literature it has been argued that the rate of innovation generated by a firm is positively correlated with its export success because of a technology lead of the innovating firm (Posner, 1961; Vernon, 1966). Strong competition on the market makes contemporary export increasingly innovative. Innovation becomes “the added value” of an export product. Export helps to reduce manufacturing costs, due to the possibility of acquiring extended market for the products manufactured by a particular enterprise.

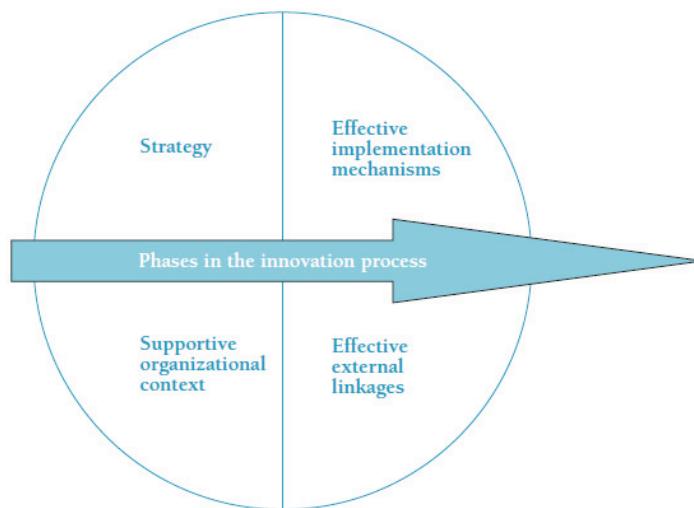
At present innovations are one of the key factors for the competitiveness of enterprises. Their vital role was also noted by M. Porter, who claims that companies reach a competitive advantage as a result of innovative procedures (Porter, 2001).

Innovation has been regarded for a long time as having key significance for economic growth, as well as for the development and welfare of communities. More and more commonly, innovation is perceived as a tool necessary to gain competitive advantage and one of the safest methods to defend one's strategic position. While the competitive advantage still results from the amount or possession of particular assets, it becomes increasingly popular to believe that the best situated companies are those which are able to focus on knowledge, technology and experience, and to offer novelties (products and services) or innovative methods of producing them, and which manage to reach their clients with their offers (Tidd & Bessant, 2009, pp. 24–25).

It has been also argued that innovation management is not a matter of doing one or two things well, but of good all-round performance. There are no single, simple magic bullets but a set of learned behaviours. In particular, we have identified four clusters of behavior which we feel represent particularly important routines (see Picture 1) (Tidd, Bessant & Pavitt, 2005):

- Successful innovation is strategy-based.
- Successful innovation depends on effective internal and external linkages.
- Successful innovation requires enabling mechanisms for making change happen.
- Successful innovation only happens within a supporting organizational context.

Picture 1: Clusters of behaviour which represent particularly important routines



Source: Managing Innovation, Integrating Technological, Market and Organizational Change, Third Edition, Joe Tidd, Science and Technology Policy Research (SPRU), University of Sussex, John Bessant, School of Management, Cranfield University, Keith Pavitt, John Wiley&Sons Ltd, 2005, p. 560.

FDI inflows generate positive spillovers from multinational companies to domestic firms (bringing new knowledge from abroad) through such channels as: the adoption of new methods of production and/or management or human capital transfer (Görg & Greenaway, 2004).

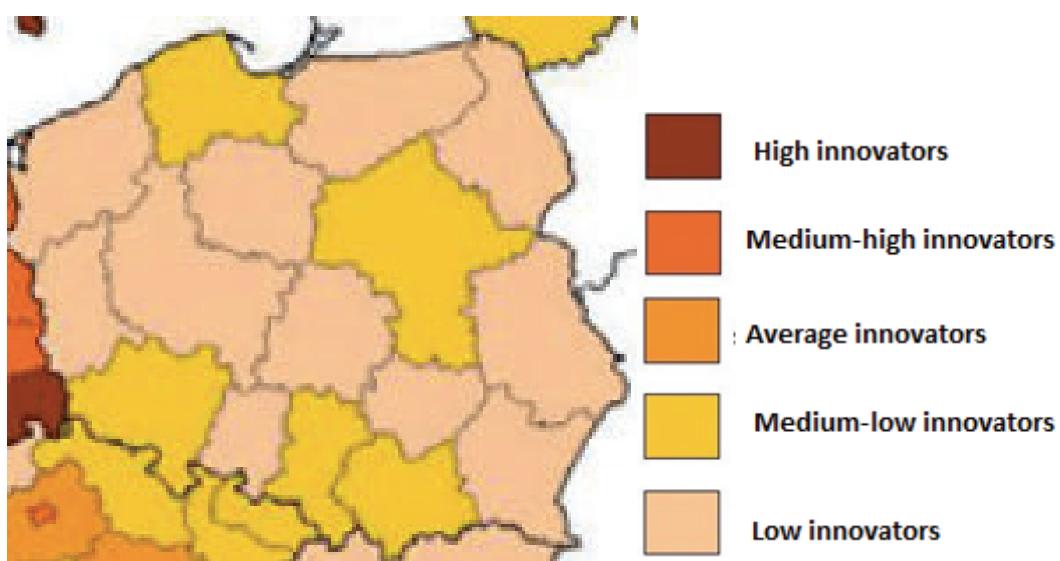
FDI inflows create also some additional competition for domestic firms, enhancing their innovation (a similar effect as in case of imports) and exposure to the leading firms.

The policy of innovation is developed and implemented on the regional level. The study entitled European Regional Innovation Scoreboard (RSI)¹ presents the results of innovation levels in particular regions in 2009. The idea of synthetic assessment of innovation in the regions, as well as of their ranking, was based on a set of 16 indexes from the available regional data. The indexes were grouped into input factors, companies' activity and output factors. On this basis the Regional Innovation Index (RII) was established. The obtained result makes it possible to qualify a particular region as belonging to one of five groups: high innovators, medium-high innovators, average innovators, medium-low innovators and low innovators.

In the latest innovation scoreboard (RIS) published in December 2009, the group of medium-low innovators included Pomorskie, Mazowieckie, Małopolskie, Śląskie and Dolnośląskie Voivodeships. The remaining regions were qualified as low innovators, which is presented on Map 1.

¹ The comparison was prepared by the Institute for the Protection and Security of the Citizen (IPSC), along with the Directorate General for Enterprise and Industry the University of Maastricht (MERIT).

Map 1: Polish regions in the Regional Innovation Scoreboard (RIS) 2009



Source: Regional Innovation Scoreboard (RIS) 2009, p. 3.

Lubelskie Voivodeship was classified as a low-innovator in the latest European Regional Innovation Scoreboard (RSI) but in Scoreboard in 2004 was classified as medium-low innovator.²

Regional development in Poland is varied and the level of GDP in all voivodeships is lower than the EU average. The level of GDP per capita (PPS) in Lubelskie voivodeship in 2008 in relation to the EU average was 39³ and was the lowest in Poland.

After a period of recession in the export of goods, which lasted from November 2008 until the end of 2009 (EUR 98.3 billion), the following years brought its systematic reconstruction. Polish export in 2010 was EUR 120,373.1 m and was addressed primarily to the markets of the developing countries, including the EU countries in particular, which made more than 79 % of the total export⁴ out of 16 regions.

As regards the volume of it export, Lublin Voivodeship is on the 14th position out of the total of 16 regions. Such a low level of exports suggests a necessity for a discussion which would explain the reasons for this situation. The author will focus her attention on assessing the innovation level of the companies involved in export from the area of the Lublin Region, as well as the issues concerning the implementation of innovation.

There are compelling reasons to expect a positive interdependence between exports and innovation. We proceed by first discussing how engagement in one growth strategy reinforces the benefits achievable through the other, and then highlighting how the adoption of a strategic activity can make the adoption of the other less costly (Golovko & Valentini, 2011).

² The comparison was prepared by the Institute for the Protection and Security of the Citizen (IPSC) in cooperation with the Directorate General for Enterprise and Industry and the University of Maastricht (MERIT).

³ Based on the data provided by Eurostat.

⁴ Based on the data provided by GUS (Central Statistical Office of Poland).

2. METHODOLOGY

The aim of the study was to assess the innovation and the entrepreneurs' opinion regarding its (positive or negative) effect on their exporting activities.

The data were collected in the systemic project: "The analysis of export potential of the region - the study of external markets in the context of socio-economic situation of the Lublin Voivodeship" cofinanced by the Human Capital Operational Programme, Priority VIII Regional human resources for the economy, Measure 8.1 Development a workforce and enterprises in the region, Sub-measure 8.1.4 Predicting economic change – systemic projects.

The study involved 21.9 % of businesses, i.e. 1,560 out of 7,128 firms which were in the initial sample group for participation in the study. After the control of questionnaire works and the logic control of the set, 1,411 interviews were left: 761 with exporting companies, 540 with companies classified as potential exporters and 100 defined as not interested in running export activities. Due to the necessity to complete the sub-sample of potential exporters, at the second stage of the study 269 more interviews were acquired. As a result, the basis including 1,680 items was created: 761 exporters, 809 potential exporters and 110 companies defined as not interested in running export activities. The research was performed from April to June (the first stage) and in December 2011 (complementary studies)⁵.

3. RESULTS

The results of the present study suggest that the exporting companies in Lublin Voivodeship are situated mainly in the urban areas, with 25 % localized in the capital city of the Voivodeship, Lublin. The primary reason for the enterprises running their business activities in the Lublin region to initiate exporting was to acquire new markets, which should in a short or longer time span result in maximizing their profits. The vast majority of the studied firms, both exporters and non-exporters, has been running their activities for at least six years. Nearly 20 % of small enterprises (employing 10 to 49 people) increased the employment after initiating their exporting activities by enough staff to become medium-size companies (with 50 to 249 employees). Among the companies active in the service sector the largest number of exporters is involved in wholesale (17.5 %), land transport (9.9 %), retail sales (excluding cars) (7.5 %). The most numerous group of exporters among manufacturing companies offers products such as groceries, beverages and tobacco (7.2 %), farming, hunting, forestry and fishing products (6.2 %), textiles, clothes and leather accessories (4.9 %), metals and metal products, excluding machines and equipment, (4.9 %). It should be noted, however, that the percentage values reflect the number of entities, but not the volume of their export⁶.

Among the studied enterprises 43.86 % stated that low innovation characterizing their products was one of the agents significant for the development of export in their companies.

⁵ The study based on a working report, part II, "The conditionings for export activities run by companies from Lublin Voivodeship in the light of field investigation" making an element of the project entitled "Studies and analyses of the demand for work places in the context of supporting the exporting potential of Lublin Region", p. 28.

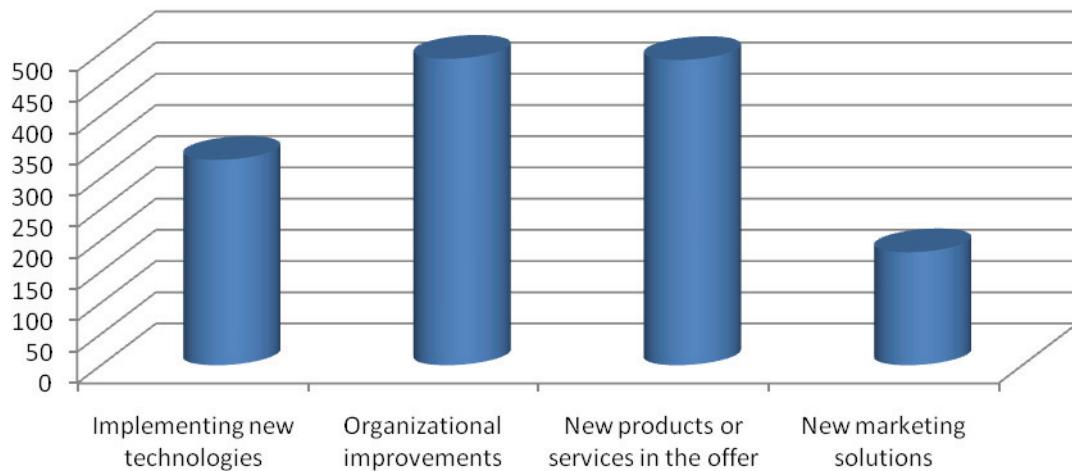
⁶ The study based on a working report, part II, "The conditionings for export activities run by companies from Lublin Voivodeship in the light of field investigation" making an element of the project entitled "Studies and analyses of the demand for work places in the context of supporting the exporting potential of Lublin" ordered by the Marshal's Office of Lublin Voivodeship, Ernst & Young Business Advisory consortium and PBS DGA, p.11.

On the other hand, 55.29 % of the companies in question declared that low innovation level was the factor which was decisive for their abstaining from export activities. Only 13 firms admitted that the most vital activities undertaken by them in order to improve the competitiveness of their exporting offer included the innovative character of their products.

Innovations make one of the key factors of company's competitiveness. According to Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data, 3rd edition, we can distinguish four types of innovation which include implementing new technologies, introducing organizational improvements, adding new products or services to the offer and marketing enhancement.

Since 2008 the 1,680 companies comprised by the present study have implemented 1,490 innovations. The latter were classified into 4 main types of innovation and their number is presented in Picture 2.

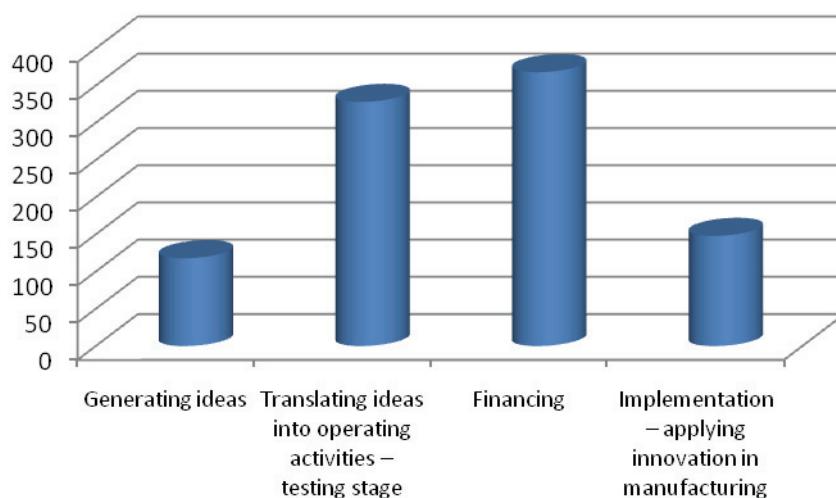
Picture 2: Main types of innovations implemented by the enterprises



Surveyed enterprises mostly introduced organizational improvements and adding new products or services. The alarming fact is that 36.9 % of the analyzed enterprises have not implemented any innovation since 2008, while only 342 companies are planning to implement innovations during the next 3 years.

The enterprises that have implemented innovations point to the problems that occurred during the implementation process and concerned mainly the stages of testing and financing the project, which is presented in Picture 3.

Picture 3: Areas posing the most serious problems in the process of innovation



4. SUMMARY

Innovations make one of the key factors of company's competitiveness. Developing key competences begins 5–10 years in advance in relation to the current products and technologies. It should be noted that the foundation for creating key competences of an enterprise is its innovativeness.

The research suggests that low innovation level occurring in a company is important for the development of the company's exports and has become the reason for its decision not to become involved in exporting activities. Since 2008, 36.9 % of the studied enterprises have not implemented any innovation. Despite low innovativeness of their products, only 342 companies are planning to implement innovations in the coming 3 years. Companies should implement innovation if they want to become exporter. Exporters can learn about new technologies or products through their interaction with more knowledgeable foreign buyers.

Summing up, it may be concluded that innovations affect the level of exports since they are responsible for enhanced competitiveness of the company's functioning, its higher productivity, performance and quality of work, improved quality and competitiveness of products, better general efficiency and effectiveness of actions, refined organization and methods of work, removing barriers and activating the resources. There is positive relationship between innovation and competition. Competition is seen as a main driver of innovation and as a consequence as one of the most important factors explaining differences in innovation performance of regions. Competition fosters the efficient use of resources, and also acts as an incentive for firms to innovate, explore and establish new market niches in order to be different from competitors.

REFERENCE LIST

1. Almeida, R., & Fernandes, A. M. (2008). Openness and Technological Innovations in Developing Countries: Evidence from Firm-Level Surveys. *Journal of Development Studies*, 44(5), 701–727.

2. Golovko, E., & Valentini, G. (2011). Exploring the complementarity between innovation and export for SMEs' growth. *Journal of International Business Studies*, 42, pp. 362–380 & Academy of International Business, pp. 365–366.
3. Görg, H. & Greenaway, D. (2004). Much Ado About Nothing? Do Domestic Firms Real Benefit from Foreign Direct Investment? *World Bank Economic Observer*, 19(2), 171–97.
4. Hollanders, H., Tarantola, S., & Loschky A. (2009). *Regional Innovation Scoreboard (RIS)*.
5. McClatchy, G. M. (2010). *Export innovation called competitive key*.
6. Parteka, A., & Wolszczak-Derlacz, J. (2011). Market Size, Competitiveness and Technological Frontier, the Impact of Trade Integration with the UE on Productivity in Polish Manufacturing Sectors. National Bank of Poland, Working Paper, No. 82, Warsaw.
7. Porter, M. E. (2001). *Porter o konkurencji*. PWE, Warszawa, p. 202 [in:] K. Poznańska, *Czynniki...*, op. cit., p. 92.
8. Posner, M. V. (1961). International Trade and Technical Change. *Oxford Economic Papers*, 30, 323–341.
9. *The conditionings for export activities run by companies from Lublin Voivodeship in the light of field investigation, Report, part II*. (2012). Ernst & Young Business Advisory consortium and PBS DGA.
10. Tidd, J., & Bessant, J. (2009). *Managing innovation, Integrating Technological, Market and Organizational Change*. Pp. 24–25.
11. Tidd, J., Bessant, J., & Pavitt, K. (2005). Managing Innovation, Integrating Technological, Market and Organizational Change, Third Edition, *John Wiley&Sons Ltd*, 560.
12. Vernon, R. (1966). International Investment and International Trade in the Product Cycle. *Quarterly Review of Economics*, 88, 190–207.