

The conditions of entrepreneurship development in Kielce: students' opinions survey

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Abstract

The purpose of this article is to analyze the conditions for entrepreneurship development in relation to labour market condition, cultural offer and the condition of civil society development in the city of Kielce in the opinion of the managementstudents from the Jan Kochanowski University in Kielce.

Keywords

Entrepreneurship, Economic development

¹Introduction

Entrepreneurship plays special role in economic development (both national and regional) by increasing economic efficiency, creating technological innovations, and generating new jobs. The dynamics of entrepreneurship can be vastly different depending on institutional level of economic development and a result of agglomeration effects.

In addition to the level of economic development, many other economic, technological, demographic, cultural and institutional variables determine the rate of (nascent) entrepreneurship. There is an extensive literature on these influences, across wideranging scientific domains including neo-classical economics, institutional economics, sociology and anthropology.

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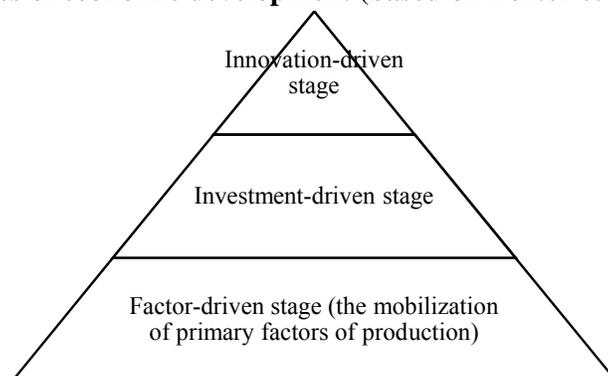
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Economic development

There are many concepts of economic development². The role of economic development is to promote the standard of living, to decrease unemployment and to develop a local cultural offer of a specific area. A well-known operational notion of economic development is referred to as structural transformation. Accumulation of capital (physical and human), and moves in the sector composition of economic activity (production, consumption, employment) are considered as the main components of this transformation³. Related changes are, inter alia, urbanization⁴, growing level of education, health care, public safety or cultural offer.

The modern view of economic development underlines increasingly sophisticated ways of producing and competing, and indicates the evolution from a resource-based to a knowledge-based economy⁵.

Figure 1. Three stages of economic development (based on Porter et al.)



M. E., Porter, J. D. Sachs, J. W. McArthur, *Executive Summary: Competitiveness and Stages of Economic Development* [in:] *The Global Competitiveness Report 2001–2002*, M. E. Porter, J. D. Sachs, P. K. Cornelius, J. W. McArthur and K. Schwab, Oxford University Press, New York 2002, p. 16-25.

Knowledge-based economy does not mean merely the production of knowledge-intensive goods and services (tangible and intangible values), rather, knowledge must be initiated and disseminated throughout the economy. In the knowledge-based economy, innovation is driven by the interaction of producers and users in the exchange of knowledge

²R. N. Cooper, *A Half-Century of Development*, Center of International Development at Harvard University, Working Paper No. 118, March 2005, p. 3.

³ S. Wennekers, A. van Wennekers, R. Thurik, P. Reynolds, *Nascent Entrepreneurship and the Level of Economic Development*, *Small Business Economics* 2005, Vol. 24, Issue 2, p. 294.

⁴J. D. Sachs, *End of Poverty. Economic Possibilities for Our Time*, The Penguin Press, New York 2005, p. 35-36.

⁵ S. Wennekers, A. van Wennekers, R. Thurik, P. Reynolds, *Nascent Entrepreneurship and the Level of Economic Development*, *Small Business Economics* 2005, Vol. 24, Issue 2, p. 294.

(both codified and tacit)⁶. This innovation leads to the entrepreneurship that delivers the engine of economic growth.

Economic development and entrepreneurship

Entrepreneurship plays a very important role in the process of economic development (both national and regional)⁷. Entrepreneurship is considered to be an important mechanism for economic development through innovation, welfare effects and employment. The dynamics of entrepreneurship can be vastly different depending on institutional level of economic development⁸ and a result of agglomeration effects.

The environment shaping the economy affects the dynamics of entrepreneurship within any given country. This environment is marked by interdependencies between economic development and institutions⁹, which affect other aspects, such as quality of governance, access to capital and other resources, and the perceptions of entrepreneurs. Institutions are critical determinants of economic behavior and economic transactions in general, and they can impose direct and indirect effects on both the supply and demand of entrepreneurs¹⁰. That leads to Institutional Economic Theory underlying the importance of institutions¹¹ as a determining factor of economic growth in society, providing a conceptual framework which is adequate for the institutional analysis of entrepreneurship¹².

The development of entrepreneurship is a result of agglomeration effects. Some cities may be favored by the agglomeration of certain demand and supply-side factors which may enhance the potential access to knowledge and new ideas, factors of production, and clients or costumers. Entrepreneurs can leverage these economies of scale in cities. Furthermore, market

⁶N. Wickramasinghe, D. von Lubitz, *Knowledge-Based Enterprise: Theories and Fundamentals*, Idea Group Publishing, Hershey, London, Melbourne, Singapore 2007, s. 3.

⁷ F. Linan, J. Fernandez-Serrano, *National culture, entrepreneurship and economic development: different patterns across the European Union*, "Small Business Economics" 2014, Vol. 42, Issue 4, p. 687.

⁸ Z. J. Acs, S. Desai, J. Hessels, *Entrepreneurship, economic development and institutions*, "Small Business Economics" 2008, Vol. 31, Issue 3, p. 219.

⁹For Douglass North, institutions are fundamental to economic development. D. W. Arner, *Financial Stability, Economic Growth, and the Role of Law*, Cambridge University Press, Cambridge – New York 2007, p. 17-18.

¹⁰ Z. J. Acs, S. Desai, J. Hessels, *Entrepreneurship, economic development and institutions*, "Small Business Economics" 2008, Vol. 31, Issue 3, p. 219.

¹¹P. L. Joskow, *Introduction to New Institutional Economics: A Report Card*[w:] *New Institutional Economics. A Guidebook*, red. E. Brousseau, J-M. Glachant, Cambridge University Press, Cambridge - New York 2008, p. 6.

¹²M. C. Sánchez-Escobedo, J. C. Díaz-Casero, R. Hernández-Mogollón, M. V. Postigo-Jiménez, *Perceptions and attitudes towards entrepreneurship. An analysis of gender among university students*, "International Entrepreneurship and Management Journal" 2011, Vol. 7, Issue 4, p. 444.

proximity and business infrastructure have shown to positively affect entrepreneurship¹³. Urban agglomerations are places rich in cultural life and other amenities conducive to a certain lifestyle and worklife balance that attracts highly skilled people¹⁴.

The City of Kielce

The city of Kielce is an economic, cultural and educational center and the capital of the Świętokrzyskie Voivodship. It is worth emphasizing that in the years 1949 – 2008 the population of Kielce increased from 49 960 to 205 665, that is by 412%. The city's area increased almost three times, from 4052 to 10 945 ha. The population of Kielce is 199 870 residents (Dec 2013).

Table 1. Human resources in Kielce

Working-age population	127 913 people (2012)
Economically active population	73 667 people (2012)
Unemployed	11 700 people (2012)
Unemployment rate	10.8% (2013)
Total number of companies having their registered office	20 563 (2013)
Average monthly wage	3 597.04 (Dec. 2013)

Source: *Human resources and labour costs*, http://www.invest.kielce.pl/eng/economy/human_resources_and_labour_costs 2014.27.12; *Investing in Poland. Trendbook Poland 2015*, Warsaw Business Journal Group, Warsaw 2014, p. 87.

There could be differentiated sectors with the largest investment potential in Kielce. Defined areas of development (“strengths”, “sectors of opportunity”) are:

- Kielce Technology Park – a multifunctional area of economic activity. This institution represents advanced and comprehensive institutional form of activating regional development and supporting entrepreneurship. Kielce Technology Park helps the newly created and innovative companies to achieve maturity and ability to function on the market¹⁵.
- Trade fairs and fair support services sector – Kielce Trade Fairs is the fast growing exhibition centre. Kielce Fairs is a member of international trade fairs organizations such as UFI and CENTREX that confirm high quality of provided services;

¹³ A. B. Garcia, *Analyzing the determinants of entrepreneurship in European cities*, “Small Business Economics” 2014, Vol. 42, Issue 1, p. 81.

¹⁴ D. Audretsch, O. Falck, S. Heblich, *Who's got aces up his sleeve? Functional specialization of cities and entrepreneurship*, “The Annals of Regional Science” 2011, Vol. 46, Issue 3, p. 624; X. Li, A. G. Yeh, *Modelling sustainable urban development by the integration of constrained cellular automata and GIS*, “International Journal of Geographical Information Science” 2000, Vol. 14, No. 2, p. 132.

¹⁵ *Kielce Technology Park*, <http://www.technopark.kielce.pl/eng/home> 2014.27.12.

- Construction industry – rich natural resources of the city and its the surrounding area attracted many companies operating in the construction industry and building materials industry;
- Steel, machinery and precision industry - traditions associated with the presence of the Old Polish Industrial District (the oldest and the largest industrial region in Poland dominated by mining and smelting of lead, silver, copper and iron) make it possible to successfully continue to strengthen this branch;
- Health service sector - dynamic development of this sector in the region should be associated not only with natural conditions (presence of water with high degree of sulphide mineralization), but also in wellness companies¹⁶.

Methodology and hypothesis development

The main goal of this article is: to explore the conditions for entrepreneurship development from perspective of the managementstudents from the Jan Kochanowski University in Kielce.

The main research problem (RP0) explored in this paper is: to investigate the conditions for entrepreneurship development in relation to labour market condition, cultural offer and the condition of civil society development in the city of Kielce.

The detailed research problems explored in this paper are:

- Q1: What is the relation between conditions for entrepreneurship development in relation to the situation on the labour market in Kielce from the point of view of the managementstudents from the Jan Kochanowski University in Kielce.
- Q2: What is the relation between conditions for entrepreneurship development in relation to the cultural offer in Kielce from the point of view of the managementstudents from the Jan Kochanowski University in Kielce.
- Q3: What is the relation between conditions for entrepreneurship development in relation to the condition of civil society development in Kielce from the point of view of the managementstudents from the Jan Kochanowski University in Kielce.

Accordingly, I offer the following hypotheses:

Main hypothesis is as follows – for students of the management from the Jan Kochanowski University in Kielce perceived conditions of entrepreneurship development will

¹⁶*Economy. Kielecki portal gospodarczy*, <http://www.invest.kielce.pl/eng/economy> 2014.27.12.

have a positive relationship with perceived situation on the labour market; perceived cultural offer and perceived condition of civil society development in Kielce.

The detailed hypotheses explored in this paper are:

- H1. There is positive correlation between conditions for entrepreneurship development and the situation on the labour market in Kielce from the point of view of the managementstudents from the Jan Kochanowski University in Kielce.
- H2. There is positive correlation between conditions for entrepreneurship development and the cultural offer in Kielce from the point of view of the managementstudents from the Jan Kochanowski University in Kielce.
- H3. There is positive correlation between conditions for entrepreneurship development and the condition of civil society development in the city of Kielce from the point of view of the managementstudents from the Jan Kochanowski University in Kielce.

An open-ended online survey instrument was developed for this study. A questionnaire was developed and administered to students of management from the Jan Kochanowski University in Kielce. The first section collected demographic information about the student (gender, age). The next section of the questionnaire required students to ranked conditions for entrepreneurship development, labour market condition, cultural offer and the condition of civil society development in the city of Kielce.

A total of 58 students completed the survey. The questionnaire was published in April 2014 and closed one month later.

The data was initially summarized using univariate statistics (means and frequencies) to provide a better understanding of the respondents and characteristics of the data. Spearman correlation coefficient was used to give information about the degree of correlation as well as the direction of the correlation between variables. Spearman correlations coefficient estimation is a non-parametric technique based on ranks. This non-parametric technique was used because of uncertainty about the population distribution.

Data analysis and results

In the frequent user group: 19 were male (32,8%) and 39 were female (67,2%).

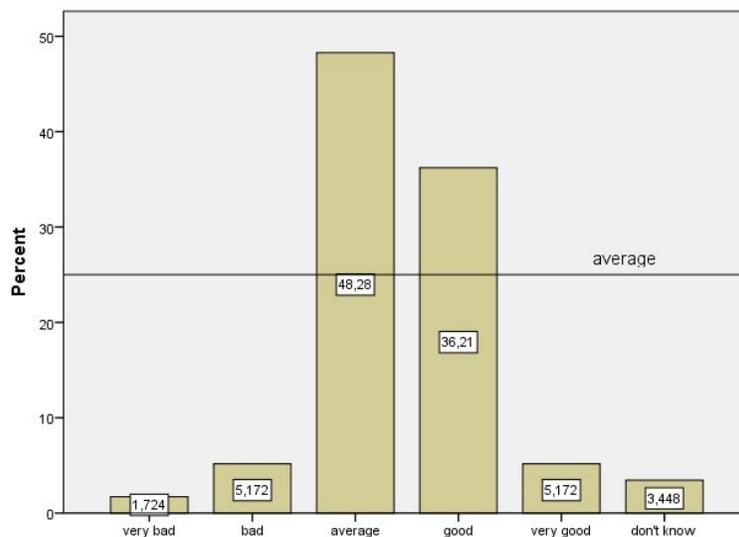
Table 2. Gender of the respondents

		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Female	39	67,2	67,2	67,2
	Male	19	32,8	32,8	100,0
	Total	58	100,0	100,0	

Source: Ownanalysis.

The first aspect concerned the entrepreneurship development in Kielce. In the opinion of respondents entrepreneurship development in Kielce mostly is average (48,3%) and good (36,21%).

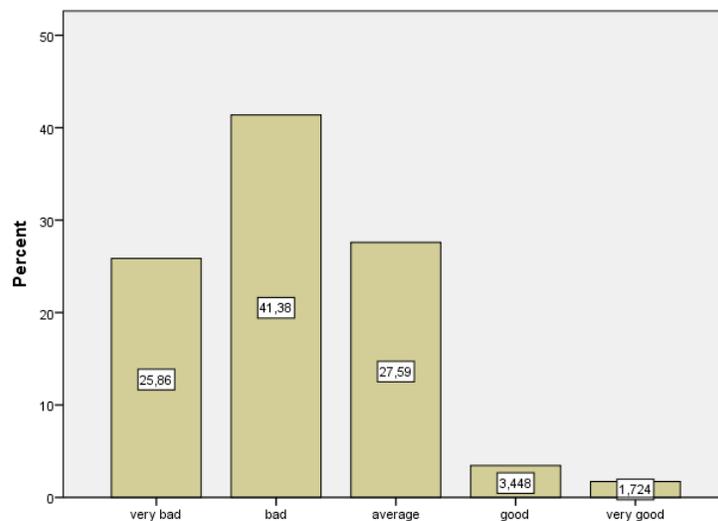
Figure 2. Entrepreneurship development in Kielce (student's opinion)



Source: Own analysis.

Next aspect concerned the labour market in Kielce. In the opinion of students situation on the labour market in Kielce generally is bad (41,4%), than “average” (27,6%) and “very bad” (25,9%).

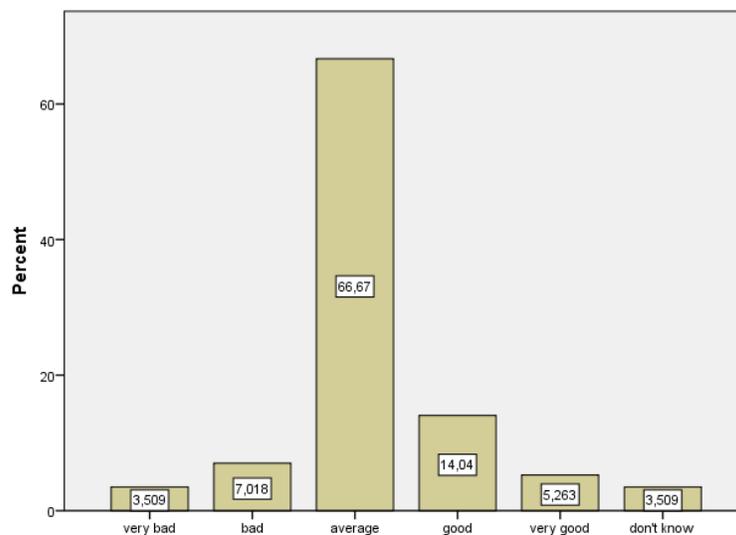
Figure 3. Situation on the labour market in Kielce(student's opinion)



Source: Own analysis.

For the type of conditions of civil society development in Kielce, the vast majority of respondents estimated that aspect on “average” (66,7%).

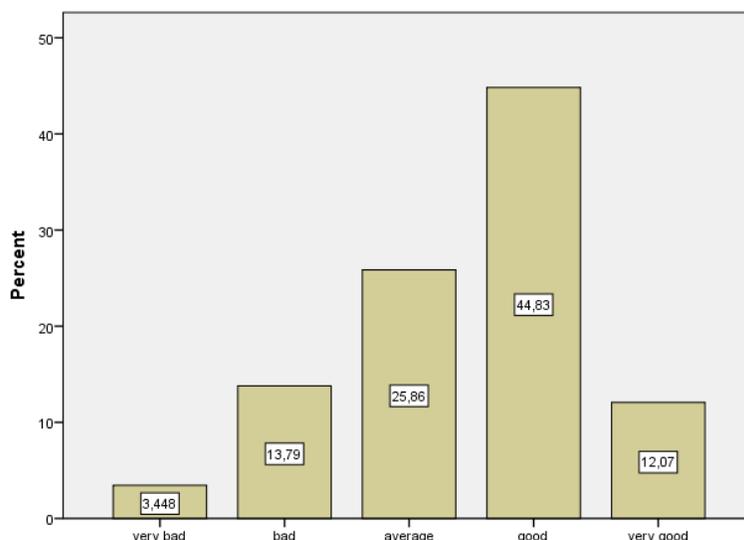
Figure 4. Conditions of civil society development in Kielce(student’s opinion)



Source: Own analysis.

Cultural offer in Kielce was estimated as „good” (44,9%) and average (25,9%).

Figure 5. Cultural offer in Kielce (student’s opinion)



Source: Own analysis.

Table 3. Correlations between entrepreneurship development, civil society development, situation on the labour market and cultural offer in Kielce

			Entrepreneurship development	Civilsociety development	Situation on the labour market	Culturaloffer
Spearman's rho	Entrepreneurship development	CorrelationCoefficient	1,000	,465**	,314*	,409**
		Sig. (2-tailed)	.	,000	,019	,002
		N	56	55	56	56
	Civilsociety development	CorrelationCoefficient	,465**	1,000	,351**	,315*
		Sig. (2-tailed)	,000	.	,009	,019
		N	55	55	55	55
	Situation on the labour market	CorrelationCoefficient	,314*	,351**	1,000	,035
		Sig. (2-tailed)	,019	,009	.	,797
		N	56	55	58	58
	Culturaloffer	CorrelationCoefficient	,409**	,315*	,035	1,000
		Sig. (2-tailed)	,002	,019	,797	.
		N	56	55	58	58

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

(An opinion "don't know" was excluded from Spearman correlation analysis)

Source: Own analysis.

Discussion and Conclusions

There is a relationship between entrepreneurship development and situation on the labour market; cultural offer and civil society development. More advanced analysis of this research shows that situation on the labour market ($\rho = .314$; $p < .05$) is significantly positively correlated with entrepreneurship development. Cultural offer ($\rho = .409$; $p < .001$) is positively correlated with entrepreneurship development. The strongest correlation was observed between civil society development ($\rho = .465$; $p < .001$) and entrepreneurship development.

Table 4. Spearman's rho

Variable	Spearman's rho	Significance level
Entrepreneurship development vs. Situation on the labour market	,314	Sig. 0,05 level
Entrepreneurship development vs. Cultural offer	,409	Sig. 0,01 level
Entrepreneurship development vs. Civil society development	,465	Sig. 0,01 level

Source: Own analysis.

This study examined the main research problem from which it follows, that creation of conditions for the entrepreneurship development influences at the cultural offer and civil society development in the city.

The main and detailed hypothesis were confirmed.

Table 5. The detailed hypotheses

	Hypothesis	Verification
H1	There is positive correlation between conditions for entrepreneurship development and the situation on the labour market in Kielce	<u>Weak</u> positive correlation
H2	There is positive correlation between conditions for entrepreneurship development and the cultural offer in Kielce	<u>Medium</u> positive correlation
H3	There is positive correlation between conditions for entrepreneurship development and the condition of civil society development in the city of Kielce	<u>Medium</u> positive correlation

Source: Own analysis.

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