
Innovation Matters Everywhere

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Abstract

Innovation, the driving force of important economies, matters everywhere. No matter the type (product, process, organization or marketing), it can be the differentiating point between a well running business and a business driven by inertia. Besides the product launches, the processes are also important. Moreover, starting with 2018, according to OSLO Manual, the evaluation of process innovation includes the organization and marketing innovations.

In this paper, we would like to investigate the national innovations data, in order to find encouraging and positive aspects related to innovation indicators.

Romania is a modest innovator, with a National Innovation System underdeveloped (Adams, 2014) and a small share of innovative companies. Our objective is to exploit the existing data in order to show that the innovative companies hold a consistent share in total companies' turnover development.

For that, we have conducted an empirical study on the existing data from the National Statistical Institute, by interrogating the existing databases related to innovation.

After analyzing the data, we can conclude, that for any company type, by size, the innovative companies are more dynamic than the non-innovative companies are, and that a consistent part of the turnover growth is coming from the innovative companies.

The share of innovative companies in the total number of Romanian companies is less than 15%, but the number of innovative companies is growing. This could be encouraging, and most probably, with the proper education on innovations management, promoting the positive impact of innovation on businesses and measurement methods, the share of innovative companies and their contribution to growth could increase significant in the next years.

Keywords

Innovation, product innovation, process innovations, turnover growth, business development.

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Introduction

Innovation matters! No matter the time, the place or the context. Since the beginning of 20th century, the literature offers the confirmation that innovations are the driving factor for economic growth (Schumpeter, 1934, 1942). During time, many authors tried to find methods of evaluation. One of them detailed by Alfred Kleinknecht and Donald Bain (1993), supposed to make an evaluation of innovations using a special technique by scanning all commercial and technical magazines. Now, at the beginning of 21st century, the OSLO Manual, published by the Organization for Economic Cooperation and Development (OECD) offer a framework for innovation Management and create comparable KPIs

(Becheikh, et al., 2006). Still there is no precise recipe for success when it comes to innovations and the way this could be achieved. You could count many unnecessary parameters as you could also face the situation that some useful ones cannot be counted (Kylliäinen, 2018).

According to OSLO Manual, before 2018 the types of innovation were: 1) product innovation; 2) process innovation; 3) marketing innovation; 4) organizational innovation (OECD, 2005). After 2018, the OSLO manual classified innovation in two types: 1) product innovation; 2) process innovation (OECD, 2018). Process innovations covers the process, organizational and marketing innovation from the old manual. We will consider for the present article, the product and process innovation.

Taking into consideration the importance of innovation in organizations is important to monitor and measure the innovation impact on businesses, the evolution of innovative companies, and their impact in the total companies' turnover. At Global level, for measuring innovation, exists the GII (Global Innovation Index) and at European level, the European Innovation Scoreboard is used. In Romania, the National Statistical Institute creates an Innovation Report every two years, based on the "Community Innovation Survey" (CIS) 2016-2018, used by all members of European Union.

Even if Romania is one of the European modest innovators (Adams, 2014), innovations matters and what is more important, the turnover from the innovative companies contribute the most at the growth of the total companies' turnover.

We have structured the paper into three sections. We started with the review of literature and the research methodology description. In the second part, we have presented an overview of European countries according to European innovation scoreboard and we have analyzed the data from Romania, going deeper on: the typologies of innovators and the evolution of innovative companies and successful innovative companies, next to the share of innovative companies in the total turnover splitted by size and economic sector. In the last part, we draw the conclusion by processing the companies' turnover data, analyzing their evolution and calculating the innovative companies' contribution to growth.

Literature review

Many recent books and studies confirm that global enterprises that are facing big growth challenges identified innovation as one possible growth key driver for value creation (Takács, 2018) and confirmed the importance of a strategy for the innovation management. The innovation management strategy should be part of the organization development strategy and correct implemented (Lafley and Martin, 2013). For the execution of the innovation management, a system for motivations and reasons for improvement should be considered. (Dobbs and Koller, 2015). For measuring and monitor the performance of companies in order to achieve the correct execution, a system for the Innovation Management should be implemented. The following aspects could be considered: monitoring, control, improvement, coordination and motivation (Lohman, et al., 2004).

At national level, exist companies that are using new management methods, focusing on innovation management, for driving future growth (Mateescu, et al., 2015). Most probably, the number of companies that are considering innovation an important factor for development is on a positive evolution in Romania. We are confident that in the future, the share of innovative companies will grow and more businesses will achieve positive results by trying „to get better every day” (Kylliäinen, 2018).

Research methodology

Innovation is important and the dynamic of the innovative companies is better than the non-innovative ones. Starting from the published data of Romanian Statistic Institute from 28 July 2020, regarding innovation in enterprises, during 2016-2018, we wanted to interrogate the existing databases, to verify the following hypothesis:

H1. A consistent part of turnover growth is coming from the innovative companies.

The research objective is to calculate the contribution to growth of innovative companies. For that, we have conducted an empirical study on the existing National Statistical Institute data, by interrogating the existing databases related to innovation.

The researched enterprises are small, middle-size and large, with more than nine employees, from the entire industry and active at the moment of data collection. The data were collected in the period: 18.06.2019-16.08.2019 and the unweighted response rate was 91.0%. The maximum permissible error of the estimates is $\pm 3\%$.

Results and discussions

Romania is one of the European modest innovators, according to European innovation scoreboard. This somehow is expected, considering the economic environment, the lack of education for innovation, the small investments in Research and Development or the lack of governmental programs for innovation development in companies.

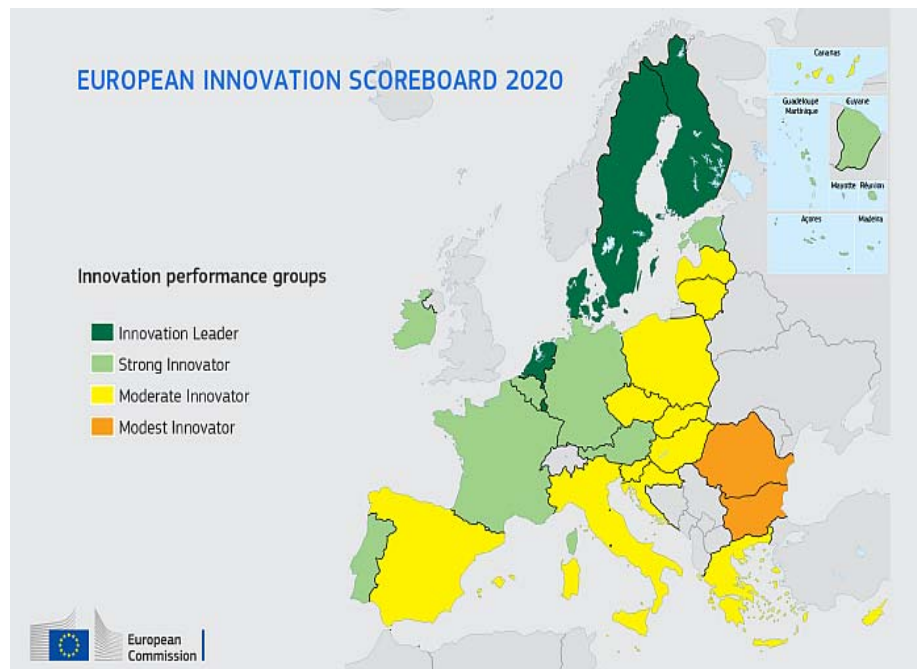


Figure no. 1. European innovation scoreboard

Source: Official website of the European Union, 2021

The following findings are based on INS (National Statistical Institute) databases (DB) interrogations.

The share of innovative companies in the total number of companies from Romania, in the last analyzed period, 2016-2018 is 14.6%, with positive evolution, +4.4 percentage points versus the previous period 2014-2016.

Going deeper with the understanding of figures, even the percentage of innovative companies in the entire industry is rather small 14.6% the number of innovative companies increase by 43.5% and the number of successful innovative companies increase with 47.5%, as show in table 1.

Table no. 1. Typologies of innovators and evolution

Innovators Types and evolution	2016 (number)	2018 (number)	Evolution 2018 vs. 2016 (%)	Share in total 2016 (%)	Share in total 2018 (%)	Evolution of share (pp)
TOTAL number of companies	28809	28776	-0,1%	100%	100%	
Innovative companies	2925	4198	43,5%	10,2%	14,6%	4,4
Successful innovative companies	2795	4124	47,5%	9,7%	14,3%	4,6
Companies with product innovations only	430	1836	327,0%	1,5%	6,4%	4,9
Companies with process innovations only	478	1281	168,0%	1,7%	4,5%	2,8
Companies with product and process innovations only	518	1007	94,4%	1,8%	3,5%	1,7
Not innovative companies	25884	24578	-5,0%	89,8%	85,4%	-4,4

Source: Data processed based on INS DB

Regarding the typologies of innovation (table 2), in the category of successful innovative companies, in the last period 44.5% had only product innovations, 31.1% had only process innovation and 24.4% had product and process innovations, so we can conclude that almost 70% (68.9%) from the successful innovative companies launched new products in the last 2 years.

Table no. 2. Importance and evolution of innovative companies

Importance and evolution of innovative companies	2016 (number)	2018 (number)	Share in total 2016	Share in total 2018	Evolution of share pp
Successful innovative companies	2795	4124	100%	100%	
Companies with product innovations only	430	1836	15,4%	44,5%	29,1
Companies with process innovations only	478	1281	17,1%	31,1%	14,0
Companies with product and process innovations only	518	1007	18,5%	24,4%	5,9

Source: Data processed based on INS DB

The business size classification are the following: Microenterprises, companies with 1 to 9 employees, Small enterprises, companies with 10 to 49 employees, Medium-sized enterprises, companies with 50 to 249 employees, and Large enterprises, companies with 250 employees or more.

From the total Romanian innovative companies, the large companies are the most innovative, 28% from them implemented in the last 2 years activities related to innovation (table 3).

Table no. 3. The share of innovative companies in total companies, by size classes and activity sectors, in the period 2016-2018

Company type	Total	Industry	Services
Total	14,6	16,3	12,9
Small	13,5	15,1	12,3
Medium-sized	15,9	17,0	14,2
Large	28,0	28,4	27,2

Source: Press release INSSE No 195/28 July 2020

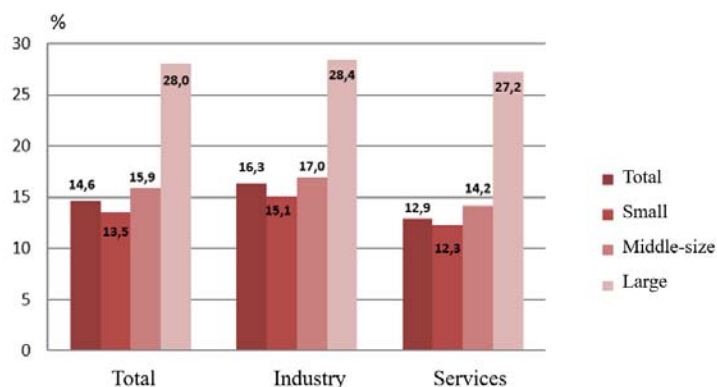


Figure no. 1. The share of innovative companies in total companies, by size classes and activity sectors, in the period 2016-2018

Source: Press release INSSE No 195/28 July 2020

The innovative companies generate 29% from the total turnover.

Analyzing the results in value (table 4), we have a total growth of +12% for the total companies' turnover and +42% growth for the innovative companies. Regarding the contribution to growth (table 5), the innovative companies contribute with 82% at the total turnover development / growth and large innovative companies contribute with 50% at the total turnover growth.

Table no. 4. Turnover evolution 2018 vs. 2017

	2016 (RON)	2018 (RON)	Turnover evolution 2018 vs. 2016 (RON)	Turnover evolution 2018 vs. 2017 (%)
Total companies turnover by size	864.765.522	967.479.082	102.713.560	12%
Small	161.085.528	191.520.184	30.434.656	19%
Medium	207.376.105	245.690.937	38.314.832	18%
Large	496.303.889	530.267.961	33.964.072	7%
Total innovative companies turnover by size	200.181.377	284.229.491	84.048.114	42%
Small	14.140.590	25.024.068	10.883.478	77%
Medium	28.590.287	50.482.889	21.892.602	77%
Large	157.450.500	208.722.534	51.272.034	33%
Total not innovative companies turnover	664.584.145	683.249.591	18.665.446	3%

Source: Data processed based on INS DB

Table no. 5. Share of turnover evolution in the total growth

	2016 (RON)	2018 (RON)	Turnover evolution 2018 vs. 2016 (RON)	Share of turnover evolution in the total growth
Total companies turnover by size	864.765.522	967.479.082	102.713.560	100%
Small	161.085.528	191.520.184	30.434.656	30%
Medium	207.376.105	245.690.937	38.314.832	37%
Large	496.303.889	530.267.961	33.964.072	33%
Total innovative companies turnover by size	200.181.377	284.229.491	84.048.114	82%
Small	14.140.590	25.024.068	10.883.478	11%
Medium	28.590.287	50.482.889	21.892.602	21%
Large	157.450.500	208.722.534	51.272.034	50%
Total not innovative companies turnover	664.584.145	683.249.591	18.665.446	18%

Source: Data processed based on INS DB

Conclusions

The main objective of the article was to show that positive and encouraging aspects related to innovation could be found in the national data of a modest innovator country. We have analyzed the existing data and showed that the innovative companies hold a consistent share in the total companies' turnover development, so our hypothesis H1: A consistent part of turnover growth (82%) is coming from the innovative companies, is confirmed.

Romania scored weak in RandD system, with less than the average patents application, but well at exporting technologically sophisticated services or products. One of the explanations could be the foreign direct investments and their exports (Adams, 2014).

In the future, besides the measurement of past innovation related activities, projects for promoting the importance of innovation in businesses should be developed, next to a model with innovation related activities planning, an on-going business impact measure and improvement methods for the Romanian entrepreneurs.

Another aspect that should be in our priority is the security of innovations against competitors and encouraging more patents application (Kim and Mauborgne, 2005). Together with this, the philosophy "high class with low cost" could be promoted, by optimizing the processes, the production costs and achieving products with good quality and accessible price. This could be a good way for securing the innovations and local businesses, keeping always in mind, that execution matters most (Doerr, 2018)

The development of an Innovation Management Model based on the country particularities, shared and aligned with the main country innovators could help more companies to have successful innovations, no matter if these are product, process or product and processes.

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