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## RANKING OF INSTITUTIONAL BARRIERS REGARDING MANAGEMENT OF MEDICAL EQUIPMENT ENTERPRISES IN MUNICIPAL ECONOMIC SYSTEM

Abstract. This article describes characteristics of the institutional factor as one of the obstacles for management of medical equipment enterprises in municipal economic system. The author finds out that the institutional environment is determined by the legal and administrative infrastructure within which entrepreneurs, companies and government interact to create well-being of the nation. The dynamics of results indicator "Competitiveness Index" was investigated for the whole Ukraine, as well as for such cities as Kyiv, Lviv and Ternopil during 2009-2013. The comparative evaluation index of changes in the results of institutional barriers was made and ranking components of the institutional environment were presented in these cities during the same period.

*Keywords:* ranking, factor, index of competitiveness, risk, institutional environment subsystem, institutional environment, economic growth.

**Introduction.** At the present stage of Ukraine's economy development and location, there are a lot of interrelated and mutually influencing factors of domestic enterprises' financial and economic activity. It is necessary to use the latest research methods of the impact of existing factors in order to improve this situation. In fact, by the detection and evaluation of existing research indicators one can apply the ways to minimize their negative impact, or, conversely, use them for the benefit of activity development.

Literature review. There are many prominent scientists who work on the problem of institutional environment, such as P. Drucker, J. MacArthur, J. Moore, V. Ramaswamy, A. Slyvotski, J. Stigler, L. Baker, A. Batanov, R. Bennett, E. Blaikly, B. Blueston, A. Bobrowski, S. Bogachev, M. Butko and others.

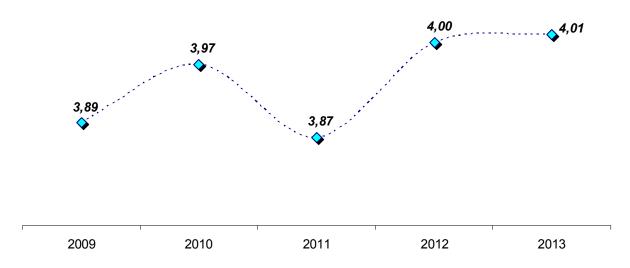
**Characteristics of the research sample.** Unfortunately, the unified system for determining risk (factors) and neutralizing their impact on the domestic enterprises in Ukraine does not exist.

<http://sepd.tntu.edu.ua/images/stories/pdf/2015/15piames.pdf.>.

Panukhnyk I. and Panukhnyk O. (2015). Ranking of institutional barriers regarding management of medical equipment enterprises in municipal economic system. *Sotsial* no-ekonomichni problemy i derzhava – Socio-Economic Problems and the State [online]. 12 (1), p. 6-21. [Accessed April 30, 2015]. Available from:

**Statement of the problem.** Research and evaluation of institutional barriers to control management of medical equipment enterprises in municipal economic system.

The current economic and political situation in the country has somewhat inefficient potential impact on the development of the competitiveness of domestic enterprises dealing with medical equipment. Therefore, by making comparisons (according to the data of "Competitiveness Report of Regions of Ukraine" for 2009-2013) the results of indicator "Competitiveness Index" for the country as a whole, the subsequent dynamics is found (Fig. 1).



**Fig. 1. Dynamics of «Competitiveness Index» results in Ukraine during 2009-2013** *Note: developed by the author ([*1, p. 10]; [2, p. 8]; [3, p. 7]; [4, p. 7]; [5, p. 7])

Fig. 1. shows that the lowest value of «Competitiveness Index» (further – CI) in Ukraine was in 2011 (3,87) and the highest result 4,01 was recorded in 2013. Also, the graph clearly shows that since 2011, the results of CI of the country have had positive dynamics of growth.

Fig. 2. shows the results of country's CI compared to regions (Kyiv, Lviv, and Ternopil).

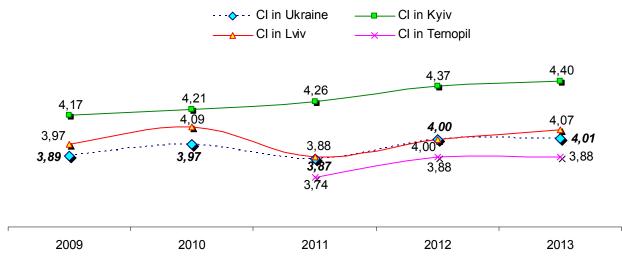


Fig. 2. Comparison of the dynamics results of «Competitiveness Index» in Kyiv, Lviv, Ternopil and Ukraine in general during 2009-2013

*Note: developed by the author* ([1, p. 10]; [2, p. 8]; [3, p. 7]; [4, p. 7]; [5, p. 7])

During the research of the dynamics of Competitiveness Index CI (Fig. 2) in Ukraine and its specific in regions (Kyiv, Lviv, Ternopil) it was noticed that the best results are observed in Kyiv. It

is necessary to underline positive growth rate of CI results throughout the analyzed period (2009 - 2013).

As for the dynamics of this index in Lviv, assessment of changes in presented results is ambiguous. In fact, during 2009-2010 we observe the rise by 0.12 points, but from 2010 to 2011 there is the result of the decline in the index to -0.21 points, however, in 2011-2013 notable significant growth of the CI results +0,12 and +0,07 points accordingly. So, since 2011 the dynamics of CI in Lviv can be characterized as positive.

The dynamics of CI results in Ternopil during 2010-2009 is not traceable. However, starting from 2011 relatively stable change of this factor is viewed. Thus, in 2011 the index was 3.74 points, but during 2013-2012 it was 3.88 points, i.e. +0.14 points more than it was in 2011.

In general, we can conclude that the dynamics of the Competitiveness Index of Ukraine and regions studied has been positive since 2011.

Further we research more specifically what institutional factors have contributed to this positive trend.

Generally, an institutional field is defined by legal and administrative infrastructure within which private entrepreneurs, companies and the government generally interact to create well-being of the nation. The significance of conducive and equitable institutional environment has become more apparent during the recent financial crisis. Institutions are essential to support and enhance the unstable economic growth, given that the state pays more significant role on the international level for economies of many countries.

The quality of the institutional environment affects the competitiveness and growth significantly. It affects investment decisions and production organization as well as the way in which societies distribute the benefits and costs of implementing programs and strategies. For example, landowners, corporate shares, or intellectual property will not invest in their property if they are not guaranteed the right to it.

The value of institutions is not limited to the legal framework. Government attitude to markets and freedoms and the effectiveness of its activities plays an important role: enormous bureaucracy, excessive government regulation, corruption, dishonesty in the preparation and execution of public contracts, lack of transparency and reliability, failure to provide necessary services for business, political subjection of the judiciary system lead to significant economic costs and slow down the development process.

Despite the fact that in the economic literature more attention is paid mainly to public institutions, private institutions are also important elements in the process of well-being creation. Events related to the recent global economic crisis, as well as numerous corporate scandals, reveal the importance of accounting standards, accountability and transparency, which allow to prevent fraud and poor management as well as to maintain the confidence of investors and consumers.

Economic growth is based on the business activities that adhere to the principles of fair management, where management follows strict ethical standards in relations with the state, other companies and the public in general. Transparency of the private sector is a required feature of business. It can be achieved by compliance with relevant standards, and using practices of auditing and accounting, which provides providing timely access to information [5, p. 13].

Fig. 3 shows the dynamics of institutional barriers that affect the activities and financial situation of the studied regions (Kyiv, Lviv, Ternopil).

Fig. 3. shows that the most positive institutional component is in Ternopil and this effect is increasing from the period of 2011-2013; for 2009-2010, there was no impact of changes.

The positive effect of this factor is also increasing in Lviv.

As for the dynamics of institutional barriers in Kyiv, existing positive impact during 2009-2010 (+0,30 points) was observed, in 2011 there was a slight decrease of the existing economic component (-0,22 points), however, starting from 2012 the growth of the indicator (+0,14 and +0,14 points, respectively to 2012 and 2013) was noted.

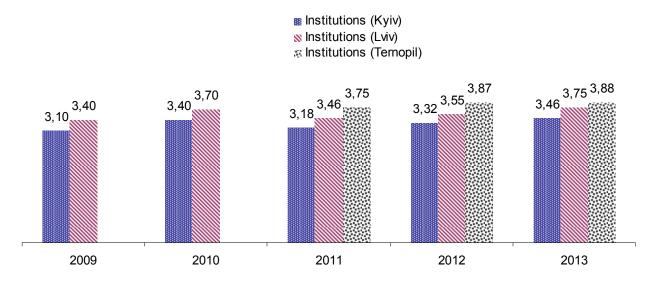


Fig. 3. The dynamics of institutional barriers by region of the country (Kyiv, Lviv, Ternopil) during 2009-2013

*Note: developed by the author* ([1, pp. 138, 162]; [2, pp. 108, 116]; [3, pp. 132, 148, 176]; [4, pp. 138, 154, 182]; [5, pp. 162, 178, 206])

It is necessary to make assess changes of institutional indicator. Table.1 evaluates the results of the main components in the institutional factor.

Dynamics of the components of the institutional environment in the regions (Kyiv, Lviv, Ternopil) during 2009-2013										
Ranking of the components of the institutional environment, points			Period							
N⁰	Name	2009	2010	2011	2012	2013				
1	2	3	4	5	6	7				
Kyiv										
1	Ownership	3,20	3,60	3,49	3,81	4,19				
2	Intellectual property protection	2,60	3,20	2,67	2,82	2,94				
3	Misuse of the budget	2,30	2,80	2,43	2,50	2,59				
4	Public confidence to politicians	1,60	1,70	1,40	1,85	2,16				
5	Bribes and unofficial payments	-	-	3,19	3,28	3,44				
6	Independence of the judiciary	2,20	2,30	1,98	2,12	2,34				
7	Favoritism in decisions of government officials	2,90	2,90	1,73	2,07	2,41				
8	Squander of budget expenditures	3,40	2,70	3,54	3,59	3,59				
9	The burden of administrative regulations	3,10	2,30	2,15	2,31	2,74				
10	Effectiveness of the legal system in resolving disputes		-	2,18	2,41	2,67				
11	Effectiveness of the legal system in appealing regulatory acts	3,00	-	2,22	2,55	2,67				
12	Transparency of state policies	3,30	2,80	4,14	4,53	4,61				
13	Business losses from the threat of terrorism	6,40	5,80	6,43	6,45	6,26				
14	Business losses from crime and violence	5,30	4,70	4,18	4,38	4,60				
15	Criminality	3,90	5,20	4,61	4,29	4,27				
16	Reliability of police services	3,80	3,90	3,86	3,83	3,69				
17	Corporate ethics	2,50	3,70	3,32	3,44	3,55				
18	Level of auditing and reporting standards	3,40	3,80	-	3,77	3,72				
19	The effectiveness of corporate management	5,40	5,10	5,38	5,24	5,15				

## Dynamics of the components of the institutional environment in the regions (Kyiy Lyiy

Table 1

20	Protection of minority shareholders	2,40	3,10	3,00	3,10	3,07				
21	Reliability of investor protection	-	-	4,70	4,70	4,70				
Lviv										
1	Ownership	3,50	3,70	3,55	3,96	4,25				
2	Intellectual property protection	3,10	3,60	2,52	2,85	3,17				
3	Misuse of the budget	3,10	3,90	2,99	3,15	3,65				
4	Public confidence to politicians	2,00	2,00	2,31	2,41	2,50				
5	Bribes and unofficial payments	-	-	3,54	3,52	3,84				
6	Independence of the judiciary	2,70	2,80	2,70	2,62	2,90				
7	Favoritism in decisions of government officials	3,20	2,90	2,77	2,79	3,01				
8	Squander of budget expenditures	2,60	3,20	3,59	3,63	3,91				
9	Ownership	3,40	3,20	2,92	2,80	3,13				
10	Intellectual property protection	2,90	-	2,78	2,76	2,89				
11	Misuse of the budget	2,90	-	2,74	2,78	3,02				
12	Transparency of state policies	3,50	3,70	4,11	4,52	4,78				
13	Business losses from the threat of terrorism	5,40	6,70	5,98	6,23	6,41				
14	Business losses from crime and violence	5,00	6,30	4,38	4,42	4,72				
15	Criminality	4,90	5,80	5,24	5,19	5,34				
16	Reliability of police services	3,10	3,40	3,69	3,66	3,77				
17	Corporate ethics	3,50	3,70	3,36	3,41	3,49				
18	Level of auditing and reporting standards	3,50	3,70	-	3,77	3,72				
19	The effectiveness of corporate management	4,70	4,70	5,04	5,02	5,11				
20	Protection of minority shareholders	3,20	3,30	3,06	3,29	3,35				
21	Reliability of investor protection	-	-	4,70	4,70	4,70				
	Ternopil									
1	Ownership	-	-	4,26	4,54	4,54				
2	Intellectual property protection	-	-	2,92	3,13	3,07				
3	Misuse of the budget	-	-	3,86	3,82	3,76				
4	Public confidence to politicians	-	-	2,16	2,43	2,63				
5	Bribes and unofficial payments	-	-	4,13	4,24	4,32				
6	Independence of the judiciary	-	-	3,03	2,97	2,93				
7	Favoritism in decisions of government officials	-	-	3,53	3,37	3,26				
8	Squander of budget expenditures	-	-	3,43	3,70	3,65				
9	Ownership	-	-	3,22	3,32	3,48				
10	Intellectual property protection	-	-	2,73	2,92	2,96				
11	Misuse of the budget	-	-	2,84	2,90	2,88				
12	Transparency of state policies	-	-	4,13	4,66	4,81				
13	Business losses from the threat of terrorism	-	-	6,71	6,64	6,57				
14	Business losses from crime and violence	-	-	4,97	4,94	5,18				
15	Criminality	-	-	5,19	5,35	5,59				
16	Reliability of police services	-	-	4,08	4,28	4,50				
17	Corporate ethics	-	-	3,31	3,49	3,40				
18	Level of auditing and reporting standards	-	-	-	3,77	3,72				
19	The effectiveness of corporate management	-	-	4,71	4,94	5,09				
• •	Distantion of minority shough aldong	-	-	3,27	2 27	3,27				
20 21	Protection of minority shareholders Reliability of investor protection	-	-	4,70	3,37 4,70	<b>4,70</b>				

*Note:* 1 – explanation, 1: 1 point – inefficient; 7 point – efficient; 2 – developed by the author ([1, pp. 138, 162]; [2, pp. 108, 116]; [3, pp. 132, 148, 176]; [4, pp. 138, 154, 182]; [5, pp. 162, 178, 206])

Regarding the evaluation of the components in the institutional environment for Kyiv during 2013, it was found that the best results are as follows: ownership (4,19 points); transparency of government agencies policy (4,61 points); reliability of investor protection (4,70 points).

For Lviv in 2013 the best results were shown by the following components in the institutional environment as: the ownership (4,25 points); transparency of government agencies policy (4,61 points); reliability of investor protection (4,78 points); effectiveness of corporate management (5,11 points).

Analysis of the components in the institutional environment for enterprises in Ternopil showed that the most positive impact for 2013 was made by ownership (4,54 points); transparency of government agencies policy (4,81 points); business losses from crime and violence (5,18 points); criminality (5,59 points); reliability of police services (4,50 points); effectiveness of corporate management (5,09 points); reliability of investor protection (4,70 points).

**Conclusions and recommendations for future research.** The level of institutions development in Ukraine and regions (Kyiv, Lviv, Ternopil) has traditionally been an increasing factor for the growth of the medical industry competitiveness.

However, what is worth noting is positive aspect of dynamics of "Competitiveness Index" in studied regions of the country since 2011. Also it is necessary to remember that the impact of institutions on the economy depends largely on the stage of economic development of the country.

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