

# Managing the competitiveness in CIS countries and Ukraine: the goal and conditions

Anna KUKHARUK\*, Julia GAVRISH\*\*, Danyil ZMITROVYCH\*\*\*

## Abstract

*The study is focused on the analysis of conditions for business development and the industrial enterprises' competitiveness formation in Commonwealth of Independent States (CIS). The study is based on several concepts – sustainable development, macroeconomic stability, “green economy”, and competitiveness. The article analyses the level of macroeconomic instability in a sample of CIS countries and Ukraine following the statistical approach and using the variation coefficient. The authors suggest calculating the indicators of stable development (SD-indicator) and business simplicity (SB-indicator) based on the international analytical reports data. Several CIS countries are visualized in SD and SB coordinates. The study defines the countries where the conditions for business competitiveness are to be improved due to the comparatively higher level of macroeconomic instability. The article will be interesting to scientists whose subject of research is the competitiveness of enterprises or the economic instability phenomena.*

**Keywords:** competitiveness, industrial company, CIS countries' development, macroeconomic stability, management goal, conditions for doing business, sustainable development, green economy

## Introduction

Despite the fact that the share (value added) of industry in world GDP is falling (28% in 2015 instead of 34% in 1995 (The World Bank, 2017)), this study refers to the development and competitiveness of an industrial company (IC) due to its significant role in ensuring economic growth in resource-based economy conditions which are typical for Commonwealth of Independent States (CIS). In

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CIS countries, a large share of working population is employed by the small and medium-sized enterprises: Moldova - 57%, Tajikistan - 49%, Russia – 25%. In Ukraine, this share is 40% (Executive Committee of the Commonwealth of Independent States, 2016, p. 54).

The problems faced by small and medium manufacturers in countries-participants in the CIS are largely similar: there is a need to improve the business climate and small business lending terms. The level of competitiveness of CIS countries is not high compared to European countries in areas such as market infrastructure and macroeconomic stability. Therefore, new business opportunities are followed by a serious challenge: it is becoming increasingly difficult for small and medium-sized companies to create their competitive advantages and compete in target markets. An average enterprise is faced with a double challenge: on the one hand, there is a need to optimize costs and improve the quality of manufactured products, on the other hand, it is necessary to adhere to social responsibility principles and resource saving.

In light of the foregoing, the main research issue is to clarify the conditions for business development and formation of competitive advantages of industrial enterprises in a resource-based economy under macroeconomic instability influence. Considering the above mentioned, there is a need to clarify the goal, principles, and conditions of management of the IC's competitiveness in an unstable market environment taking into account the features of CIS economic development. Hence, the aim of this article is to gain the better understanding of the goal and conditions for managing companies' competitiveness under the influence of globalization and market instability.

## 1. Methodology

The sample includes several countries selected on the basis of completeness and availability of data for analysis. Since, at the moment, Ukraine has an objectively ambiguous status with respect to participation in the CIS, in the article, the country is mentioned in addition to the core countries-participants due to legal peculiarities of membership. Further arguments are formulated taking into account the significant differences in the economy of countries described in the work of Kurmanalieva and Fedorov (2012) as follows:

Group 1. Energy exporters (Russia, Kazakhstan, Azerbaijan, and Turkmenistan) have a significant export to GDP ratio, a positive balance of trade and a current account surplus. The share of raw materials exports in budget revenues is high. These countries have financial reserves which were accumulated during the favourable part of the 2000s, which however reduced considerably during the 2008-2009 crisis.

Group 2. The economies of Armenia, Moldova, Kyrgyzstan and Tajikistan are financed, to a considerable extent, by remittances from labour migrants and with

the support of diasporas. Although the majority of these countries have certain (mineral and/or agricultural) resources, they are not large enough to make exports determine economic dynamics.

Group 3. Belarus, Uzbekistan, and Ukraine can be included in the third group. These countries have a diversified structure of exports and a considerable share of products with a relatively high level of processing, while they still have considerable raw materials exports. Their foreign balances are historically better than those in the second group (Kurmanalieva and Fedorov, 2012, p.122-123).

The methodology of the study includes general scientific methods, the main ones are: macroeconomic aggregation, systematization, situational and comparative analysis (are used for the definition of the economic conditions for doing business in the selected countries); concretization (used for identifying the management goal and expanding the list of principles for managing the competitiveness of an industrial company); graphical visualization method (used in the development of identification of CIS countries' and Ukraine's positions in coordinates of stable development); method of generalization (for suggesting two stable development indicators). In addition, we have used the methods of the statistical observation and time series analysis (to collect and analyse data concerning actual problems of trade balance value variance in certain states as an example of the unstable economic process).

One of the important components of the study is the CIS countries macroeconomic instability assessment. This calculational and analytical part is expedient for the quantitative description of the conditions for the formation of competitive advantages of enterprises. In such a research direction as the economic environment instability and dynamism, the scientific contribution was made by such scholars as Ansoff, Duncan, Emery, and Trist.

Ansoff (1989) has identified the possibility of a differentiated approach to the evaluation and analysis of environmental dynamism and suggested three groups of methods for determining future changes, namely: forecasting, modelling, and expert evaluation. Duncan (1979) has developed a two-dimensional matrix of environmental assessment, to determine its degree of difficulty (the first dimension) and dynamism (the second dimension).

Emery and Trist (1965, 1973) published a fundamental work on the theory of the dynamism of the environment and, following a systematic approach, highlighted four types of economic environment of the organizations: (a) placid, randomized environment; (b) placid, clustered environment; (c) disturbed-reactive environment; and (d) turbulent fields.

Ukrainian researchers have published scientific works focused on to the assessment of macroeconomic instability, as well. Noteworthy is the work of Drin (2015), who summarized the results of the studies on that subject and suggested using the statistical instruments, the coefficient of variation in particular, to

evaluate the level of economic instability. We agree with the author in terms of the usefulness of this indicator for two reasons:

- 1) an expert evaluation, besides requiring the involvement of a significant number of professional experts, is characterized by a high level of subjectivity.
- 2) a two-dimensional matrix of Duncan (1979) is an objective method of investigation at the micro level, but does not allow the comparison between business environment developments in several countries with different economic mechanisms.
- 3) the statistical methods make it possible to quantify the fluctuations of economic indicators, and the analysis of variance, including the calculation of the quadratic coefficient of variation, is the most common and developed by scientists.

Thus, to analyse the level of economic instability in CIS countries, we use the variation coefficient (Yerina and Palian, 1997) i.e. the ratio of the standard deviation to the mean of the sample. The scale for interpretation of the variation coefficient value is shown in Table 1.

**Table 1. Variation coefficient value interpretation**

No	The level of variance (instability)	Ratio (modulo), %
1	High	60 or more
2	Significant	34 - 59
3	Low	33 or less

*Source:* represented by the author on the basis of Yerina and Palian (1997, p. 83); Berezhnaya, Kolyadov and Tarasenko (2014, p. 9)

The theoretical basis of our research includes the scientific papers, analytical reports of international organizations concerning problems of world and CIS economic development, and proceedings of the results of a CIS Council of Heads of State meeting.

The main sources of quantitative indicators are the official statistical websites, the database of the Ukrainian non-governmental organization World Data Center for Geoinformatics and Sustainable Development, the World Bank data catalogue.

## 2. Brief recent literature review

### 2.1. A concept of competitiveness

Problems of competition and companies' competitiveness management have been the research issue for such scientists as Porter, Ketels and Delgado

(2007, 2008), Bartling, Fehr, Marechal and Schunk (2009), Connor (2003), Diaz-Chao, Sainz-Gonzalez and Torrent-Sellens (2016), Flak and Glod (2015), Man, Lau and Chan (2002), Neary (2006), Porter (2008), Flagman, Lu, Shen and Jewell (2007), Wint (2003). The mentioned authors have built the theoretical basis for further research related to enhancing competitiveness on the microeconomic and macroeconomic level. An important contribution to the development of theoretical and methodological foundations of the industrial enterprises' management problems in the context of enhancing their capacity to compete has been accomplished by Ukrainian scientists such as Gerasymchuk (2008), Gavrish, Grytsenko and Grygorova (2008), Illiashenko (2014), Nykolyuk (2011, 2014), Yastremska and Gerashchenko (2013) and others.

The interpretation of competitiveness as the characteristics of an enterprise in the scientific literature should be characterized by some ambiguity. Certain definitions of the essence of this concept are as follows:

- the ability of companies to manage effectively their own and borrowed resources in a competitive market (Porter, 2008).
- a potential or achieved economic capacity of an enterprise for effective long-term activity in the relevant environment (Klimenko, 2008, p. 330);
- company's competitive production facilities and steady financial activities (Fatkhutdinov, 2002, p. 6);
- characteristics of the enterprise which reflects the success of its dynamism with regard to economic processes and phenomena (Nykolyuk, 2011, p. 248);
- integrated characteristic of a certain competitive market [...] which objectively reflects the sum of its significant comparative advantages in operation areas [...] and allows the company to take an appropriate market position (Panasenکو, 2012, p. 274);
- the ability of the enterprise to dominate among other enterprises, manufacture, supply, and sell products (Salyp, 2012, p. 77);
- the ability of companies to get above average returns in a market where there are both domestic and foreign competitors (Wint, 2003).

The above definitions are different, but similar in nature, as authors understand the competitiveness of the company as its ability to achieve superiority over the competitor. Scientists determine actions that lead to the achievement of such a superiority depending on the particular approach to business success sources.

We agree with Ketels, who notes in "Review of competitiveness frameworks":

Definitions of abstract concepts like competitiveness are never true or false. They can, as conceptual tools, only be evaluated with regards to their ability to shed light on the particular issues that they are being proposed to address. This somewhat abstract but fundamental insight has often been lost in the debate about competitiveness as a concept (Ketels, 2016, p. 7).

Moreover, there are several approaches to a concept of competitiveness definition that should be named (summarized by the author):

- the system approach (considers the competitiveness as a system category, i.e. the enterprise's characteristic which includes interrelated and interdependent partial characteristics);
- the process approach (considers the competitiveness as the goal of a continuous competitive advantage creating process at each stage of the company life cycle);
- the strategic approach (according to which competitiveness is determined by the ability to create and maintain a sustainable competitive advantage as a result of an effective competitive strategy).

There are also many different approaches to the definition of indicators and factors of competitiveness, which are named according to the key indicator (resource-based, innovation, financial, environmental approach, and so on).

In our view, competitiveness is the ability of a company to implement the existing and potential operational, financial, and managerial capabilities to compete for target markets by consistently effective use of tangible and intangible resources towards customer satisfaction and for sustainable competitive advantages creation in conditions of economic instability. This definition takes into account the importance of gaining company's ability to maintain its superiority over time. The following research findings are based on the mentioned interpretation of this concept.

Despite the fact that the main task of our study is to analyse the macroeconomic conditions for competitiveness and development of enterprises, we consider it appropriate to mention the related studies on competitiveness at the macro level. One of the relevant research areas is the analysis of countries' competitiveness level due to various aspects of their development. Such an approach was introduced and implemented by McArthur and Sachs (2002) with suggesting Growth Competitiveness Index (GCI). As it was noted in "The Global Competitiveness Report 2008-2009",

An important milestone was reached in 2000, when Professor Jeffrey Sachs introduced the Growth Competitiveness Index, based on a stronger academic foundation in economic growth theory. Professor Michael Porter joined the effort in 2000, introducing a companion Business Competitiveness Index (BCI) focused on the microeconomic drivers of prosperity. In 2004, Professor Xavier Sala-i-Martin created a Global Competitiveness Index (GCI), which included both macroeconomic and microeconomic factors of competitiveness (World Economic Forum, 2008, p. 43).

Interrelations between the micro and macro levels of competitiveness were well highlighted by Porter, Ketels, and Delgado (2007) in "Global Competitiveness Report 2007-2008". The scientists rank countries by BCI and

claim that “productivity ultimately depends on the microeconomic capability of the economy, rooted in the sophistication of companies” (Porter, Ketels and Delgado, 2007, p. 51).

## 2.2. Macroeconomic stability as a key business success factor

Keynes’s concept of macroeconomic instability (Keynes, 2007) was considered in the recent works of Bhattacharjee, Higson, Holly and Kattuman (2009), who examined how macroeconomic instability affects the risk of bankruptcy and liquidation, Kurmanalieva and Fedorov (2012), who investigated the impact of global financial and economic instability on the CIS, and N. Skorobogatova (2016), who highlighted concepts of appearance and elimination of macroeconomic instability, as well as the Keynesian approach to overcoming issues in Ukraine’s macroeconomic instability.

Such international surveys as The Global Competitiveness Report (World Economic Forum, 2016), Doing Business (World Bank Group and International Bank for Reconstruction and Development, 2015), The Global Manufacturing Competitiveness Index (Deloitte Touche Tohmatsu Limited, Global Consumer and Industrial Products Industry Group, 2016) reflect features of world economic development and often include an analysis of macroeconomic stability. Macroeconomic environment, the 3<sup>rd</sup> pillar of The Global Competitiveness Index, provides an analysis of this phenomenon. As noted in the relevant report, the stability of the macroeconomic environment is important for business and, therefore, significant for the overall competitiveness of a country (World Economic Forum, 2016, p. 35).

For CIS countries, the issue of macroeconomic stability is particularly acute.

The economic recession in 2015–2016 was caused by a combination of external and domestic factors. The former included tighter monetary policy in the U.S., subdued global growth and a collapse in commodities prices. The latter included the CIS economies’ extreme macroeconomic fragility, which is a legacy from past crises, a relatively poor business climate, structural distortions, weak public finances and government deficits. On top of that, the conflict between Russia and Ukraine has inflicted severe economic pain not only on these two economies themselves, but also on their neighbors (Aceves, 2017).

Macroeconomic instability has ambiguous effects on the economic and social development of a country, which is projected through the development of GDP, one of the most significant macroeconomic indicators (Skorobogatova, 2016). In a resource-based economy, industrial enterprises are the main driving force for a country's economic progress, although the instability of the environment has a direct negative effect on their financial position and the

possibility of survival. Moreover, the financial instability is a characteristic of CIS countries as in these countries the position of the national currency is weak in contrast with the most common types of currencies in the world.

### 3. Key research findings

#### 3.1. Managing the competitiveness in resource-based economy conditions

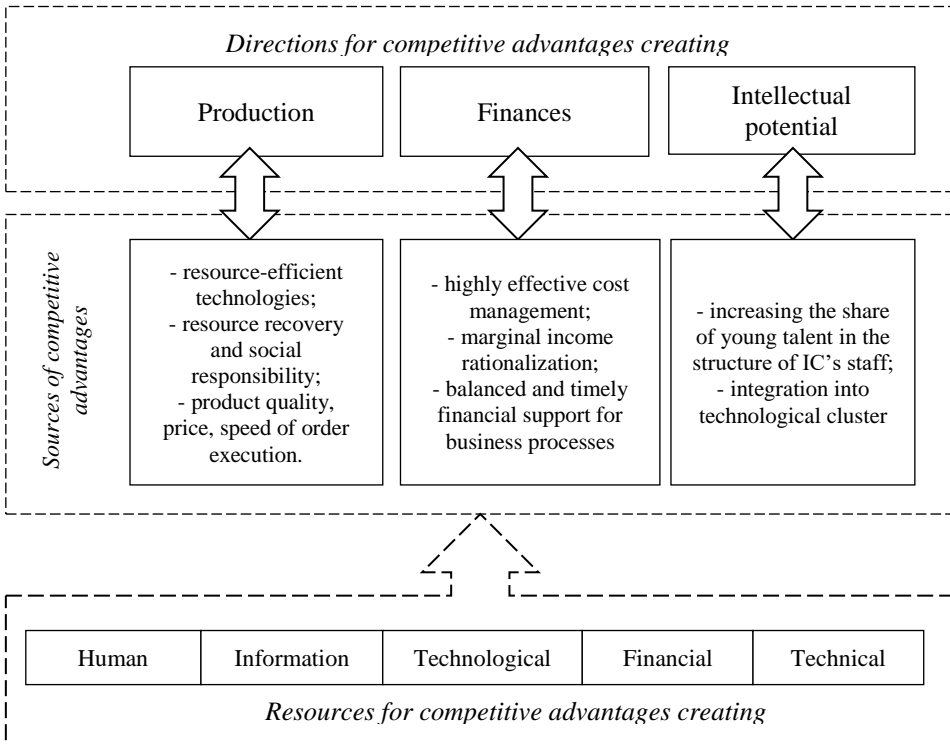
Without any doubt, a resource can become a source for creating the competitive advantage, especially for an industrial enterprise which functions in resource-based economy conditions. As it is noticed by the Interstate Statistical Committee of the CIS (the official website), CIS countries take one of the first places in the world by volume of explored resources of gas, petroleum, coal, iron and manganese ores, many non-ferrous metals, potassium salts, and other important types of minerals. Therefore these states are characterized by a significant industrial potential. The agricultural sector and industry are traditional areas of CIS countries activity, therefore their economic development depends entirely on the efficiency of resource use.

The management of IC's competitiveness should be considered as a system of measures to influence a company's capacity to compete and bring it to the desired or optimum, as well as for sustaining it in the future. The ability to create the sustainable competitive advantages is the real force for small and medium-sized businesses in conditions of financial crisis, and a source of sustainable economic growth. Thus, the *goal* of competitiveness management is to bring it to the desired or optimal level. The desired level of competitiveness refers to the maximum possible (equals to the sustainable leading market position). The optimum of competitiveness, in our view and in accordance with the main statements of a resource-based approach to the performance (Bowman, 2001; Grant, 1991), is such an ability to compete that meets both the company's need for customers and resources and the general principles of "green" economy (Allen, 2012).

The management of competitiveness of industrial enterprises is a complex and difficult process. The management of competitiveness in a resource-based economy should be aimed primarily at strengthening IC's competitive advantages in the field of resource efficiency and technical and technological capacity. However, it is quite important for the manager of IC to understand that the post-industrial world trends are to be considered as well. At the present time, the traditional approach to creating competitive advantages on the quality criteria, productivity, and price is not enough. It becomes increasingly important to develop all kinds of sources for competitive advantages, including intellectual potential as an instrument for innovation activity (Figure 1).



**Figure 1. Key directions, sources, and resources for competitive advantages creating**



Source: own representation

As shown in Figure 1, there are three main directions for creating the competitive advantages of an IC. The first direction (production) involves optimizing the process of material resources exchange between an industrial enterprise and the economic environment. Within this area, the company should meet the principles of resource saving and corporate responsibility. The second direction (financial) involves adjusting the external cost-effective financing. By cost-effective financing, we mean attraction of investment to company's potentially profitable production projects. The third direction (creative) provides the formation of intellectual capital, attracting highly qualified personnel, as well as cooperation with universities and recruiting agencies to attract young professionals (graduates) and skilled workers in the manufacturing process.

### 3.2. Macroeconomic instability as the reason to improve managerial approach for enhancing IC's competitiveness

The level of economic instability in CIS countries could be evaluated by a *variance* of several key macroeconomic indicators, such as export and import value, gross domestic product per capita (GDP per capita), foreign direct investment (FDI), inflation rate (IR), unemployment rate (UR) for instance. We have analyzed the dynamics of the above mentioned macroeconomic indicators and have obtained the results that are shown in Table 2 (the instable rates) and Annex 1 (the sustained rates).

**Table 2. Instable indicators value in the selected<sup>1</sup> CIS countries and Ukraine**

Indicator	Country <sup>2</sup>	Value						Variation, % modulo
		2010	2011	2012	2013	2014	2015	
<b>IR, consumer prices (%)</b>	ARM	8,18	7,65	2,56	5,79	2,98	3,73	42,94
	AZE	5,67	7,85	1,01	2,38	1,39	4,17	65,06
	BLR	7,74	53,23	59,22	18,31	18,12	13,53	70,84
	KAZ	7,12	8,35	5,11	5,84	6,72	..	40,27
	KGZ	7,97	16,50	2,69	6,61	7,53	6,50	52,47
	RUS	6,84	8,43	5,08	6,78	7,81	15,53	39,81
	TJK	6,42	12,43	5,83	5,01	6,10	5,71	36,17
	UKR	9,38	7,96	0,56	-0,28	12,19	48,72	126,57
	MDA	7,35	7,61	4,64	4,64	5,09	9,68	28,75
<b>FDI (current mln US\$)</b>	ARM	-0,52	-0,44	-0,48	-0,32	-0,39	-0,17	30,30
	AZE	-0,33	-0,93	-0,81	-1,14	-2,44	-0,84	60,48
	BLR	-1,34	-3,88	-1,31	-1,98	-1,79	-1,55	44,74
	KAZ	-3,67	-8,58	-11,86	-8,03	-4,77	-3,39	45,41
	KGZ	-0,42	-0,70	-0,31	-0,63	-0,24	-1,01	47,67
	RUS	9,45	11,77	-1,77	17,29	35,05	15,71	75,59
	TJK	-0,08	-0,16	-0,24	-0,13	-0,31	-0,43	52,61
	UKR	-5,76	-7,02	-7,20	-4,08	-0,30	-3,01	53,11
	MDA	-0,28	-0,31	-0,25	-0,25	-0,31	-0,23	12,02

*Source:* represented and calculated by authors on the basis of (World Bank, 2017; World Data Center for Geoinformatics and Sustainable Development, 2017).

As shown in Table 2, the variance of foreign direct investment and the inflation rate in the CIS is significant (34 - 59 %) or high (60 % or more), depending on the particular economy. As a matter of fact, the Republic of

<sup>1</sup> The data of Turkmenistan and Uzbekistan are not accessible.

<sup>2</sup> We use the ISO Alpha-3 codes to indicate countries in Table 2.

Moldova has sustained rates; however, there are negative FDI and IR values and on the whole it is difficult to interpret the respective variance rates. Since investment development and the inflation rate have a significant impact on a country's economic potential and business competitiveness, we can conclude that it is a conundrum for certain countries which are characterized by a significant FDI and IR instability to develop a brand new governmental strategy aimed at reducing economic unsteadiness.

As it was noted in analytical materials "Development and activities of Commonwealth of Independent States in 2015",

Nonetheless, the difference between the competitiveness of an enterprise and that of a nation is that the enterprise will cease to exist if it remains uncompetitive for long whereas a nation never goes out of business no matter how badly it is managed or how uncompetitive it is. When a nation loses its competitiveness, this is reflected in its deteriorating welfare conditions rather than elimination from the market (UNCTAD Secretariat, 2005, p. 4).

### **3.3. The CIS: conditions for doing business and competitiveness**

The opportunity to find and solve the current problem of the enterprise at the moment of its appearance depends on the conditions of doing business as well as on the general economic and political situation. At the country level, it is possible to formulate some conclusions about the latter based on the analysis of global comparative reviews such as "Global Competitiveness Index" (World Economic Forum, 2016) due to its traditional 12 pillars of competitiveness. In order to formulate conclusions about the economic, political, and social factors for business (enterprise level), in our opinion, it is appropriate to use the data of "Doing Business 2016" (World Bank Group and International Bank for Reconstruction and Development, 2015). Using its data, we can generalize the economic, social, and political conditions for entrepreneurship in the selected countries of Commonwealth of Independent States (CIS) and Ukraine (Table 3).

As shown in Table 3, there are different conditions for entrepreneurship in mentioned CIS countries. The leader of the above ranking is Armenia (general score is 35), and the last position is taken by Ukraine (its general score is 83). Thus, as the economic conditions for doing business are different, there is accordingly a different level of significance and importance of observance of management sensitivity and management flexibility principles in each region. At the same time, it is advisable to identify the country where IC's sensitivity and flexibility should be created quickly.

**Table 3. Ease of Doing Business Ranking of selected CIS countries<sup>3</sup>**

Indicator	Country's position in the rating (where the 1 <sup>st</sup> position is the highest)						
	Ukraine	Azerbaijan	Armenia	Kazakhstan	Kyrgyz Republic	Moldova	Russian Federation
Ease of Doing Business Rank	83	63	35	41	67	52	51
Starting a Business	30	7	5	21	35	26	41
Dealing with Construction Permits	140	114	62	92	20	170	119
Getting Electricity	137	110	99	71	160	104	29
Registering Property	61	22	14	19	6	21	8
Getting Credit	19	109	42	70	28	28	42
Protecting Minority Investors	88	36	49	25	36	36	66
Paying Taxes	107	34	41	18	138	78	47
Trading Across Borders	109	94	29	122	83	33	170
Enforcing Contracts	98	40	28	9	137	67	5
Resolving Insolvency	141	84	71	47	126	60	51

*Source:* represented based on the data of (World Bank Group and International Bank for Reconstruction and Development, 2015)

To do this, we suggest grouping all countries of the sample shown in Table 3 by the level of necessity to create sensitivity and flexibility of management due to the level of such main indicators from “The Global Competitiveness Report 2016–2017” (World Economic Forum, 2016) as follows: the stability of the macroeconomic environment, and financial market development (Table 4). The financial market development is appropriate to choose for further analyses due to our previous analysis and the obtained data shown in Table 2 and Annex 1 (only the financial rates such as inflation and foreign direct investment are characterized by significant or high variation).

As shown in Table 4, there is a different level of the macroeconomic environment stability and financial market development in the mentioned countries. The leader of the above ranking is Azerbaijan (39/97), and the last position is taken by Ukraine (128/130).

<sup>3</sup> The sample includes countries which are fully represented in relevant report.

**Table 4. Macroeconomic environment and financial market development of CIS countries and Ukraine**

Indicator	Country's position in the rating (where the 1 <sup>st</sup> position is the highest)						
	Ukraine	Azerbaijan	Armenia	Kazakhstan	Kyrgyz Republic	Moldova	Russian Federation
The stability of the macroeconomic environment	128	39	88	69	113	100	91
Financial market development	130	97	90	104	96	129	108

Source: own representation based on the data of «The Global Competitiveness Report 2016–2017» (World Economic Forum, 2016)

To rank countries by the general level of economic stability and to provide an opportunity for further analysis we suggest calculating an appropriate indicator – the average level of stable development of the country (*SD*-indicator) using a formula of the following type:

$$SD = \sum_{i=1}^n x_i \gamma_i, \quad (1)$$

where *SD* – the average level of stable development of the country, rate;  $x_i$  – the component (partial indicator) of *SD*;  $\gamma$  - the validity of an appropriate *x*-indicator.

The mathematical roots of the above formula (1) are the following:

- 1) the indicator of stable development is an additive, complex, includes the calculation of several partial indicators;
- 2) the use of formula (1) is accompanied by the following condition:

$$\sum_{i=1}^n \gamma_i = 1 \quad (2)$$

Partial *x*-indicators from (1) are those mentioned in Table 4, namely:

- 1) the stability of the macroeconomic environment;
- 2) the financial market development.

As clarified in Table 4, the 1<sup>st</sup> position of a country by both criteria is the highest (the leading one), therefore, the higher the *x*-indicator, the less country's development stability. Hence, to calculate the level of stability and subsequent ranking of countries by the *SD*-indicator, it is suggested to use the reverse partial indicators:

$$SD = \frac{1}{SME} \times \gamma_1 + \frac{1}{FMD} \times \gamma_2, \quad (3)$$

where *SME* – the level of stability of macroeconomic environment, rank; *FMD* – financial market development, rank;  $y_1$  – validity of *SME* for *SD*;  $y_2$  – validity of *FMD* for *SD*;  $y_1 = 0,6$ ,  $y_2 = 0,4$  (values are based on the evaluation of the validity by expert method).

In view of the above, by the average level of a country's stable development we understand the opportunity of a particular country to function without any significant structural or value changes in the macroeconomic environment and the financial mechanism. The concept "opportunity" is used because the partial indicators which are the basis for *SD*-indicators calculation are rates from the appropriate reports, i.e. they have comparative nature. The *SD*-indicator may be used for a quantitative analysis of the conditions for doing business in a particular country. To represent each country in the coordinates of stable development (the first dimension) and ease of doing business (the second dimension), it is necessary to bring the second indicator (*Ease of Doing Business Rank* represented in Table 3 earlier) to a form suitable for comparison with the first one. Thus, as the maximal rank of ease of doing business is the first position in an appropriate rating, we should calculate the reverse rank to those shown in Table 3 in order to satisfy the condition: the higher the rank, the higher the simplicity of doing business. We suggest using the latter combination of words as the name of the reverse rank which is to be calculated as follows:

$$SB = \frac{1}{EDBR} , \quad (4)$$

where *SB* – the level of simplicity of doing business; *EDBR* – ease of doing business rank (from Table 3).

**Table 5. Evaluation of results for *SD* and *SB* indicators**

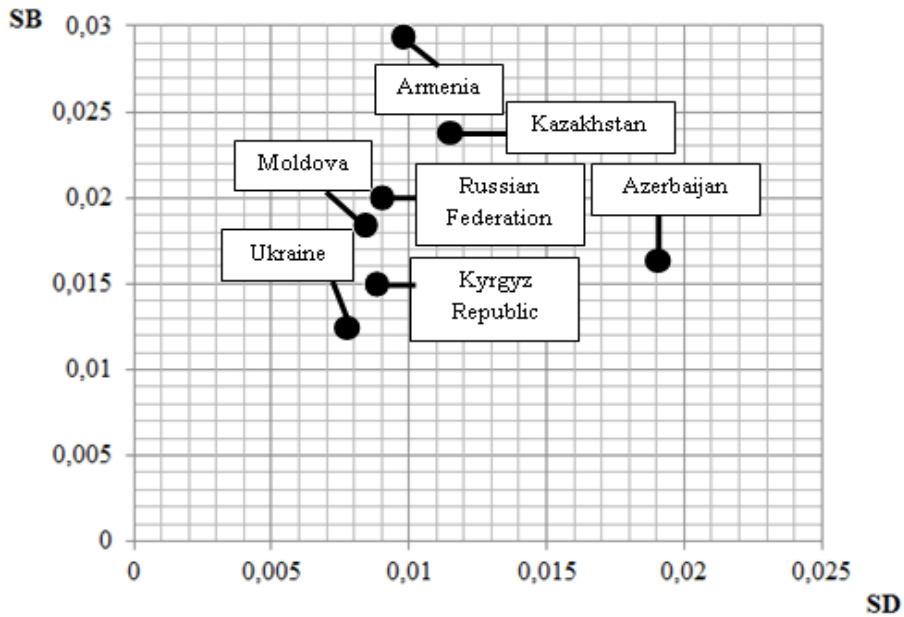
Indicator	Value (0.029=max)						
	Ukraine	Azerbaijan	Armenia	Kazakhstan	Kyrgyz Republic	Moldova	Russian Federation
<i>SD</i>	0.008	0.020	0.011	0.013	0.009	0.009	0.010
<i>SB</i>	0.012	0.016	0.029	0.024	0.015	0.019	0.020

Source: own calculations

The results of the calculation with formulas (1) and (2) of the *SD* and *SB* indicators by countries are shown in Table 5. As both indicators noticed in Table 5 are positive factors for managing *IC*'s competitiveness in a particular country, we consider that it is desirable that the value of *SD* and *SB* increases. Thus, it is

possible to visualize all countries in coordinates of these indicators simultaneously (Fig. 2).

**Figure 2. CIS countries and Ukraine in coordinates of stable development and simplicity for doing business**



Source: own representation

As shown in Figure 2, there are two leaders in our rating by conditions for ICs to improve their competitiveness: Armenia (by SD-indicator, stable development level) and Azerbaijan (by SB-indicator, doing business simplicity). Ukraine takes the last position by both indicators. Using the obtained results, we can assume that it is quite important to improve the Ukrainian, Russian, Moldovan, and Kyrgyz macroeconomic stability (due to the SD-indicator) as well as the conditions for business development (due to the SB-indicator).

**Conclusions**

The aim of this article was to gain a better understanding of the goal and conditions for managing companies’ competitiveness under the influence of globalization and market instability. The research is based on several concepts – sustainable development, macroeconomic stability, “green economy”, competitiveness.

The structural changes that occur in the global production and consumption create new conditions for doing business – the main engine of economic growth. In the era of economic and environmental dynamism, the ability of enterprises to react quickly and effectively at destabilizing the negative factors of the external environment, as well as to observe the principles of corporate responsibility, becomes especially important. That is why, in the article, it is determined that the goal of management of competitiveness is to bring it to the desired or optimal level, where the desired level equals to the sustainable leading market position, and the optimum of competitiveness is the ability to compete that meets both the company's need for customers and resources and the general principles of “green economy”.

A sample of the study was made up by several CIS countries – Ukraine, Azerbaijan, Armenia, Kazakhstan, Kyrgyz Republic, Moldova, and Russian Federation. The investigation of analytical reports and statistical information has shown that the conditions for doing business and forming the competitiveness of industrial enterprises vary by countries. To determine the conditions for doing business in these countries, we have analysed such indicators as the level of macroeconomic instability, the financial market development, and the ease of doing business rank. The first two indicators were used to calculate the complex indicator of stable development (SD-indicator) as the sum of reverse values to the corresponding countries' positions in the “Global Competitiveness Report 2016-2017”. The ease of doing business rank was brought to a form suitable for comparison with the indicator of stable development by calculation of the reverse value which shows the business simplicity level (SB-indicator).

According to the result of this visualization, it is determined that, in some countries (Ukraine, Russian Federation, Moldova, and Kyrgyz Republic), there is a higher level of macroeconomic instability and a relatively low level of simplicity of doing business, and therefore the sustainable competitive advantages formation is complicated for enterprises.

The scientific novelty of the study resides in the development of the theoretical aspects of management in the field of industrial companies' competitiveness enhancing in CIS countries under the specific economic, political, and social conditions of their development. The suggested statements will contribute to the improvement of the managerial strategy of ICs in an unstable market environment.

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## Annex 1

**Table 1. The sustained macroeconomic indicators in CIS countries and Ukraine**

Indicator	Country	Value						Variance, % modulo
		2010	2011	2012	2013	2014	2015	
<b>GDP per capita (thousand US\$)</b>	ARM	3.12	3.42	3.57	3.72	3.86	3.49	13.44
	AZE	5.84	7.19	7.39	7.81	7.89	5.50	13.10
	BLR	5.82	6.31	6.72	7.72	8.03	5.74	13.42
	KAZ	9.07	11.63	12.39	13.89	12.81	10.51	11.89
	KGZ	0.88	1.12	1.18	1.28	1.28	1.10	18.14
	RUS	10.67	14.23	15.04	15.55	14.05	9.09	13.09
	TJK	0.74	0.84	0.96	1.05	1.11	0.93	18.29
	TKM	4.48	5.72	6.80	7.48	8.20	6.67	19.58
	UKR	2.97	3.57	3.86	4.03	3.10	2.11	14.67
	UZB	1.38	1.56	1.74	1.91	2.04	2.13	10.84
	MDA	1.63	1.97	2.05	2.24	2.24	1.85	3.91
<b>Industry, value added (bln US\$)</b>	ARM	3.04	3.06	2.96	2.97	2.93	2.71	24.30
	AZE	31.74	40.71	40.67	42.74	40.63	18.00	13.77
	BLR	20.35	22.41	23.86	26.92	27.67	18.84	11.87
	KAZ	60.11	71.78	75.51	79.74	73.53	56.89	12.20
	KGZ	1.26	1.70	1.47	1.82	1.78	1.56	16.70
	RUS	457.47	593.65	622.23	637.84	571.98	388.70	16.89
	TJK	1.41	1.28	1.51	1.61	2.06	1.93	20.24
	TKM	13.35	19.26	23.41	24.86	26.41	20.39	22.60
	UKR	35.23	40.97	43.14	41.37	30.46	20.24	18.92
	UZB	11.93	13.79	15.68	17.61	19.31	21.07	15.27
	MDA	0.77	0.98	1.02	1.14	1.16	0.80	13.44
<b>Agriculture value added per worker (constant 2010 thousand US\$)</b>	ARM	10.64	12.38	13.74	15.10	16.37	19.09	18.81
	AZE	2.70	2.85	3.03	3.19	3.11	3.34	6.93
	BLR	11.74	13.04	14.46	14.47	15.56	15.81	9.97
	KAZ	5.60	7.15	5.97	6.73	6.91	7.26	9.24
	KGZ	1.64	1.68	1.71	1.77	1.77	1.90	4.78
	RUS	8.16	9.54	9.69	10.43	10.94	11.59	10.96
	TJK	1.43	1.53	1.68	1.84	1.88	1.94	10.88
	TKM	3.63	..	..	..	..	..	-
	UKR	4.20	5.18	5.15	6.02	6.38	6.31	14.00
	UZB	2.62	2.80	3.01	3.24	3.50	3.78	12.60
	MDA	3.50	3.87	3.25	5.01	5.70	5.16	20.80
<b>Imports of goods, services and primary income (bln US\$)</b>	ARM	5.13	5.62	5.82	6.05	6.16	4.87	8.38
	AZE	14.38	21.59	22.81	24.65	23.97	21.73	15.70
	BLR	38.40	49.81	51.44	49.93	47.11	35.75	13.38
	KAZ	66.34	81.30	91.75	90.73	81.67	58.80	15.43
	KGZ	4.11	5.55	6.62	7.10	6.79	4.98	18.32
	RUS	406.13	513.14	560.12	591.43	544.03	355.93	17.20
	TJK	3.38	4.22	5.11	5.26	4.31	3.53	16.45
	TKM	..	..	..	..	..	..	-
	UKR	76.33	103.08	110.91	108.15	77.08	54.98	23.10

	UZB	..	..	..	..	..	..	-
	MDA	4.47	5.92	5.90	6.32	6.16	4.79	12.55
<b>Exports of goods, services and primary income (bln US\$)</b>	ARM	3.26	3.81	4.03	4.42	4.53	4.02	10.38
	AZE	28.91	38.06	37.84	36.94	34.23	21.29	18.41
	BLR	29.81	47.24	52.80	44.90	44.20	33.41	18.92
	KAZ	68.21	91.76	93.85	93.21	88.96	54.91	18.22
	KGZ	2.27	3.24	3.53	3.86	3.31	2.62	17.07
	RUS	479.90	616.14	637.53	634.13	609.72	430.55	14.36
	TJK	2.25	2.95	3.53	3.73	3.19	2.56	17.01
	TKM	..	..	..	..	..	..	-
	UKR	70.34	89.14	93.60	89.49	70.94	52.16	18.78
	UZB	..	..	..	..	..	..	-
	MDA	2.72	3.67	3.76	4.19	4.07	3.29	13.70

*Source:* represented and calculated by the authors on the basis of (World Bank, 2017; World Data Center for Geoinformatics and Sustainable Development, 2017).