

# Competitiveness of the Company on the Market: Analytical Method of Assessment and the Phenomenon of the Impact of Corruption in Ukraine

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## Abstract

The purpose of the article is to substantiate the theoretical positions and develop practical recommendations for the development of tools for analytical assessment of the competitiveness of an enterprise, taking into account the influence of the corruption component. It has been established that the main inalienable structural components of the analytical assessment of the competitiveness of enterprises on the market are: 1) the efficiency of the enterprise (in four components: financial and economic efficiency, commercial efficiency, production-technological efficiency, social efficiency); 2) the competitiveness of the enterprise's products (includes calculation of such indicators as an integral indicator of product quality (useful effect), price of products, integral indicator of service quality and other additional (consumer) product parameters).

**Keywords:** Competitive Advantages; Competitiveness of the Enterprise; Corruption Risks; Enterprise; Method of Assessment of Competitiveness.

## 1. Introduction

Modern theory and practice of doing business proves that in existent market relations a high level of competitiveness of the enterprise is a key condition (component) to ensure its effective development and formation of prospects. Competitiveness and investment attractiveness of enterprises is the most important locomotive of competitiveness of industries and countries, the basis of their development (Falciola, Jansen & Rollo, 2020), (Skrynkovskiy, 2008), (Skrynkovskiy, 2011), (Maalouf, Abi Aad & El Masri, 2020). To ensure the competitiveness of the enterprise, it is methodologically important to integrate and model the performance indicators of enterprises according to new qualitative approaches in accordance with its strategic objectives and achievement of economic goals under certain spatio-temporal conditions.

Today economists and practitioners offer a significant list of approaches to assessing the competitiveness of an enterprise. The authors of scientific papers (Dluhopolska, 2014), (Levytska, 2013), (Shynkar, 2011) present the concepts and tools (parameters, criteria, methods) of analytical and graphic evaluation of the competitiveness of an enterprise, taking into account the peculiarities of its economic activity. Scientific papers (Dluhopolska, 2014) and (Levytska, 2013) consider the partial method of evaluating the competitiveness of an enterprise, which provides the graphical assessment of the competitiveness of products, and its interpretation,

according to various economic (price), marketing and consumer parameters of products, taking into account the ratio between them; (Shynkar, 2011) presents a comprehensive system of methods for assessing the competitiveness of an enterprise, which aims at simultaneous evaluation of the maximum range of areas and units of the enterprise with regard to its ability to develop in the strategic plane and create competitive advantages. The author (Horshkova, 2012) emphasizes that the choice of indicators, methods of their calculation, depend directly on such factors as the purpose of the analysis and evaluation, business sphere, available information (data, information), etc. However, in these works, the methodological and criterial support of the analytical method for assessing the competitiveness of enterprises on the basis of business indicators is not fully substantiated.

## 2. Literature Reviews

On the basis of the analysis of papers (Melnyk, 2010b), (Purlys, 2010), (Tsaritova, 2017), (Shved & Bila, 2017) it has been found out that scientists clearly state the existence of the relationship between the systems of economic diagnosis and assessment of the competitiveness of an enterprise. Along with it, according to the results of the study (Falciola, Jansen & Rollo, 2020), (Maalouf, Abi Aad & El Masri, 2020), (Salehi & Moghadam, 2019) it has been found out that multidimensional analysis of external factors, influencing the competitiveness of the enterprise allows to increase the information base for management decisions.

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This is a very positive aspect, but the authors (Falcicola, Jansen & Rollo, 2020), (Salehi & Moghadam, 2019), (Panchal & Krishnamoorthy, 2019) do not take into account the internal and external reserves of the enterprise in terms of resource constraints.

There is also no emphasis on the priority of the human (as a factor) according to factor and result characteristics, where: knowledge from a managerial point of view is a resource that provides effective business management, increases corporate profits, etc. (Panchal &

Krishnamoorthy, 2019), (An, Ri & Rim, 2019); knowledge management in the system «type of innovation - type of development» has a direct and significant impact on the competitiveness of the firm (An, Ri & Rim, 2019), (Mohamad & Mat Zin, 2019), (Bloodgood, 2019).

From here it is obvious that the basis for the selection of business indicators for assessing the competitiveness of enterprises is based on the factors of competitiveness (Gontareva et al., 2020), competitive advantages of the enterprise, the components of functioning of the organization, some unique product properties, etc. The conclusion is made about the lack of a unified and systematic approach in this direction.

The papers (Melnyk, 2010b), (Hetman & Shapoval, 2007), (Lutsii & Vesperis, 2010), (Shevchenko, 2008), (Tielietov & Letunovska, 2014) consider the methodological and methodical principles of analytical assessment of the competitiveness of an enterprise, which are based on a certain list of principles, clear meaningful definition and selection of business indicators, specific assessment methods, etc. In particular, the authors of (Shevchenko, 2008) recommend to use both interrelated and interconnected indicators for assessing the competitiveness of the enterprise, most of which, according to experts, are of little use in practice, have a high level of subjectivity and a lack of scientific substantiation. Along with it, we believe that the proposed analytical tools for assessing the competitiveness of enterprises have a certain cluttered look due to the use of methodological procedures which include duplication of certain business processes. However, a positive thing in this area is that the authors (Melnyk, 2010b) and (Hetman & Shapoval, 2007) provide quite clear content argumentation in view of the distinction between such key concepts as “enterprise competitiveness” and “product competitiveness”, since the assessment of product competitiveness is an integral part of the enterprise’s competitiveness assessment.

Analysis of literary sources suggests that, firstly, the thesis of the authors of work (Kuzmin & Horbal, 2005) “In spite of the need for a deep analysis of the competition and the enterprise’s own competitiveness, in practice such an analysis is rarely performed” remains relevant. Secondly, most often, in the methodological plan, the assessment of the competitiveness of the enterprise is reduced to an elementary interpretation of the aggregate estimation, which is obtained by the additive method. Ignoring more complex, including economic-mathematical, methods and approaches, which allow to take into account the connection between the

competitiveness of the organization and informal relations between the subjects of the market is present. In Ukraine, in particular, such relations are manifested in violation of the legislation on protection of economic competition (Skrynkovskyy & Chubenko, 2016) and corruption and corruption-related offenses (Pawlowski, Kramar & Skrynkovskyy, 2016). At the same time, it is worth noting that corruption in Ukraine, according to the evaluation of the experts of the anti-corruption organization Transparency International, taking into account the high profile corruption cases in Ukraine, covered in the media, is the most important negative factor, which not only hinders the development of competition and is an obstacle to the formation of competitiveness of enterprises, but also affects the economic growth of the business as a whole. In this context, it is important and appropriate to analyze the impact of the corruption phenomenon on the competitiveness of Ukrainian enterprises. All this, given the results of previous studies (Skrynkovskyy & Chubenko, 2016), (Pawlowski, Kramar & Skrynkovskyy, 2016), influenced the choice of direction and the formation of the final topic of the study.

### 3. Results

#### 3.1. Analytical assessment of the competitiveness of enterprises on the market

On the basis of the results of the performed research, it has been established that:

1. Effective development and formation of the prospect of any enterprise directly depends on its competitiveness and investment attractiveness (Melnyk, 2010b), (Pawlowski, 2017), which are under significant influence of the level of formation and development of the educational and professional capacity of its staff, practical aspects of the introduction (or use) of modern information systems and technologies at the enterprise (Isabekovna, 2013) and corruption risks in the field of management and administration (Hnylytska, 2017).

2. The competitiveness of the enterprise (*C*) on the market should be understood as:

1) A synthetic relative spatiotemporal parameter, which reflects the characteristics (or competitiveness) of products (*P*) and the efficiency of the (*E*) enterprise (in four components: financial and economic efficiency, commercial efficiency, production-technological efficiency, social efficiency (Pawlowski, 2017), which enable it to occupy the corresponding positions on the market of a certain level of concentration (*I*) (Melnyk, 2010b);

2) Its ability (possibility) to achieve specific competitive advantages over other enterprises on a certain (determined) market (Kuzmin & Horbal, 2005).

At the same time, the work of (Kuzmin & Horbal, 2005) deserves special attention. It states that in order to assess the competitiveness of an enterprise (*C*) it is expedient to use the formula (1):

$$C = \sum_{j=1}^m \sum_{i=1}^n \left( \frac{V_i}{V} \right) b_j \times C_{ij} \rightarrow 1, \quad (1)$$

where  $V_i/V$  (or  $a_i$ ) is the relative (specific) weight of the product (products) of the enterprise in the volume of sales for the analyzed period (determined by the shares of the unit  $i=1, 2, 3 \dots n$ );  $V_i$  – sales volume of the goods for the analyzed period, monetary unit;  $V$  – total sales of products of the enterprise for the same period, monetary unit;  $b_j$  – indicator of the value of the market in which the product is

sold (for developed countries, the value of markets is recommended for 1,0, for other countries – 0,7, for the home market – 0,5);  $C_{ij}$  – the competitiveness of the  $i$ -commodity in the  $j$ -market ( $j=1, 2, 3 \dots m$ ) or structural component  $P$  according to the interpretation of the essence of the category (concept) “competitiveness of the enterprise” (Kuzmin & Horbal, 2005).

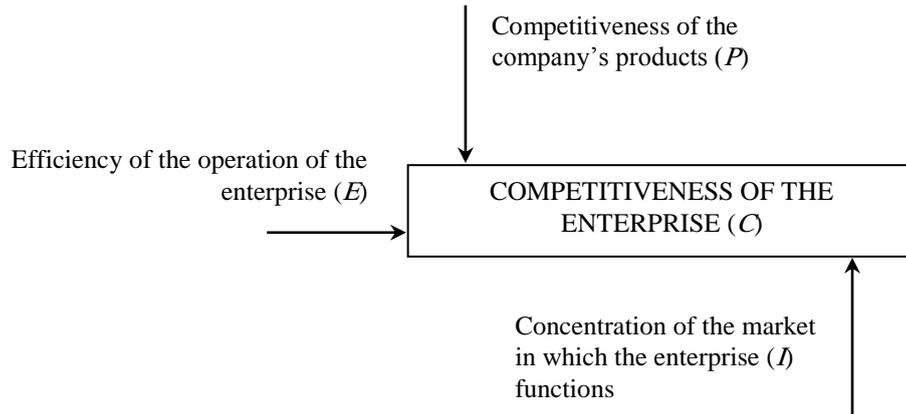


Fig. 1. Components of the analytical assessment of the competitiveness of the enterprise in the market, sources: formed on the basis by (Melnyk, 2010b)

Considering the abovementioned and taking into account the conceptual orientation of the problem assessment, Figure 1 presents the main components of the analytical assessment of the competitiveness of the enterprise in the market.

In this context (Figure 1), the results of the research of scientific works (Melnyk, 2010b), (Pawlowski, 2017), (Zaika & Gridin, 2016) prove that it is expedient to evaluate the efficiency of the activity ( $E$ ) of the enterprise (within the limits of the abovementioned four components) according to the specific business indicators (coefficients, parameters) according to the economic-mathematical model – formula (2) drawn up by the authors for the results of scientific and practical research (Melnyk, 2010b), (Pawlowski, 2017), (Zaika & Gridin, 2016), (Protsiuk, Tsybul'sky & Tsyuh, 2013):

$$E = f \left\{ \begin{array}{l} E_{fe} = f(p_{fe1}, p_{fe2}, p_{fe3}, p_{fe4}) \\ E_c = f(p_{c1}, p_{c2}, p_{c3}) \\ E_{pt} = f(p_{pt1}, p_{pt2}, p_{pt3}, p_{pt4}) \\ E_s = f(p_{s1}, p_{s2}) \end{array} \right. \quad (2)$$

where  $E$  – efficiency of activities (as a component of determining the effectiveness of business processes at the enterprise in the system “information – resource – time”) (Oleksyuk, 2016);  $E_{fe}$  – financial and economic efficiency of the enterprise;  $E_c$  – commercial efficiency of the enterprise;  $E_{pt}$  – production and technological efficiency of the enterprise;  $E_s$  – social efficiency of the enterprise;  $p_{fe1}$  – coefficient of return on capital (assets);  $p_{fe2}$  – coefficient of general liquidity;  $p_{fe3}$  – coefficient of

autonomy;  $p_{fe4}$  – coefficient of financial leverage;  $p_{c1}$  – coefficient of profitability of sales;  $p_{c2}$  – average maturity of accounts payable;  $p_{c3}$  – average maturity of accounts receivable (days);  $p_{pt1}$  – output-capital ratio;  $p_{pt2}$  – return on material;  $p_{pt3}$  – productivity;  $p_{pt4}$  – capital stock;  $p_{s1}$  – the level of satisfaction of owners and employees with a set of social benefits and guarantees (taking into account forms and systems of remuneration (Kuzmin, 1995), (Bozhok & Balanovych, 2015) in relation to the cost of them (in the system “time – quality – cost”) or with an increase in the return on the work of employees (in the system “effect – result”);  $p_{s2}$  – the level of satisfaction of consumers’ needs in services, goods, etc. in the market.

It should be noted here that the formulas for calculating business indicators (coefficients, parameters) of the components of the evaluation of the efficiency of the enterprises ( $E_{fe}$ ,  $E_c$ ,  $E_{pt}$ ), their content and criterion values (taking into account the contradictions of the Ukrainian legal and regulatory framework in the field of economic diagnostics of enterprises) is presented in the scientific works by (Melnyk, 2010b), (Melnyk, 2010a). At the same time, it has been established that despite the reforms and legislative changes that are being implemented in Ukraine today, these studies remain relevant.

In addition, within the framework of the study of scientific work (Khobta, 2005), it has been found out that a full and objective assessment of the effectiveness of the enterprise should include such types of evaluation as: 1) absolute assessment; 2) relative assessment (includes: comparing the value of the indicator with the best level; comparing the value of the indicator with the normative values; comparing the value of the indicator with the indicator of any other enterprise).

At the same time, it has been brought to light that any company represents itself on the market with the products it produces. Traditionally (classically) the competitiveness of enterprise products ( $P$ ) is considered as a set of characteristics of products (quality, value), ensuring its compliance with the requirements of a specific market at a certain (definite) period of time. It is clear from this that this multifaceted integral concept characterizes the degree of attractiveness and usefulness of products (goods, works, services) for consumers in certain time and space conditions, which reflects the decisive factor of the company's success in the market (Melnyk, 2010b). Taking this into consideration, it should also be noted that for the resultative (effective, reliable, qualitative) measurement (or for the purpose of objective analytical assessment) of the competitiveness, one should, first of all, analyze: 1) a beneficial effect of functioning of a specific product and its competitors in the specific market for the normative period; 2) total expenses for the stages of the life cycle of goods on the market (throughout the period), aimed at obtaining a beneficial effect from them (Kuzmin & Horbal, 2005).

It has been established that the integral level of the competitiveness of products ( $P$ ) of the enterprise is recommended to be calculated by the formula (3):

$$P = \sum_{i=1}^n R_i g_i, \quad (3)$$

where  $n$  is the number of product parameters that are the subject of analytical assessment;  $R_i$  – expert score assessment of the corresponding product parameter;  $g_i$  – validity of the corresponding parameter of production (Melnyk, 2010b), (Kuzmin & Horbal, 2005).

At the same time, it should be noted that the level of competitiveness of enterprise products is appropriate to be determined on the basis of a combination of analytical and graphical methods for its evaluation (Skrynkovskyy, Shpak, Protsiuk & Noga, 2018), based on the characteristics of the product parameters, which are presented in Figure 2.

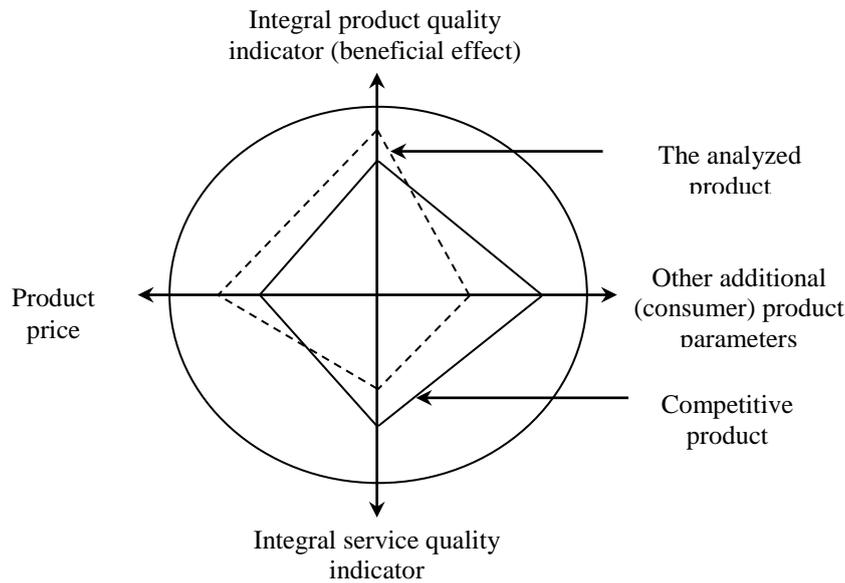


Fig. 2. An example of the graphical method for assessing the competitiveness of enterprise products, sources: formed on the basis by (Melnyk, 2010b), (Hetman & Shapoval, 2007), (Kuzmin & Horbal, 2005), (Skrynkovskyy, Shpak, Protsiuk & Noga, 2018)

In this context, the scientific work (Protsiuk, Tsybulskyy & Tsyuh, 2013) deserves special attention. It states that an important component of the assessment of the competitiveness of an enterprise is the consideration (analysis and evaluation) of the level of market concentration ( $I$ ). The intensity of competition is a determining (key) factor in the formation of a business entity's strategy.

It was determined that the level of competition is measured by means of an economic-mathematical model – Gerfindahl-Girshman Index ( $I$ ) – formula (4):

$$I = \sum_{i=1}^m k_i^2, \quad (4)$$

where  $k_i$  is the market share of the  $i$ -enterprise, %,  $i=1...m$ ;  $m$  – the number of enterprises offering goods of the same type in the market; often using  $m=50$  (the Gerfindahl-Hirschman Index characterizes not the market share controlled by several major companies, but the distribution of the market power among all subjects in a particular market) (Melnyk, 2010b), (Kuzmin & Horbal, 2005), (Protsiuk, Tsybulskyy & Tsyuh, 2013).

At the same time, one of the tools for assessing monopoly power in the market is the Lerner Index ( $L$ ) – formula (5):

$$L = \frac{P - M}{P} = \frac{-1}{E}, \quad (5)$$



Klyuvak & Skrynkovskyy, 2016); 3) strengthening the capacity of investigating authorities in certain areas of their professional work and depriving law enforcement bodies of the right to interfere into economic activity; 4) the full restart of the National Agency for the Prevention of Corruption by updating the management and personnel of the department; 5) termination of interagency struggle between anti-corruption bodies (in particular, between the National Anti-Corruption Bureau of Ukraine and the Specialized Anti-Corruption Prosecutor's Office of Ukraine); 6) increasing legal liability for any pressure on journalists, academics and activists working in the field of prevention and counteraction to corruption in Ukraine, etc. (Transparency International Ukraine, 2018), (Voitovych, 2018), (Kravchuk, 2018).

At the same time, it should be noted that the economic literature (Kravchuk, 2018), (Basantsov & Zubareva, 2016), (Kokhan, 2013), (Fleychuk, 2010) present a wide range of corruption indicators and assessment methods that are appropriate to be used in scientific research and to be adapted to the current conditions of Ukraine's economic development and its Euro-integration perspectives in order to increase the competitiveness of enterprises and their investment attractiveness.

It is also useful to note the results of research by (Klitgaard, 2008), (Klitgaard, Maclean-Abaroa & Lindsey Parris, 2000), according to which it can be seen that the phenomenon of corruption can be described as a predisposition to corruption, which includes low risk, moderate punishment and high profit – formula (7):

$$K = M + F - A, \quad (7)$$

where  $K$  is corruption;  $M$  – monopoly;  $F$  – freedom of action;  $A$  - accountability.

At the same time, the scientific work by (Fleychuk, 2010) presents a quantitative definition of the preconditions and factors of corruption at micro and macro levels. In general, it (i.e. corruption index) can be represented as a set of indicators of monopolization of certain spheres of activity and ineffectiveness of institutions, except for liability and motivation for legal activity – formula (8):

$$K_i = (M_i + I) - (O + Z_{leg}), \quad (8)$$

where  $K_i$  – is the index of corruption;  $M_i$  – index of monopolization of certain types of activities,  $0 \leq M_i \leq 1$ ;  $I$  – coefficient of efficiency of the institutional base,  $0 \leq I \leq 1$ ;  $O$  – employee liability ratio,  $0 \leq O \leq 1$ ;  $Z_{leg}$  – coefficient of motivation to legal activity,  $Z_{leg} \leq 0$  (Revak, 2011), (Fleychuk, 2010).

In this context, the work “Crime and punishment: economic approach” by the Laureate of the Nobel Prize in Economics (1992) G. S. Becker deserves special attention (Becker, 1968). He expressed the expected benefit of committing an offense by the formula (9):

$$EU = (1 - p) \times U(Y) + pU(Y - f) = U(Y - pf), \quad (9)$$

where  $EU$  is an expected utility of the crime;  $p$  – probability of conviction of the offender;  $Y$  – income from crime;  $U$  – utility function of the offender;  $f$  – punishment

for a crime (Becker, 1968), (Nezhurbida, 2012), (Haga, 1987).

According to G. Becker's economics and mathematical model – see formula (8), the potential offender has the following two alternatives: 1) the choice of criminal activity (with  $EU > 0$ ); 2) the choice of law-abiding behavior (with  $EU < 0$ ) (Becker, 1968), (Nezhurbida, 2012), (Haga, 1987).

In addition, according to the results of research papers (Skrynkovskyy & Chubenko, 2016), (Piasetska-Ustych, 2016), (Voloshenko, 2014), (Dryomin, 2013) it can be argued that corruption (or corruption offenses and offenses related to corruption) as an economic phenomenon is latent, illegal, which is realized through rent-oriented behavior of officials, a form of socially unauthorized exchange, distribution and appropriation of certain economic benefits, money resources, securities and assets that restrict economic freedom, free competition and the access of citizens and business to national resources (Piasetska-Ustych, 2016).

It is clear from this that today in Ukraine in the field of economics, business and management there is a need to develop effective and resultative measures of legal impact (in particular, strengthening legal liability) that would allow to make economically disadvantageous committing of corrupt acts and other offenses related to corruption, with the aim of supporting and protecting economic competition, limiting monopolies in economic activity and increasing the competitiveness of enterprises in the market on the basis of development of competitive relations.

#### 4. Conclusions

The results of the research prove that:

1. The competitiveness of a company on the market should be understood as: 1) a synthetic relative spatiotemporal parameter, which reflects the characteristics (or competitiveness) of products and the efficiency of the enterprise, allowing it to occupy the relevant positions in the market of a certain level of concentration; 2) its ability (possibility) to achieve specific competitive advantages over other enterprises on a certain (definite) market.

2. The main (key) integral structural components of the analytical assessment of the competitiveness of enterprises on the market are: 1) the efficiency of the enterprise (in four components: financial and economic efficiency, commercial efficiency, production and technological efficiency, social efficiency); 2) the competitiveness of the enterprise's products (includes calculation of such indicators as an integral indicator of product quality (useful effect), price of products, integral indicator of service quality and other additional (consumer) product parameters); 3) the concentration of the market in which the enterprise carries out its activities.

3. Today, corruption in Ukraine (as a negative social and economic phenomenon), bureaucracy and political instability significantly discredit the country on the international scene, impede the flow of investment and adversely affect the competitiveness of enterprises (especially in the industrial and agricultural sectors). The main determinant of offenses in the field of doing business

is, for the most part, inconsistent, and sometimes openly contradictory, policies of the state (including corruption with the practice of double standards) in this direction.

4. Reducing the level of corruption in Ukraine requires further elaboration of effective and resultative measures of legal impact (in particular, strengthening legal liability) that would make it economically unprofitable to commit corruption offenses and other corruption-related offenses in order to: 1) support and protect economic competition; 2) restrict monopoly in economic activity; 3) increase the competitiveness of enterprises in the market through the development of competitive relations.

The prospect of further research in this direction is the development of a conceptual model of enterprise development and the formation of its prospect.

## References

- An, M.-H., Ri, G.-Y., & Rim, G.-N. (2019). Intellectual Product and Method of Assessing the Competitiveness of an Enterprise with It. *Journal of the Knowledge Economy*. doi: <https://doi.org/10.1007/s13132-019-00593-5>
- Basantsov, I., & Zubareva, O. (2016). Corruption in Ukraine: realities and effective countermeasures. Sumy: Sumy State University.
- Becker, G. S. (1968). Crime and Punishment: An Economic Approach. *Journal of Political Economy*, 76(2), 169–217. doi: 10.1086/259394
- Bloodgood, J. M. (2019). Knowledge acquisition and firm competitiveness: the role of complements and knowledge source. *Journal of Knowledge Management*, 23(1), 46–66. doi: <https://doi.org/10.1108/jkm-09-2017-0430>
- Bozhok, N., & Balanovych, N. (2015). Researches of forms and systems of compensation. *Problemy ekonomiky transportu*, 9, 65–70.
- Dluhopolska, T. (2014). Theoretic-methodological approaches to the estimation of the firm competitiveness. *Science and Economics*, 1(33), 63–69.
- Dryomin, V. (2013). Institutional methodology in studying crime. *Aktualni problemy derzhavy i prava*, 70, 49–46.
- Falciola, J., Jansen, M., & Rollo, V. (2020). Defining firm competitiveness: A multidimensional framework. *World Development*, 129, 104857. doi: <https://doi.org/10.1016/j.worlddev.2019.104857>
- Fleychuk, M. (2010). Theoretical and methodological bases of economy legalization and corruption counteraction in Ukraine in conditions of globalization]. *Doctor's thesis*. Kyiv: National Institute for Strategic Studies.
- Gontareva, I., Babenko, V., Shmatko, N., Litvinov, O., Hanna, O. (2020). The Model of Network Consulting Communication at the Early Stages of Entrepreneurship. *WSEAS Transactions on Environment and Development*, Vol. 16, pp. 390-396. doi: <https://doi.org/10.37394/232015.2020.16.39>
- Haga, W. (1987, October). *A Survey of Economic Models of Criminal Behavior*. Retrieved from <https://www.cia.gov/library/readingroom/docs/CIA-RDP07-01280R000400470001-0.pdf>
- Hetman, O. & Shapoval, V. (2007). *Economic Diagnostic*. Kyiv: Tsentr navchalnoi literatury.
- Hnylytska, L. (2017). Managing Corruption Risks: Identifying Problems and Assessing the Probability of Manifestation]. *Ekonomichni horyzonty*, 2, 90–97.
- Horshkova, T. (2012). Methods of calculating the competitiveness of the enterprise. *Visnyk Dnipropetrovskoho universytetu. Seriiia «Ekonomika»*, 6(1), 101–106.
- Isabekovna, T. (2013). The Use of a Simulation Model to Assess the Problem of Enterprise Competitiveness. *Procedia - Social and Behavioral Sciences*, 106, 3116–3120. doi: 10.1016/j.sbspro.2013.12.360.
- Kataev, A. (2014). Administration of the commodity policy of the organization: an estimation of competitiveness of the goods. *Retail Marketing*, 1, 26–35.
- Kataev, A. (2016). Actual functional tasks of marketing commodity policy. Kharkov: Dialog.
- Khobta, V. (2005). *Activation and increase of efficiency of investment processes at enterprises*. Donetsk: NAN Ukraine.
- Klitgaard, R. (2008). *Controlling corruption*. Berkeley: Univ. of California Press.
- Klitgaard, R., Maclean-Abaroa, R., & Lindsey Parris, H. (2000). *Corrupt Cities: A Practical Guide to Cure and Prevention*. Washington: World Bank Institute.
- Kokhan, H. (2013). The phenomenon of political corruption: theoretical and methodological analysis. Kyiv: National Institute for Strategic Studies.
- Kravchuk, T. (2018, January 29). ACC corruption survey highlights creation of Anti-corruption Court as #1 priority for business. Retrieved from <http://www.chamber.ua/en/Media/News/8184>
- Kuzmin, O. (1995). *Modern Management*. Lviv: Tsentr Yevropy.
- Kuzmin, O., & Horbal, N. (2005). *Management of the international competitiveness of the enterprise*. Lviv: Kompakt-LV.
- Levytska, A. (2013). Methods for Assessing Competitiveness: National and Foreign Approaches to Classification. *Mechanism of Economic Regulation*, 4, 155–163.
- Lutsii, O., & Vesperis, S. (2010). Estimation of the competitiveness of mechanical engineering enterprises. *Marketing in Ukraine*, 5, 32–38.
- Maalouf, J. T., Abi Aad, A., & El Masri, K. (2020). Competitiveness of sharing economy companies in emerging markets. *Competitiveness Review: An International Business Journal*, ahead-of-print(ahead-of-print). doi: <https://doi.org/10.1108/cr-05-2019-0058>
- Melnyk, O. (2010a). Contradictions of the national regulatory framework in the field of economic diagnostics of enterprises. *Actual problems of the economy*, 9, 147–158.
- Melnyk, O. (2010b). *Systems of diagnostics of activity of*

- machine-building enterprises: polycrystalline concept and tools]. Lviv: Lvivska politehnika.
- Mohamad, M. R., & Mat Zin, N. (2019). Knowledge management and the competitiveness of small construction firms. *Competitiveness Review: An International Business Journal*, 29(5), 534–550. doi: <https://doi.org/10.1108/cr-03-2018-0027>
- Nezhurbida, S. (2012). “Neoclassic” orientation of crime causation theories: Gary S. Becker’s views on causes of crime]. *Naukovyi visnyk Chernivetskoho universytetu. Pravoznavstvo*, 618, 115–120.
- Oleksiuk, O. (2016). Technology for assessing the effectiveness of the enterprise. *Zbirnyk Naukovykh Prats Cherkaskoho Derzhavnoho Tekhnolohichnoho Universytetu. Serii: Ekonomichni Nauky*, 2(22), 169–173.
- Panchal, D., & Krishnamoorthy, B. (2019). Developing an Instrument for Business Model Dimensions: Exploring Linkages with Firm Competitiveness. *International Journal of Global Business and Competitiveness*, 14(1), 24–41. doi: <https://doi.org/10.1007/s42943-019-00004-1>
- Pawlowski, G. (2017). Development of the system of management diagnostics of the enterprise. *Doctor’s thesis*. Lviv: Lvivskiy universytet biznesu ta prava.
- Pawlowski, G., Kramar, R., & Skrynkovskyy, R. (2016). Diagnostics of corruption risks in activity of state enterprise and liability for corruption offences and offences related to corruption. *International scientific journal*, 2(20), 138–145.
- Piasetska-Ustych, S. (2016). The phenomenon of corruption in Ukraine (political and economic analysis). *Hlobalni ta natsionalni problemy ekonomiky*, 14, 20–25.
- Protsiuk, T., Tsybulskyy, Y., & Tsyuh, S. (2013). Methodical approach to the diagnosis of industrial competitiveness. *Investytsii: praktyka ta dosvid*, 22, 43–45.
- Purlys, Č. (2010). Influence of business ethics for enterprise competitiveness. *The 6th International Scientific Conference “Business and Management 2010”. Selected Papers*.
- Revak, I. (2011). *Corruption: Theoretical and Methodological Principles of the Study*. Lviv: Lviv State University of Internal Affairs.
- Salehi, M., & Moghadam, S. M. (2019). The relationship between management characteristics and firm performance. *Competitiveness Review: An International Business Journal*, 29(4), 440–461. doi: <https://doi.org/10.1108/cr-11-2018-0070>
- Shevchenko, L. (2008). *Competitive diagnostics of the firm: concept, content, methods*. Kharkov: INZhEK.
- Shved, T., & Bila, I. (2017). Evaluation of competitiveness of enterprises]. *Economy and Society*, 8, 405–410.
- Shynkar, S. (2011). Evaluation of the competitiveness of enterprises using the graphical method. *Ekonomichna stratehiia i perspektyvy rozvytku sfery torhivli ta posluh*, 2, 274–278 [in Ukrainian].
- Skrynkovskyy, R. (2008). Investment attractiveness evaluation technique for machine-building enterprises. *Actual Problems of Economics*, 7(85), 228–240.
- Skrynkovskyy, R. M. (2011). Methodical approaches to economic estimation of investment attractiveness of machine-building enterprises for portfolio investors. *Actual Problems of Economics*, 118(4), 177–186.
- Skrynkovskyy, R., & Chubenko, A. (2016). Diagnostics of the enterprise competitive potential and liability for violation of the legislation on the protection of economic competition]. *Pidpriemnytstvo, hospodarstvo i pravo*, 7, 49–54.
- Skrynkovskyy, R., Shpak, O., Protsiuk, T., & Noga, I. (2018). Formation of the Toolkit for Graphical Assessment of Enterprise Competitiveness. *Path of Science*, 4(1), 1014–1021. doi: 10.22178/pos.30-1.
- Tielietov, O.S., & Letunovska, N.Ye. (2014). Organizational and economic mechanism of industrial enterprises soicial infrastrucutre development. *Actual Problems of Economics*, 160(1), 329-337.
- Transparency International Ukraine. (2018). *CPI 2017*. Retrieved from <https://ti-ukraine.org/en/research/cpi-2017/>
- Tsaritova, K. (2017). Problems of Enterprise Competitiveness Assessment. *Socialnaya Politika i Sociologiya*, 16(4), 33–41.
- Voitovych, O. (2018, February 21). TI Rating: Ukraine is the most corrupted country in Europe after Russia. *Deutsche Welle*. Retrieved from <http://p.dw.com/p/2t5u6>.
- Voloshenko, A. (2014). Corruption impact on a business environment. *Yevropeiski perspektyvy*, 1, 83–87.
- Yuzevych, V., Klyuvak, O., & Skrynkovskyy, R. (2016). Diagnostics of the system of interaction between the government and business in terms of public e-procurement. *Economic Annals-XXI*, 160(7-8), 39–44. doi: 10.21003/ea.v160-08.
- Zaika, S., & Gridin, O. (2016). Features diagnostic efficiency of management. *Visnyk Kharkivskoho natsionalnoho tekhnichnoho universytetu silskoho hospodarstva imeni Petra Vasylenka*, 171, 195–204.

Skrynkovskyy, R., Kataiev, A., Zaiats, O., Andrushchenko, H., & Popova, N. (2021). Competitiveness of The Company on The Market: Analytical Method of Assessment and The Phenomenon of The Impact of Corruption in Ukraine. *Journal of Optimization in Industrial Engineering*, Special issue 2021, 79-86.

[http://www.qjie.ir/article\\_677836.html](http://www.qjie.ir/article_677836.html)  
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