

University of Economics and Humanities
Wyższa Szkoła Ekonomiczno-Humanistyczna
Вища школа економіко-гуманітарна
Высшая школа экономико-гуманитарная

Methodological bases and practice of sustainable development implementation

Monograph

Edited by: Dr. of Economics, Prof. O. Prokopenko,
Ph.D in Economics, Assoc. Prof. N. Kostyuchenko

Recommended by the Academic Council of the University of Economics and Humanities
(Bielsko-Biala, Republic of Poland),
Academic Council of Sumy State University (Ukraine)

Bielsko-Biala,
2015

ББК 65.050.9
УДК 502.131.1
М 54

Reviewers:

Angel Mirchev, Dr. of Economics, Professor, Professor of University “Professor Dr. Assen Zlatarov”
(Burgas, Republic of Bulgaria);

Leonid Melnyk, Dr. of Economics, Professor, the Head of Department of Economics and Business Administration,
Director of the Institute of Economics Development of the Ministry of Education and Science of Ukraine and National
Academy of Sciences of Ukraine in Sumy State University (Ukraine);

Ayapbergen Taubaev, Dr. of Economics, Professor of Economy and Management Department
in Karaganda Economic University of Kazpotrebsoyus (Republic of Kazakhstan)

*Recommended by the academic council of the Higher School of Economics and Humanities
(Bielsko-Biala, Republic of Poland) (protocol № WSEH/589/11/14 of 26.11.2014),
academic council of Sumy State University (Ukraine)
(protocol № 8 of 10.04.2014)*

M 54 **Methodological** bases and practice of sustainable development implementation : monograph /
edited by Dr. of Economics, Prof. O. Prokopenko, Ph.D in Economics, Assoc. Prof.
N. Kostyuchenko. – Ruda Śląska : Drukarnia i Studio Graficzne Omnidium, 2015. – 272 p.

ISBN 978-83-63649-56-2

The monograph deals with new approaches and urgent questions to create methodology of sustainable development. There is suggested usage of economic instruments for sustainable development on different management levels. Authors analyze and suggest scientific and methodological approaches to sustainable development. Special attention is paid to scientific and applied aspects of sustainable development into regional and territorial levels.

It can be useful for specialists on environmental economics, innovative management and marketing, business economics, regional development, macro-economic regulation, and also for lecturers, post-graduates and students of HEIs economic specialties.

W monografii zbadano aktualne kwestie tworzenia metodologii zrównoważonego rozwoju. Przeanalizowano główne czynniki zrównoważonego rozwoju. Zaproponowano instrumenty ekonomiczne dla zrównoważonego rozwoju na różnych szczeblach zarządzania. Zaproponowano podejście naukowo-metodyczne do zapewnienia zrównoważonego rozwoju. Szczególną uwagę zwraca się na naukowo-praktyczne aspekty zapewnienia zrównoważonego rozwoju na poziomie regionalnym i terytorialnym.

Adresatem wyników badań są specjaliści w ekonomii środowiska, regulacji makroekonomicznej, rozwoju regionalnego, ekonomii przedsiębiorstwa, innowacyjnego zarządzania i marketingu, jak również pracownicy naukowo-dydaktyczni i studenci dziedziny nauk ekonomicznych i dyscypliny nauk o zarządzaniu.

У монографії досліджено актуальні питання формування методології сталого розвитку. Проаналізовано основні чинники сталого розвитку. Розглянуто економічні інструменти забезпечення сталого розвитку на різних рівнях управління. Запропоновано науково-методичні підходи до забезпечення сталого розвитку. Особливу увагу приділено науково-прикладним аспектам забезпечення сталого розвитку в галузевому та територіальному розрізах.

Адресовано фахівцям з питань економіки природокористування, макроекономічного регулювання, регіонального розвитку, економіки підприємства, інноваційного менеджменту та маркетингу, а також науково-педагогічним працівникам, аспірантам і студентам галузі наук економічних і дисципліни наук про управління.

В монографии исследованы актуальные вопросы формирования методологии устойчивого развития. Проанализированы основные факторы устойчивого развития. Рассмотрены экономические инструменты обеспечения устойчивого развития на различных уровнях управления. Предложены научно-методические подходы к обеспечению устойчивого развития. Особое внимание уделено научно-прикладным аспектам обеспечения устойчивого развития в отраслевом и территориальном разрезе.

Адресовано специалистам по вопросам экономики природопользования, макроекономического регулирования, регионального развития, экономики предприятия, инновационного менеджмента и маркетинга, а также научно-педагогическим работникам, аспирантам и студентам области экономических наук и дисциплины наук об управлении.

ББК 65.050.9
УДК 502.131.1

ISBN 978-83-63649-56-2

© University of Economics and Humanities, 2015

Content

	P.
INTRODUCTION	5
PART 1 THEORETICAL AND METHODOLOGICAL ISSUES OF SUSTAINABLE DEVELOPMENT	
1.1 Sustainability transformation: challenges and insights	8
1.2 Sectorial issues of rio convention obligations implementation in national sustainable development policy of Ukraine.....	20
1.3 Ecologically oriented innovative culture of a society as a prerequisite for sustainable development: perspectives for Ukraine.....	31
1.4 Optimization of the investment fund distribution dealing with nature protection projects	40
1.5 International coordination of economic policies as a european perspective for sustainable development	48
1.6 Evolution of marketing and sustainable development	59
1.7 Sustainable development – sustainable enterprise and sustainable personneli n the 21'st century.....	68
PART 2 SCIENTIFIC AND METHODOLOGICAL ISSUES OF SUSTAINABLE DEVELOPMENT IMPLEMENTATION	
2.1 Indicators as management tools of sustainable development on individual, institutional and regional levels	77
2.2 Ecological management as a tool for effective use of the principles for sustainable development	86
2.3 Cluster approach to evaluation of the competitiveness of the regions based on the concept of sustainable development.....	97
2.4 Development of environmental marketing strategies of enterprises on the basis of sustainable development	108
2.5 Limitations to sustainable development of tourist territories: possible solutions for Republic of Bulgaria	118
2.6 Corporate environmental responsibility as a tool for sustainable development of a country	129

PART 3 SCIENTIFIC AND APPLIED ISSUES OF SUSTAINABLE DEVELOPMENT IMPLEMENTATION

3.1 Ecological marketing as a tool for promoting sustainable business in zones of ecological risk	136
3.2 Opportunities for social and economic development of districts for planning in Republic of Bulgaria.....	146
3.3 Economic mechanisms of environmental and economic security in the black sea region	155
3.4 Sustainable development strategy of the river Horyn basin's agrosphere	167
3.5 General principles of conducting a competitive marketing research of industrial market environment	179
3.6 Alternative management as a conceptual modification of educational processes for sustainable development in higher education institutions	190

PART 4 PRACTICAL ISSUES OF SUSTAINABLE DEVELOPMENT IMPLEMENTATION

4.1 Public-private partnership as a form of state and business cooperation in investment sphere.....	202
4.2 Professional and emotional competencies of government officials.....	214
4.3 Informative space of innovative business processes of industrial enterprises in conditions of ukrainian structuration	225
4.4 Credit support in the financing of investment activity of ukrainian enterprises	238
4.5 Marketing research of new media	247
4.6 Technological development of the process of banking products implementation.....	256
Abstract	268
Abstrakt (abstract in Polish).....	269
Анотація (abstract in Ukrainian).....	270
Аннотация (abstract in Russian)	271

INTRODUCTION

The success of implementing the concept of sustainable development at different levels directly depends on consistency of theory and practice. Violation of such consistency leads to inefficient management of socio-ecological and economic development, to a number of problems that can amplify its negative impact on development processes in conditions of internationalization and globalization. These circumstances necessitate generalization and harmonization of international experience in sustainable development implementation, taking into account regional and industrial characteristics.

Authors' points of view and research results presented in the monograph are focused on improvement and harmonization of theoretical and methodological bases, scientific and methodological approaches and applied aspects of sustainable development. The authors outlined general aspects of sustainable development as well as European perspectives and perspectives for Ukraine. They stressed on the role of ecological management and ecological marketing on the way to sustainability. They also grounded on the role of ecologically oriented innovative culture in that process. The authors also defined regional limitations to sustainable development.

The authors of the monograph are scholars and practitioners from three countries, including Republic of Poland, Ukraine and Republic of Bulgaria.

Prokopenko Olha, Dr. of Economics, Professor, University of Economics and Humanities (Bielsko-Biała, Republic of Poland), Sumy State University (Ukraine), Scientific Editor (introduction; 2.1);

Kostyuchenko Nadiya, PhD in Economics, Associate Professor, Sumy State University (Ukraine), Scientific Editor (introduction; 2.6);

Aleksandrov Ivan, Dr. of Economics, Professor, Donetsk National University (Ukraine) (1.4);

Borisova Lalka, Dr. of Economics, Assistant Professor, International Business School – Sofia (Botevgrad, Republic of Bulgaria) (4.2);

Gritsenko Larisa, Dr. of Economics, Associate Professor, State Higher Educational Establishment “Ukrainian Academy of Banking of the National Bank of Ukraine” (Sumy, Ukraine) (4.1);

Illashenko Serhii, Dr. of Economics, Professor, University of Economics and Humanities (Bielsko-Biała, Republic of Poland), Sumy State University (Ukraine) (1.3);

Khlobystov Ievgen, Dr. of Economics, Professor, University of Economics and Humanities (Bielsko-Biała, Republic of Poland), PA “Institute of Environmental Management and Sustainable Development National Academy of Sciences of Ukraine” (Kyiv, Ukraine) (1.2);

Sadchenko Olena, Dr. of Economics, Professor, University of Economics and Humanities (Bielsko-Biala, Republic of Poland), Odessa I. I. Mechnikov National University (Ukraine) (3.1);

Ylyev Tsvetan, Doctor of Economics, Assistant Professor, International Business School – Sofia (Botevgrad, Republic of Bulgaria) (3.2);

Zharova Liubov, Dr. of Economics, Senior Researcher, PA “Institute of Environmental Management and Sustainable Development National Academy of Sciences of Ukraine” (Kyiv, Ukraine) (1.2);

Abakumenko Olga, Ph.D in Economics, Chernihiv State Institute of Economics and Management (Ukraine) (4.4);

Anderson Nina, Ph.D in Economics, Research Assistant, Odessa Institute of Market Problems and Economic and environmental studies (Ukraine) (2.3);

Dworak Janusz, Ph.D in Economics, WSB University in Gdansk (Republic of Poland) (3.6);

Grinchenko Yuriy, Ph.D in Economics, Odesa I.I. Mechnikov National University (Ukraine) (1.5);

Klimenko Oleksandr, Ph.D in Technics, National University of Water and Environment (Ukraine) (3.4);

Knap-Stefaniuk Agnieszka, Ph.D in Economics, Vistula University (Warsaw, Republic of Poland) (1.7);

Krukhmal Olena, Ph.D in Economics, State Higher Educational Establishment “Ukrainian Academy of Banking of the National Bank of Ukraine” (4.6);

Kryklii Olena, Ph.D in Economics, State Higher Educational Establishment “Ukrainian Academy of Banking of the National Bank of Ukraine” (4.6);

Lukash Svetlana, Ph.D in Economics, Sumy National Agrarian University (Ukraine) (3.5);

Nekrasenko Larisa, Ph.D in Biology, Associate Professor, Poltava state agrarian academy (Ukraine) (2.1);

Peresadko Galina, Ph.D in Economics, Assistant Professor, Kyiv National University of Trade and Economics (Ukraine) (3.5, 4.5);

Pidlisna Olga, Ph.D in Economics, Kyiv National University of Trade and Economics (Ukraine) (4.5);

Polinkevych Oksana, Ph.D in Economics, Lutsk national technical university (Ukraine) (4.3);

Robul Yuriy, Ph.D in Mathematics and Physics, Assistant Professor, Odesa I.I. Mechnikov National University (Ukraine) (1.6);

Shypulina Yuliia, PhD in Economics, Associate Professor, Sumy State University (Ukraine) (1.3);

Stankova Maria, Ph.D in Economics, Associate Professor, South-West University “Neofit Rilski” (Blagoevgrad, Republic of Bulgaria) (2.5);

Zahvoyska Lyudmyla, Ph.D in Economics, Assistant Professor, Ukrainian National Forestry University (Lviv, Ukraine) (1.1);

Eremeeva Natalia, NGO Committee of justice support (Kyiv-Sevastopol, Ukraine) (1.2);

Gromyko Nikita, CEO of “Waste management systems” (Kyiv, Ukraine) (3.5);

Kornatowski Robert, Meritt Group own brand of WRD Sp. z o.o. (Ltd.) (Republic of Poland) (2.1);

Kravets Lena, Donetsk National University (Ukraine) (1.4);

Lavrov Konstantin, Chernihiv State Institute of Economics and Management (Ukraine) (4.4);

Nichitailova Nelia, Odessa I. I. Mechnikov National University (Ukraine) (2.2);

Pavlenko Ludmila, State Higher Educational Establishment “Ukrainian Academy of Banking of the National Bank of Ukraine” (4.6);

Pidlisnyi Vitalii, Cherkassy State Technological University (Ukraine) (4.5);

Polovska Vira, Ukrainian National Forestry University (2.4);

Sapiński Aleksander, Postsecondary School of Mother Theresa of Calcutta (Żywiec, Republic of Poland) (1.7);

Smolennikov Denys, Sumy State University (Ukraine) (2.6);

Tonkonogaya Iryna, Odessa State Environmental University (Ukraine) (3.3).

The monograph contains the results of research carried out within the framework of fundamental research topics of the University of Economics and Humanities (Bielsko-Biala, Republic of Poland): "Theoretical and applied aspects of sustainable development of an enterprise, region, and society" (registration number 8/9B/10/2013), "Development of scientific and methodological bases of innovation for economic systems' sustainable development" (4/9B/10/2013), "Theoretical and methodological bases for socio-economic systems' development in conditions of globalized economic space" (5/9B/10/2013); as well as research carried out within the framework of fundamental research topics of Economic Theory Department at Sumy State University (Sumy, Ukraine): "Methodology of socio-economic systems in global environment» (0112U004470), “Fundamentals of managing sustainable development of a company, territory, and society” (0113U007870), “Methodology of innovations for sustainable development of business” (0113U007871).

key target points for development of professional competence in compliance with the European standards.

They are typical for the active, critical and broad-minded people who take responsibility for important decisions in their lives and prepare for work in the information society by increasing of their personal motivation and professional competence.

1. Благоев Д. (2005), Доклад. Изследване модела на управленските способности за определяне необходимостта от обучение на мениджърите в индустриалните предприятия, Свищов, р. 215.
2. Голман Д. (2000), Емоционална интелигентност, София.
3. Дракър П. (2002), Иновации и предприемачество, София.
4. Кови Ст. (1999), Седемте навика на високо ефективните хора, София.
5. Кратка българска енциклопедия, (1996), том 3, София.
6. Милев Ал. и др. (1971), Речник на чуждите думи в българския език, Русе.
7. Joint project of the Public Administration Institute and Open Society Institute (2004), Minimum general requirements for administrative competence, Sofia.
8. Boyatzis R. E. (1982), The Competent Manager: A Model for Effective Performance, John Wiley & Sons, New York.
9. Mayer, Salovey, Sluyter (1997), What is Emotional Intelligence, in Emotional Development and Emotional Intelligence: Educational Implications, by Peter Salovey and David Sluyter.
10. McClelland D. C. (1973), Testing for competence rather than intelligence. American Psychologist, 28.
11. Willis S. etc. (1990). Maintaining of Professional Competence. San Francisco: Jossey-Bass.

4.3 INFORMATIVE SPACE OF INNOVATIVE BUSINESS PROCESSES OF INDUSTRIAL ENTERPRISES IN CONDITIONS OF UKRAINIAN STRUCTURATION

Business-processes of industrial enterprises are developed under the influence of world economic tendencies of globalization and cauterization. Activity of the international industrial giants of small-sized and medium scale domestic enterprises, an openness of economic space have made on them essential impact.

That is they was under the influence of information field which is changeable, chaotic, variable, not structuration.

These processes have provided forming of new approaches to streamlining of information field innovative business processes. It is agreed to its subjects of managing and to approach thoroughly to an estimation of circle of functioning Business-processes of industrial enterprises, are weigh to select from a data file the factors, that have the most essential impact on the enterprise and which are essential. In modern conditions for the purpose of forming of

competitive production industrial enterprises use in the course of structuration of information field such methods, as a method «5x5», a matrix of Wilson, PEST-analysis.

These methods were widespread in the world practice. Therefore there were a necessity for development of the set of factors of an external environment which influenced on business process of the Ukrainian enterprises. Actually it considers modern approaches to consideration of production process.

Such scientists, as A. A. Kyrychenko, S. A. Yerokhin, I. S. Kuznietsova (performance indicators of investment projects, diagnostics of financial potential of the enterprise, efficiency of venture investments) engaged in problems of an external environment estimation, A. P. Mishchenko, V. D. Niemtsov, L. Ye. Dovgan (diagnostics of an external environment of the enterprises), G. A. Peresadko, L. M. Taraniuk (estimate coefficients of confidence of strategy and estimation of strategic potential of the enterprise) [2]. In works of I.V. Vereshchagina, O. V. Raievniewa, H. M. Omelaienko, K. V. Tonieva, N. Yastremska, I. V. Gontareva were macroeconomic indicators, indicators of an estimation of innovations, a standard of living of the population [1, p. 52–92; 13, p. 24–32, p. 96–105, p. 226–233].

A. Koiuda, L. A. Lysenko have offered indicators: GDP, industrial production, production of agriculture, investment into fixed capital, number of the enterprises that are introduced innovations, dynamics number of the enterprises that implement innovations, financing structure of innovation activity, number of implemented innovation products, volume of implemented innovation products, dynamics of coefficient of productivity of innovative costs [3, p. 57-97].

V. M. Grynova, V. V. Vlasenko offered indicators which will estimate innovations, research and development [2, p.9-26]. Z. V. Gerasymchuk, N. T. Rud studied innovative state of the economy of the region on the following groups of indicators: generation of knowledge (an education sphere and sciences), a transfer of knowledge (infrastructure), development of knowledge (production), use of innovations (market) [11, p. 170].

E. Porter, S. Scott suggested to use for estimation of an external environment an innovative index of Malt liquor [12], an innovative index of the State of Massachusetts, V. L. Makarov, O. C. Moskvina, R. D. Atkinson – an innovative index of Mississippi [14], a method of zoning of an innovative profile of the region, the European scale of innovations, an index of development of a mental potential (IRIP), an index of new economy (State New Economy Index) [12]; OSER recommended to use a share of patent payments to universities in general expenses on researches and developments, a part is information – the communication market (in % to gross national product), percent of the value added product in hi-tech industries, the

population participate in additional education (% from inhabitants age 25–64 year), quantity register (commercial) in a year of domain names of «com» [15].

However, information field innovative business-processes of industrial enterprises in new economy (with a primary factor of production instead of fixed capital) was not structured.

A set of factors of the external environment cause positive, neutral and negative changes in activity.

A task of management business-processes of the enterprise timely react to these changes. The verified analytical base is necessary for the purpose of estimation of an external environment which would provide complete reflexing of influence of all essential factors on innovative business-process of industrial enterprises.

Use of the analytical information which is the most complete to reflect the information field Business-processes of industrial enterprises are reasonable by means of a method «5x5», matrixes of Wilson and PEST-analyses (tab. 4.1, 4.2, 4.3). In structuration («technologies of the managing direct and advanced development») one considers creation of structure, start and provision to be more productive than effective functioning in change conditions.

On the maintenance are systematic ones, it is aesthetically reasonable, advanced change of structural elements, communications between them and methods of activity in reply to prediction or actual changes for the sake of an effective utilization of external and internal resources for research of objects in view of self-development.

On the basis of the analysis of the previous definitions structuration of information field innovative business-processes of industrial enterprises we will specify as such which consisted in drawing up of factors of circle of functioning innovative business-processes on degree of and the importance, the management depending on tactical changes of an external and internal environment.

Thus, structuration of information field innovative business-processes of industrial enterprises solved a problem of effective functioning innovative business-processes in the conditions of uncertainty and a randomness of an external environment.

Information field innovative business-processes are represented in table 4.5. The factors can be grouped in five groups:

1) macroeconomic – per capital GDP at current, industrial production indices, consumer price indices, level of use of secondary raw materials, average annual population;

2) innovation - technical – share of P&D performed on own account of total enterprises, relative density of the enterprises that is in traduced innovations, relative density of the

enterprises that implement innovations, cost of P&D work performed on own account per 1000 enterprises, relative density of P&D work performed on own account;

3) financially - innovation – relative density amount of implemented innovation products in total work of the industrial production, share of average monthly wages of employees the able-bodied person, share of labor and social contributions in operational cost of the sold industrial products, requests for objects of industrial property per 1000 industrial enterprises, growth rate of a real wages employees;

4) market-number – growth of costs of innovation activity indices, own sources, central budgets, customers' funds, other sources;

5) solvent – number units in the Unified State Register of Enterprises and Organizations of Ukraine (Business Register), industrial, entrepreneurship, industrial, wholesale and retail trade.

In table 4.6 structuration factors of information field on a matrix of Wilson. Considerable attention factors which were in the field of HH (high probability and high influence), AH (average probability and high influence), HA (high probability and average influence) is needed. In the field of HH are concerned: relative density of the enterprises that implement innovations, purchase of machines equipment on own account that introduced innovations.

Average probability and high influence on business-processes of industrial enterprises, share fixed assets of total balance structure of industrial enterprises, growth rate of a real wages employees. In the field of HA of information field are included: consumer price indices, industrial production indices.

Other factors of information field business-processes of the industrial enterprises included in matrixes of Wilson were of secondary importance at an estimation of information field business-processes of industrial enterprises.

However, if behind factors in fields of HH, AH, HA are observed negative or demanded profound research of a field of a matrix of HL (high influence and low probability, requests for objects of industrial property per 1000 industrial enterprises), AA (average influence and probability, share of average monthly wages of GDP), AL (average influence and low probability, level of economically active population), LH (low influence and high probability, volume of the execute of P&D work performed on own account), LA (low influence and average probability, level of use of secondary raw materials), LL (low influence and low probability – are not considered to influence or business processes). Reasonable construction of a matrix of possibilities and threats with Wilson thus is.

Table 4.5

Factors of influence of an external environment on business-process of industrial enterprises on a method «5x5», 2000-2012 years.

[Author's adaptation based on 4; 5; 6; 7; 8; 9; 10]

Indicator	Year												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Per capital GDP at current, mln. UAH	3436	4195	4685	5591	7273	9372	11630	15496	20495	19832	23600	28806	30901
Industrial production indices, % of the previous year	...	114,20	107,00	115,80	112,50	103,10	106,20	110,20	96,90	78,10	111,20	107,30	99,5
Share of P&D performed on own account of total enterprises, %	0,18	0,17	0,16	0,15	0,15	0,14	0,13	0,12	0,11	0,11	0,10	0,09	0,09
Relative density of the enterprises that are in traduced innovations, %	18,00	16,50	18,00	15,10	13,70	11,90	11,20	14,20	13,00	12,80	13,80	16,20	17,4
Relative density of the enterprises that implement innovations, %	14,80	14,30	14,60	11,50	10,00	8,20	10,00	11,50	10,80	10,70	11,50	12,80	13,6
Relative density amount of implemented innovation products in total work of the industrial production, %	...	6,80	7,00	5,60	5,80	6,50	6,70	6,70	5,90	4,80	3,80	3,80	3,3
Growth of costs of innovation activity indices, % of which	...	112,20	152,90	101,50	148,20	126,80	107,10	176,20	110,50	0,66	101,20	178,20	0,8
- own sources	...	118,20	129,50	100,30	163,00	144,10	103,40	153,50	0,91	0,71	0,92	158,90	0,96
- central budgets	...	in 7,2 r. m.	0,82	in 2,04 r. m.	0,68	0,44	in 4,07 r. m.	126,60	in 2,3 r. m.	0,38	0,69	171,50	1,5

Table 4.5 continuation

1	2	3	4	5	6	7	8	9	10	11	12	13	14
- customers' funds	...	0,44	in 4,5 rivers are more	0,49	0,86	140,50	111,60	182,60	0,36	in 13,1 rivers are more	159,40	0,02	in 17,48 r. m.
- other sources	...	0,94	in 2,8 rivers are more	122,40	in 6,6 rivers are more	0,61	126,50	in 3,6 rivers are more	179,40	0,27	0,68	in 8,5 rivers are more	0,45
Share of average monthly wages of employees, %	80,00	94,00	103,10	126,60	152,50	178,00	206,10	237,90	270,00	256,20	242,80	262,30	266,8
Consumer price indices, Dec. over Dec., %	125,80	106,10	99,40	108,20	112,30	110,30	111,60	116,50	122,30	112,30	109,10	104,60	99,8
Cost of P&D work performed on own account per 1000 enterprises, mln UAH	2,45	...	2,76	3,67	4,16	4,82	4,56	5,18	6,53	6,22	6,95	7,25	7,87
Relative density of P&D work performed on own account, % of GDP	1,16	1,11	1,11	1,24	1,19	1,09	0,98	0,93	0,90	0,95	0,90	0,79	0,8
Growth rate of a real wages employees, % of the previous year	98,60	119,20	118,40	115,30	123,80	120,30	118,30	112,50	106,30	90,80	110,20	108,70	114,4
Share of labor and social contributions in operational cost the of sold industrial products, %	...	...	...	...	...	13,60	12,90	12,60	12,90	11,80	13,10	11,30	...
Level of use of secondary raw materials, %	41,20	...	...	52,20	58,50	65,00	49,00	53,37	43,51	42,53	34,76	34,33	31,83

Table 4.5 continuation

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Average annual population end of year, thsd. persons	48300	48500	480000	47830,9	47470,7	47119,8	46787,7	46509,4	46258,2	46053,3	45690,4	45706,1	45593,3
Number units in the Unified State Register of Enterprises and Organizations of Ukraine (Business Register), end of year, thsd. psc. of which	834,90	887,20	945,00	981,00	1023,40	1070,70	1133,20	1187,00	1228,90	1258,5	1294,6	1323,8	1341,78
industrial, thsd. psc.	90,20	97,60	103,30	108,30	112,50	116,30	119,20	122,80	124,60	125,30	127,50	129,30	128,52
entrepreneurship, thsd. psc.	...	...	...	...	...	...	4230,00	4770,00	5300,00	5790,00	3940,00	2900,00	...
industrial, thsd. psc.	...	...	...	...	...	...	...	...	311,80	328,80	198,50	99,68	70,67
wholesale and retail trade, thsd. psc.	103,20	96,40	89,30	83,80	78,50	75,20	73,60	71,90	69,20	65,30	64,80	64,20	62,2
Requests for objects of industrial property per 1000 industrial enterprises, psc.	221,19	254,30	282,81	331,61	294,56	337,84	388,72	410,92	406,62	336,58	362,85	365,08	49079

... – not available

Table 4.6

Information field business-processes of industrial enterprises on a matrix of Wilson, 2000-2012 years.

[Author's adaptation based on 4; 5; 6; 7; 8; 9; 10]

Indicator	Year													Average value during the period
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Share fixed assets of total balance structure of industrial enterprises, %	...	...	...	...	54,4	53,7	52,9	50,3	49,5	47,6	47,6	46,6	54,1	51,31
Industrial production indices, % of the previous year	...	114,2	107,0	115,8	112,5	103,1	106,2	110,2	96,9	78,1	111,2	107,3	98,20	105,06
Volume of the execute of P&D work performed on own account, % of GDP	1,16	1,11	1,11	1,24	1,19	1,09	0,98	0,93	0,90	0,95	0,91	0,79	0,80	1,01
Purchase of machines equipment on own account that introduced of innovations, % of GDP	0,63	0,61	0,83	0,70	0,79	0,71	0,64	1,04	0,81	0,54	0,47	0,80	0,57	0,70
Relative density of the enterprises that implement innovations, %	14,8	14,3	14,60	11,50	10,00	8,20	10,00	11,50	10,80	10,70	11,50	12,80	13,60	11,87
Consumer price indices, Dec. over Dec., %	125,8	106,1	99,4	108,20	112,3	110,3	111,6	116,5	122,3	112,3	109,1	104,6	99,80	110,64
Growth rate of the real wages employees, % of the previous year	98,6	119,2	118,4	115,3	123,8	120,3	118,3	112,5	106,3	90,8	110,2	108,7	114,40	112,06
Share of average monthly wages of GDP, %	0,14	0,15	0,17	0,17	0,17	0,18	0,19	0,19	0,19	0,21	0,21	0,20	0,21	0,18
Level of use of secondary raw materials, %	41,2	...	...	52,2	58,5	65,0	49,0	53,37	43,51	42,53	34,76	34,33	31,83	46,02
Requests for objects of industrial property per 1000 industrial enterprises, psc.	23,90	27,98	30,91	36,61	32,38	36,70	40,89	42,51	41,23	33,51	35,74	35,66	36,58	34,97
Level of economically active population, %	63,2	62,3	61,9	61,8	62	62,2	62,2	62,6	63,3	63,3	63,7	64,3	64,6	62,88

... – not available

Table 4.7

Information field business-processes of industrial enterprises by a technique PEST-analyses, 2000-2012 years.

[Author's adaptation based on 4; 5; 6; 7; 8; 9; 10]

Indicator	Year												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Sociocultural environment													
Growth rate of a real wages employees, % of the previous year	98,60	119,20	118,40	115,30	123,80	120,30	118,30	112,50	106,30	90,80	110,20	108,70	114,4
Level of economically active population, %	63,2	62,3	61,9	61,8	62	62,2	62,2	62,6	63,3	63,3	63,7	64,3	73
Registered vacancies end of year, thsd persons	68,20	96,90	123,90	138,80	166,50	186,60	170,50	169,70	91,10	65,80	63,90	59,30	48,60
Skilled workers graduating, % of the previous year	1,01	1,04	1,01	0,98	1,03	1,01	1,01	0,99	0,95	0,89	1,03	0,97	0,84
Coefficient of a ratio of specialists of the I st -IV th levels of accreditation to works graduating, %	158,3	165,10	181,48	210,23	163,87	179,73	190,63	213,50	231,19	268,21	264,63	260,93	303,27
Technological environment													
Number units objects of industrial property per 1000 industrial enterprises, pcs	221,2	254,30	282,81	331,61	294,56	337,84	388,72	410,92	406,62	336,58	362,85	365,08	381,89

Table 4.7 continuation

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Installing of new technological processes per 1000 industrial enterprises, end of year, pcs	15,55	14,56	11,06	13,68	15,35	15,55	9,61	11,56	13,22	15,11	16,02	19,41	17,03
Introducing of innovations products per 1000 industrial enterprises, pcs	169,9	199,63	221,17	68,48	35,36	27,10	20,20	20,57	19,63	21,43	18,89	25,04	26,48
Introducing of new types of equipment per 1000 industrial enterprises, pcs	7,00	6,25	5,03	6,56	6,84	5,65	6,59	7,17	6,08	5,12	5,20	6,94	7,33
Economic environment													
Industrial production indices, % of the previous year	...	114,20	107,00	115,80	112,50	103,10	106,20	110,20	96,90	78,10	111,20	107,30	99,5
Cost of financing innovation activity, % of GDP	1,03	0,97	1,33	1,14	1,31	1,30	1,13	1,51	1,27	0,87	0,74	1,09	0,81
Consumer price indices, Dec. over Dec., %	125,8	106,10	99,40	108,20	112,30	110,30	111,60	116,50	122,30	112,30	109,10	104,60	99,8
Degree of depreciation of capital assets, %	43,70	45,00	47,20	48,00	49,30	49,00	51,50	52,60	61,20	60,00	74,90	...	...
- industrial, %	48,80	51,90	54,50	56,40	58,30	57,90	58,60	59,00	5,00	61,80	63,00	...	...
Share of labor and social contributions in operational cost of the sold industrial products, %	...	...	...	...	...	13,60	12,90	12,60	12,90	11,80	13,10	11,30	...

Table 4.7 continuation

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Political and legal environment													
Level of use of secondary raw materials, %	41,20	...	...	52,20	58,50	65,00	49,00	53,37	43,51	42,53	34,76	34,33	31,83
Coefficient of duration of the governmental policy	Yushchenko V.A. (22.12.99–29.05.2001) 0,29 (1,43 years)	Kinach A. K. (29.05.2001–21.11.2002) 0,31 (1,56 years)	Yanukovych V. A. (21.11.2002–5.01.2005; 4.08.2006–18.12.2007) 0,69 (3,44 years)	Yekhanurov Yu. I. (8.08.2005–4.08.2006) 0,2 (0,99 years)	Timoshenko Yu. V. (24.01-8.09.2005; 18.12.2007–3.03.2010) 0,56 (2, 81 years)	Turchinov A. V. (3.03.2010–11.03.2010) 0,004 (0,02 years)	Azarov N. Ya. (7.12-28.12.2004; 5.01–24.01.2005; 11.03.2010 – 31.12.2013) 0,72 (3,91 years)						
Coefficient of a ratio of present statutes in failures, %	43,84	41,20	46,69	0,98	in 3,76 rivers are more.	in 4,65 rivers are more	in 5,05 rivers are more	in 5,57 rivers are more	in 6,6 rivers are more	in 6,3 rivers are more	in 11,53 rivers are more	in 20,52 rivers are more	in 29,29 rivers are more
Registered of crimes per 1000 population, pcs	11,76	10,61	9,59	11,84	11,12	10,44	9,15	8,78	8,43	9,54	11,06	11,38	9,81
Emissions of pollutants indices, % -	...	102,40	100,90	101,50	102,20	104,60	108,00	100,00	97,70	89,40	103,60	103,00	0,99

... – not available

In table 4.7 essential and important factors of influence on innovative business-processes of industrial enterprises for PEST-analysis were grouped. They were group in four groups:

1) sociocultural environment – growth rate of a real wages employees, level of economically active population, registered vacancies in the end of year, skilled workers graduating, coefficient of a ratio of specialists of the Ist-IVth levels of accreditation to works graduating;

2) technological environment – number of units objects of industrial property per 1000 industrial enterprises, installing new technological processes per 1000 industrial enterprises, introducing innovations products per 1000 industrial enterprises, introducing new types equipment per 1000 industrial enterprises;

3) economic environment – industrial production indices, cost of financing innovation activity, consumer price indices, degree of depreciation of capital assets, share of labor and social contributions in operational cost of the sold industrial product;

4) political-legal environment – level of use of secondary raw materials, coefficient of duration of the governmental policy, coefficient of a ratio of present statutes in failures, registered of crimes per 1000 population, emissions of pollutants indices.

All these factors had tendencies to growth or reduction, and they can descend, ascend or spasmodic. So, factors had a tendency to growth: growth rate of a real wages employees, level of economically active population, coefficient of a ratio of specialists of the ist-ivth levels of accreditation to works graduating, number of units objects of industrial property per 1000 industrial enterprises, installing new technological processes per 1000 industrial enterprises, industrial production indices, cost of financing innovation activity, emissions of pollutants indices, coefficient of a ratio of present statutes in failures. They positively influenced business-processes of industrial enterprises in Ukraine. Consumer price indices, registered of crimes per 1000 population tended to decrease, however the changes of business – processes are positive for innovation.

Such factors had decreased in indicators affected functioning innovative business processes: registered vacancies, introducing innovations products per 1000 industrial enterprises, introducing new types equipment per 1000 industrial enterprises, share of labor and social contributions in operational, cost of the sold industrial products, level of use of secondary raw materials. Degree of depreciation of capital assets grew, but made negative impact on business-processes of industrial enterprises. Coefficient of duration of the governmental policy testified that political and legislative activity in Ukraine had signs of a

randomness and instability. Therefore development of long-term forecasts is inexpedient rather than innovation of business-processes of industrial enterprises. The best is the period for forecasting of changes of information field of innovative business-processes of industrial enterprises – 1,3–1,4 years.

It is possible to draw the following conclusions: 1) structuration of information field of business-processes of industrial enterprises solved a problem of effective functioning of innovative business-processes of industrial enterprises in the conditions of uncertainty and a randomness of an external environment; 2) factors of an external environment were grouped in groups in type on the basis of a method «5x5» (macroeconomic, innovation-technical, financing-innovation, market-numbers, solvent), of Wilson's matrixes (high, average, low probability and influence) and PEST-analyses (sociocultural, technological, economic, political-legal and degrees of importance); 3) management of information innovative field is necessary for performing of business-processes of industrial enterprises on a basis of the system – the process approach, i.e. directly to manage not one or two factors, and separate groups of factors; 4) between the offered factors there is a dependence which is corresponded to the concept of causality on Granger, in which all factors were interconnect and influenced against each other, and it is difficult to structure causes and effect relationships between them. On the variety of situations the same factor could cause or a consequence of concrete action.

1. Gontareva I. V. (2011) System efficiency of functioning and development of industrial enterprises: monograph, Kharkiv PH «ENGEC».
2. Grineva V. M., Vlasenko V. V. (2005) Organizational problems of innovative activity at the enterprises: monograph, Kharkiv PH «ENGEC».
3. Koiuda V. A., Lysenko L. A. (2010) There are more innovative activity of the enterprise and estimation than efficiency: monograph, Kharkiv PH «ENGEC».
4. Osaulenko O. G. [under editor] (2006), Statistical yearbook of Ukraine for 2005, K.: «Avgustr Trade».
5. Osaulenko O. G. [under editor] (2008), Statistical yearbook of Ukraine for 2007, K.: «Avgustr Trade».
6. Osaulenko O. G. [under editor] (2009), Statistical yearbook of Ukraine for 2008, K.: «Avgustr Trade».
7. Osaulenko O. G. [under editor] (2010), Statistical yearbook of Ukraine for 2009, K.: «Avgustr Trade».
8. Osaulenko O. G. [under editor] (2011), Statistical yearbook of Ukraine for 2010, K.: «Avgustr Trade».
9. Osaulenko O. G. [under editor] (2012), Statistical yearbook of Ukraine for 2011, K.: «Avgustr Trade».
10. Osaulenko O. G. [under editor] (2013), Statistical yearbook of Ukraine for 2012, K.: «Avgustr Trade».
11. Rud N. T. (2011) Innovative infrastructure of the region: theory, methodology, practice: monograph, Lutsk, RVV LNTU.
12. Stern Scott, Michael E. Porter (2002), National Innovative Capacity, Washington DC Council on Competitiveness.

13. Yastremska O. M., Vereshchagina I. V. [under editor] (2010), Management of innovative activity: the monograph, Kharkiv PH «ENGEС».

14. [http: / www.vcc.ac.ru / php/jou/autors/moskvina.php](http://www.vcc.ac.ru/php/jou/autors/moskvina.php) / [access 23.01.2014]

15. [http: / www.neweconomyindex.org/states /2002 /index.html](http://www.neweconomyindex.org/states/2002/index.html) / [access 23.01.2014]

4.4 CREDIT SUPPORT IN THE FINANCING OF INVESTMENT ACTIVITY OF UKRAINIAN ENTERPRISES

The development of national economy of Ukraine depends on the investment activity of its business entities, because investments are the basis of any production and economic activities to create added value. Investment activity depends on many factors, but one of the main constraining factors is the availability and accessibility of investment resources for companies. The basic investment resources are savings and emission. However, in recent time direct investment by the owner of the primary investment resources in production and economic activities of the company-legal entity is probably the exception rather than the rule. In general, before being changed into investments they go a long way with the regular transformations in various instruments of financial market. The attention in this study focuses first of all on credit financing of investments. Attention focusing just on the credit channel of investment resources transformation for investment is conditioned by the need to assess its real impact on the economy of Ukraine. Researches of special aspects of the financial market development of Ukraine indicate that the dominant component is its banking system [1]. Banks accumulate investment resources in the form of household savings and facilities emission by the state and redistribute them to the crediting of enterprises-residents, non-residents, consumer crediting etc. The above activities of banking institutions have different effects on investment activity in the country. Consumer crediting, especially on condition of high propensity to import, is withdrawal of resources from the investment sector. Provision of funds to the non-residents stimulates the economy of another state through withdrawal of domestic resources.

Before turning directly to the presentation of the research results we need slightly concretize methodological positions from which it was conducted. First of all, the authors do not agree with the interpretation of investments included in the Ukrainian legislation where investments are investment of capital for receipt of profit or achievement of social effect [8].

More logical and reasonable is of John Maynard Keynes's approach, who treats investments as a volume growth of productive assets [7]. Therefore on investment activities of