

# The System of Analytical Indexes In Strategic Management Organization of Enterprise Innovative and Investment Activity

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## The Problem Statement

Economic development of regions depends on a size and efficiency of the use of investment potential. The development of the market environment, dynamic and turbulent nature of its operation require fundamental changes of the organizational forms of social economy and changes in management analysis of innovation and investment activity of domestic enterprises. High level economic development, according to experience of industrially developed countries, is ensured by the number of conditions. Principal conditions of economic development are accumulated research and technology, industrial, investment potential, institutional impact on technological progress and state support of innovative transformations. Economic deformations prove expediency for activating and increasing of innovation investment processes efficiency in the industry and minimization of impact of factors slowing them down. Considerable impact on innovation investment activity, market dominance, competitiveness in the industry has capacity of innovation potential. Under these conditions, the study of theoretical principles and practical measures concerning the development of domestic production by means of implementation of its innovative potential assumes significance [1, page 18].

Central issues for evaluation of innovation activity consist in defining impact of new technologies on the economic development of countries. Nowadays, development of economic investment sectors for innovation integrations at regional level is of great importance provided that it is required for proper use of regional enterprises potential and perspectives of its innovation-driven growth by regions.

Entrepreneurial activity is a basis for economic and social development of country, poverty alleviation, and high living standards of citizens. Thus, in each country the problems concerning creation of proper conditions for business liable to

state, socially orientated, aiming at resolving current and long-term tasks are always of top priority. In post-crisis era such problems extremely intensified. The methods for avoiding crisis developments in economics are foremost aimed at establishment of favorable conditions for entrepreneurship as a driving force for gradual progressive country development. On the other hand, requirements for entrepreneurial activity are enhancing. Entrepreneurs have to pursue business interests as well as participate in resolving nation-wide and regional problems [2, page 22; 3, page 6].

## The Latest Researches and Publications Analysis

Research of innovation potential production, its structure and methods for evaluation, innovation investment into enterprises development was conducted in the studies by foreign and domestic scientists: O. Amosha, V. Andriychuk, V. Ambrosova, I. Balabanovaa, S. Volodina, P. Haydutskiy, V. Heydzya, O. Hudz, O. Datsiia, M. Zubtsia, M. Kysil, O. Krysalny, M. Kropivka, L. Kolosova, P. Makarenko, M. Malika, L. Martiusheva, V. Mesel-Veseliaka, V. Onegin, G. Pidlisetsky, M. Portera, I. Prygozhyna, P. Sabluka, V. Seminozhenko, V. Sytnyka, R. Solou, P. Stetsiuk, K. Freeman, J. Shumpeter, V. Yurchyshyna, Y. Yakovets' and others. Authors unanimously state that innovations integration stimulates qualitative reformations in the manufacturing that in turn represent stimulus for further changes in attainment of excellence. Analysis of the recent scientific materials indicates the results of comprehensive research on the development and implementation of the elements of innovation and investment mechanism, improvement of the investment climate, some economic and statistic calculations.

Thus, strategic planning, innovations development management, elaboration of economic and financial

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mechanisms are examined in details. It should be noted that much attention is paid to problems of innovation investment management processes on the level of country economics and particular industries. However, some problems remain non-resolved, ill founded. Study of these problems has to be expanded and improved. International practices accumulated great deal of methods and techniques for innovation investment analysis, but their employment under domestic conditions is problematic taking into consideration that they should further improved. In opinion of the author, it should be paid more attention to study dedicated to innovation activity development tendencies and formation of management mechanisms on the level of specific enterprises considering peculiarities of elaboration of system of analytic indicators for integrated management analysis of enterprises innovation activity. Enterprises innovation activity is to be conducive to formation of evaluation of industry potential development in Odessa region as a whole.

### Problem Formulation

The objective of research consists in defining programmatic and methodological basic concepts for analysis of innovation

activity, systematization of analytic indicators of industrial enterprises innovation activity in Odessa region, justification of stages in the process of investment portfolio management, conduction of complex economic and statistical research of enterprises innovation investment activity, showing up perspectives of region development.

### Statement of Basic Study Data

Author agrees with the viewpoint of such Russian scholars as N. Ilusheva and S.Krylova. It should be placed priority on indicators of scientific and technical level, competitiveness, quality, complexity and commercial attraction of innovations among diverse indicators of innovation activity [4, page 121]. It seems also appropriate to consider indicators sorting them into homogeneous groups (based on the local integrated management analysis), and differentiate analytic indicators by three stages of innovation activity comprising innovation process in its entirety: creation of innovations, innovations adaptation and stage of innovation activity results achievement. In the Table 1 we offer systematization of analytic indicators for integrated management analysis of enterprise innovation activity.

Table 1

### Systematization of integrated management analysis indicators for enterprise innovation activity

Groups of Analytical Indicators	General Description of Indicators Groups
1. Indicators of Innovation Analysis: - progressiveness of innovations; - research and technology level of innovations; - innovation activity; - commercial attractiveness; - stimulation of innovation activity	Indicators characterize scientific and technical level of innovations created. Reflect mostly scientific and technical level of innovation activity, commercial attractiveness and stimulation in the field of innovation activity.
2. Indicators of Competitive Analysis: - competitiveness; - intensity of innovations creation; - abundance of innovations process; - technological dependence; - legal innovation security; - duration of creation; - indicators of multidimensional statistics in strategic competitive analysis	Indicators characterize only enterprises relationship with their potential competitors as well as corrections of emerging innovation strategy. In other words, they characterize competitive opportunities for using innovation-oriented strategy of innovation activity development at the enterprise; measure of security reliability and safety of enterprises commercial interests etc.
3. Indicators of Marketing Analysis - complexity of products-innovations design; - necessity of technologies adaptation; - universality of exploitation	Indicators characterize market and distribution of original innovation processes elaborated by particular enterprises operating within respective branch of industry.
4. Indicators of investment analysis: - indicators of innovation investment projects efficiency; - indicators of budgeting	Indicators characterize efficiency of capital investment; technology of financial planning oriented toward elaboration of optimal project solutions and control of investment financial goals achievement
5. Indicators of Financial Analysis: - analysis of asset allocation and utilization; - analysis of money flow; - analysis of funding sources;	Indicators characterize property condition of enterprise, funding sources, liquidity and paying capacity, cash flow, financial stability, business and market activity, profitability, make integral assessment of creditworthiness

Management of enterprise innovation activity includes basic management functions – planning, organization, motivation, control. However, basic management process consists in organization of innovation activity over a distance and through time requiring formation of efficient organization mechanism that is determination of interrelation ways and means for

managerial personnel of enterprise in the process of innovations management. Summing up conceptual foundations of many great scholars and professionals, we would like to present complex of the most important programmatic and methodological issues related to integrated management analysis of innovation activity, please see Figure1.

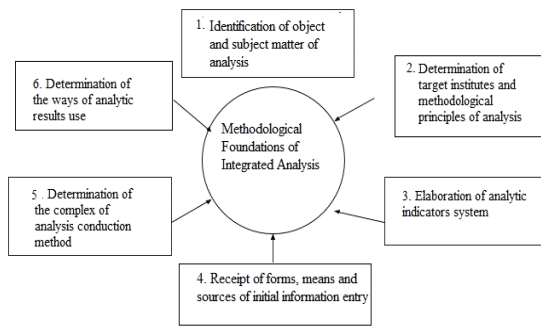


Figure 1. Programmatic and Methodological Issues of Integrated Analysis of Innovation Activity

To emphasize, programmatic and methodological issues of integrated analysis should be regarded in the following sequence: identification of the object and subject → determination of goals and principles of analysis → elaboration of indicators system → selection of information sources → selection of analysis methods → determination of ways of results use. Possibilities for efficient control and management depend on how management entity represents object in details. Degree of detail is determined by capacity of available initial information and how methods of its analysis are developed [5, page 64].

Organization of innovation activity strategic management on the basis of well-balanced indicators system (WIS) and results of applied strategic analysis consist in formation of innovative component of WIS and analysis of indicators constituting it. Formation of innovative component of WIS by analogy with elaboration of well-balanced system of indicators as whole includes the following stages:

1. Determination of strategic goals for innovation process
2. Formation (construction) of strategic chart of innovation process
3. Selection of indicators of innovation process
4. Determination of target values of innovation process indicators
5. Elaboration of strategic innovation measures.

Let us consider the second stage in more details. The objectives of strategic innovation process are not independent and separate parts; on the contrary, they are intimately related and have impact on each other. Identification and documentation of cause-effect relations between certain strategic innovation goals is a principal element of innovation component of well-balanced indicators system. Cause-effect relations, when established, show dependence between certain strategic innovation goals. In the course of such work, intuitive ideas of managers with regard to innovations, namely, their intuitive ideas about cause-effect relations between certain strategic goals of innovation process transform into explicit representations. Hence, these representations are included (documented) on the strategic maps of innovation process.

*Strategic map of innovation process* is a graphic document containing information about cause-effect relations between certain strategic goals of organization innovation process. It took a form of flow graph where strategic goals of innovation

process are represented as separate blocks and cause-effect relations between them are represented as arrows. Strategic map of innovation process is a component part of strategic maps including information about internal business process and general strategic map accordingly [4, page 181]. In exemplification of such strategic map, please find below the strategic map of innovation process showing interrelations between strategic goals formulated previously being cross functional for all types of organizations (Figure 2).

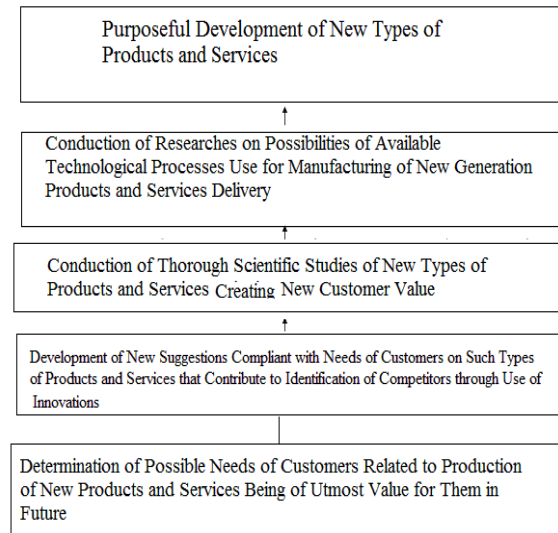


Figure 2. Strategic Map of Innovation Process

Significance of Development of Strategic Maps showing Innovation Process for Formation of Innovation Component of WIS consists in the following their characteristics:

- demonstrate interrelations and dependence between certain strategic goals of innovation process organization;
- clarify mutual effects emerging after achieving strategic goals of innovation process;
- form comprehension of dependence and significance of certain strategic goals of innovation process at managerial personnel;
- contribute to the uniform understanding of organization innovation strategy;
- clarify the meaning of innovation process management indicators;
- contribute to better understanding and communication of innovation process strategic goals;
- contribute to establishment of closer cooperation among managers of diverse structural subdivisions within organizations engaged in innovations implementations;
- create model clarifying ways of innovation success achievement in operation of company.

Further, it seems appropriate to consider theoretical aspects concerning *selection of innovation process indicators*.

Completion of strategic map development for innovation process makes it possible to proceed to selecting indicators of well balanced system innovation component. Innovation process indicators are required for exact and unambiguous expression of strategic goals content as well as determination of its achievement extent. By measuring innovation process

strategic goals, development of managed object toward proposed innovation tendency is ensured. With the purpose to ensure unambiguous understanding of selected strategic goals achievement it is advisable to use no more than two indicators in what concerns innovation process strategic goals. (in certain cases – no more than three indicators, and in exceptional circumstances – no more than four indicators).

After giving consideration to great deal of previous innovation process indicators, it seems evident that indicators have to be included in the innovation component of WIS. For these innovation process indicators and others to be used within innovation management system, it has to be elaborated their detailed description (definition, formulas, parameters). Indicators available should be verified for their applicability (for instance, data sources, value measurement frequency, planned values existence etc.)

Regarding non-available innovation process indicators, calculation procedure to be used for determining their values should be worked-out in advance.

Having considered theoretical aspects in selecting *innovation process indicators*, it is also reasonable to give consideration to the issues related to *investment portfolio management*. Formation of investment portfolio is based on the particular principles including the following:

- supporting in investment strategy implementation;
- assuring compliance of capacity and structure of portfolio with the capacity and structure of sources forming it;
- optimizing correlation between profitability and risk;
- optimizing correlation between profitability and liquidity;
- ensuring portfolio control [6, page 309].

Process on formation of investment portfolio and its management consists of the following stages systematized in the Table 2 below.

**Table 2**  
**Systematization of Stages Foreseen in the Process of Investment Portfolio Management**

Stage	Description of Stage
<i>A</i>	<i>I</i>
1. Determination of Investor Goals	Investment strategy is formulated. Local objectives of investment activity: achievement of certain level of operating profitability, capital augmentation, minimization of investment risks, provision of requisite liquidity. Contradiction of presented goals is resolved with the help of their ranking in compliance with investment strategy.
2. Conduction of Security Papers Analysis	There are two principal professional approaches to selection of security papers: 1) Fundamental analysis. Fundamental analysis is based on the study of general economic situation, state of economic sectors, standing of certain companies with their securities circulating on the market; 2) Technical Analysis is concerned with study of price movements and financial instruments.
3. Portfolio Formation	Security papers are selected for their further inclusion in portfolio, investor adhering to hierarchical structure of goals and principles of portfolio formation considered above.
4. Portfolio Monitoring	For portfolio being well-balanced, it has to be reviewed (monitored). It should be undertaken also for its composition not to contradict with general economic situation constantly changing, economic sectors standing and investment grades of certain investees.
5. Evaluation of factual efficiency, comparison with target figure	Achieved profit values and risk values are determined. Possible departures from target values and ways of its solutions are developed.

Several models have been used to identify whether a stock is mispriced. Stocks that idervalued should be purchased; stocks that are overpriced should be shorted - assuming that the manager is given authority by the client to short stocks. These models fall into two general categories: dividend discount models and factor- resed models. This chapter discusses dividend discount models.

### The Basic Dividend Discount Models

The basis for the *dividend discount model (DDM)* is simply the application of rresent value analysis, which asserts that the fair price of an asset is the present ilue of the expected cash flows. In the case of common stock, the cash flows are ise expected dividend payouts and the expected sale price of the stock at some fume date. The sale price is also called the terminal price. The dividend discount model can be expressed mathematically as follows:

$$P = \frac{D_1}{(1+r_1)} + \frac{D_2}{(1+r_2)} + \dots + \frac{D_N}{(1+r_N)^N} + \frac{P_N}{(1+r_N)^N}, \quad (1)$$

where:

- P = the fair value or theoretical value of the common stock;
- $D_t$  = the expected dividend for year t;
- $P_n$  = the expected sale price (or terminal price) in the horizon year N;
- N = the number of years in the horizon;
- $r_t$  = the appropriate discount or capitalization rate for year t.

### Constant Growth Model

If future dividends are assumed to grow at an assumed rate ( $g$ ) and a single discount rate is used, then the dividend discount model given by Equation (1) becomes:

$$P = \frac{D_1}{(1+r)} + \frac{D_1(1+g)^1}{(1+r)^2} + \frac{D_1(1+g)^2}{(1+r)^3} + \dots + \frac{D_N(1+g)^N}{(1+r)^N} + \frac{P_N}{(1+r)^N} \quad (2)$$

and it can be shown that if  $N$  is assumed to approach infinity, Equation (2) is equal to:

$$P = \frac{D_1}{(1-g)} \quad (3)$$

Equation (3) is called the constant growth model, or the Gordon-Shapiro model. An equivalent formulation for the constant growth model is:

$$P = \frac{D_0(1+g)}{r-g} \quad (4)$$

where  $D_0$  is the current dividend and, therefore,  $D_1$  is equal to  $D_0(1+g)$ .

### Three-Phase DDM

While we have used the constant-growth DDM in our illustrations, the assumption of constant growth is unrealistic and can even be misleading. The version of the DDM most commonly used by practitioners is the three-phase DDM. This model assumes that all companies go through three phases, analogous to the concept of the product life cycle. In the growth phase, a company experiences rapid earnings growth as it produces new products and expands market share. In the transition phase, the company's earnings begin to mature and decelerate to the rate of growth of the economy as a whole. At this point, the company is in the maturity phase, in which earnings continue to grow at the rate of the general economy. Figure 3 depicts this pattern.

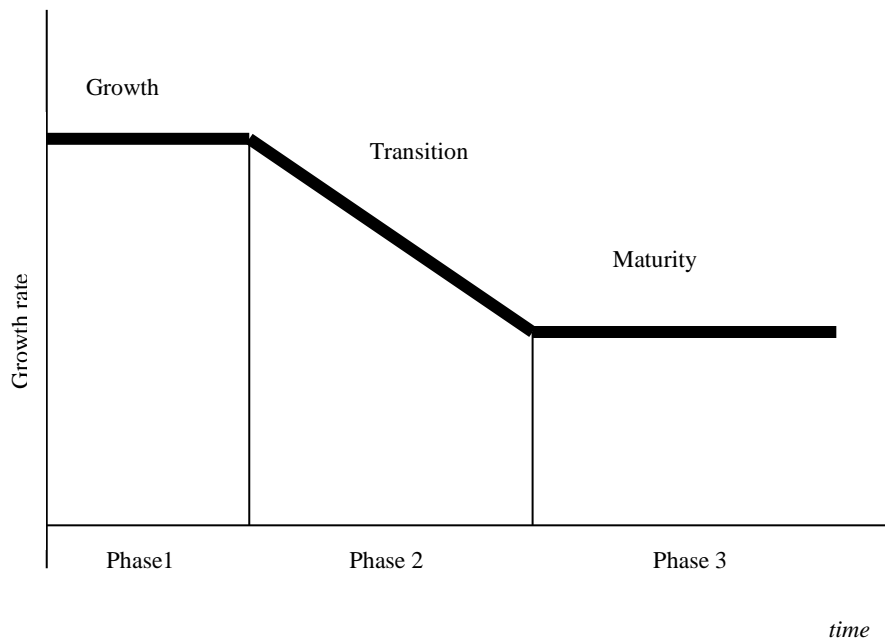


Figure 3. The generalized three-phase dividend discount model

Different companies are assumed to be at different phases in the three-phase model. An emerging growth company would have a longer growth phase than a more mature company. Some companies are considered to have higher initial growth rates and, hence, longer growth and transition phases. Other companies may be considered to have lower current growth rates and, hence, shorter growth and transition phases.

In the typical investment organization, analysts supply the projected earnings, dividends, growth rates for earnings. The growth rate at maturity for the entire economy is applied to all companies. As a generalization, approximately 25% of the

expected return from a company (projected by the DDM) comes from the growth phase, 25% from the transition phase, and 50% from the maturity phase. However, a company with high growth and low dividend payouts shifts the relative contribution toward the maturity phase, while a company with low growth and a high payout shifts the relative contribution toward the growth and transition phases.

A three-phase model is used by Salomon Brothers Inc. This organization is a broker/dealer that provides research to clients. The three-phase model that it developed is called the E-MODEL (E for earnings) [7, p.265-270].

**Practical aspects of this work** are concerned with study of innovation investment sector of enterprises in Odessa region. In this regard, statistical data concerning innovation potential and enterprise activity on the market are examined below.

In 2014 more than 69 industrial enterprises were engaged in innovation activity comparing with 83 enterprises in 2012. Its part in the general number of industrial enterprises has constituted 17,6%. Products technologically new and substantially improved as well as processes were elaborated and introduced by food industry enterprises (30,4% of enterprises engaged in innovation activity), in particular, bread producers and bakery products manufacturers as well as beverages producers (each producer constituting 8,7%), processing and preserving of fruit and vegetables (2,9%); machine builders (26,1%), especially manufacturers of machines and equipment as well as manufacturers of electric and electronic equipment (each manufacturer constituting 10,1%), manufacturers of vehicles and respective equipment (5,8%); chemical and petrochemical industry (17,4%), mostly chemical industry enterprises, and manufacturers of rubber goods and plastics articles (each enterprises constituting 8,7%); enterprises of consumer goods industry (5,8%); cellulose and paper enterprises, iron and steel enterprises, energy producers, gas enterprises, and water manufacturers (each manufacturer constituting 4,3%); manufacturers of other nonmetallic mineral products (2,9%). The largest investments into innovation industry were made by enterprises of chemical and petrochemical industry (54,9% of expenses on innovations were made by this type of enterprises), enterprises on production and distribution of electric energy, gas, water (23,1%), machinery manufacturing enterprises (11,0%), food industry enterprises, beverages and tobacco manufacturers (6,1%).

From total number of industrial enterprise engaged in innovation activity, 44 enterprises (63,8%) directly introduced innovation in manufacturing including 23 enterprises adopting new types of products and 18 enterprises adopting new technological processes.

In 2014 innovatively active enterprises adopted 87 types of innovative products including 9 new types of equipment. Machinery manufacturing enterprises adopted 33 new types of products (including 14 types of products – by manufacturers of electric and electronic equipment, 13 types of products – by manufacturers of machines and equipment, 6 types of products – by manufacturers of transport means and equipment), 26 types of products – by food industry enterprises (including per 9 types of products - by producers of milk, cheese manufacturers, bread & bakery products manufacturers, 3 types of products – by producers of tea and coffee, per 2 types of products – by enterprises on preserving vegetables and fruit and production of cacao, chocolate and sugary confectioneries, 21 types of products were adopted by enterprises of chemical and petrochemical industry (including enterprises operating in the field of rubber goods and plastics articles production – 17 types of products were adopted by these enterprises), and 4 types of products were adopted by manufacturers of soap and household chemicals).

During 2013, 24 new technological processes were introduced, 83,3% of them were low-waste technologies and resource saving technologies. Within machinery manufacturing industry, 14 new processes were introduced, 4 new processes were introduced within chemical and petrochemical industry and in

the field of manufacturing and distribution of electric energy, gas and water.

35 enterprises sold innovative products in 2013. Revenue earned as a result of selling innovation products being novelty for consumer's market and novelty for enterprises has amounted 916,8 mln UAH. that was 3,6% of total volume of sold industrial products (73,3% of this amount accrued to enterprises in Odessa region). The most considerable volumes of sold innovation products were attained by machinery manufacturing enterprises (43,4%), chemical and petrochemical industry (42,3%), food industry enterprises, producers of tea and coffee (14,3%).

Out of Ukrainian borders, enterprises of region sold innovation products amounting 201,2 mln UAH. (21,9% of total volume of sold innovation products), including products sold in the countries of CIS– 85,0 mln. UAH (42,3% of volume of sold innovation products outside Ukraine) [8, page 4-5].

In Figure 4 we would like to provide structural diagram showing allocation of Odessa enterprises in terms of their quantity engaged in innovation activity in 2013 under the main types of industrial activity.

Financing of innovation projects remain issue of current concern. In Table 3, indicators on investment funding allocations in 2013 are presented under the basic types of industrial activity [8, page 23]. The vast majority of the innovation projects are financed at the expense of internal funds - 97,0%, at the expense of municipal funds - 1,7%, credits – 1,3%.

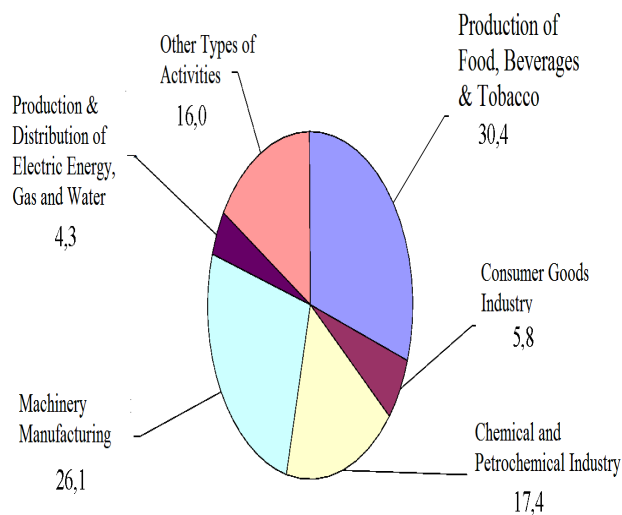


Figure 4. Allocation of Odessa Enterprises Engaged in Innovation Activity under the Main Types of Industrial Activity in Terms of Their Quantity in 2014  
 (as percentage of total quantity of innovatively active enterprises)

State (budgetary) financing of investment projects is associated with state investment into principal objects of social and economic development. Capital investments financing from budget under market conditions has its unique features. State

intervenes into the process of financial and credit security of state enterprises capital investments.

**Table 3**  
**Allocation of Funds for Innovations under the Basic Types of Industrial Activity in 2014 (UAH thousand)**

Indicator	Total Amount of Expenses on Innovations	Under Financing Sources		
		internal funds	Municipal Funds	Credits
<b>Industry</b> selected types of activities:	<b>91028,7</b> <b>(100%)</b>	<b>88310,1</b> <b>(97,0%)</b>	<b>1504,9</b> <b>(1,7%)</b>	<b>1213,7</b> <b>(1,3%)</b>
production of food, beverages and tobacco	5508,6	5470,2	–	38,4
consumers' goods industry	1828,4	1828,4	–	–
chemical and petrochemical industry	49940,0	49940,0	–	–
chemical industry	46191,4	46191,4	–	–
production of rubber and plastic products	3748,6	3748,6	–	–
production of other non-metal mineral products	462,8	462,8	–	–
metallurgical production and production of ready-made metal products	1305,4	1305,4	–	–
machinery manufacturing, repair and installation of	9997,0	8821,7	–	1175,3
manufacturing of machines and equipments	1745,3	1745,3	–	–
manufacturing of vehicles and equipment	5559,8	5559,8	–	–

Inclusions of statistical series 2000-2013 concerning innovation activity of regional industrial enterprises under areas of introduced innovations are deemed appropriate as a next stage

of conducted research (Table 4). In 2013 by contrast to 2000 number of enterprises increased by 50 units or increased by 3,6 times, on the average annual absolute increase constitutes 4 units. Upward trend is observed.

**Table 4**  
**Innovation Activity of Industrial Enterprises in the Areas of Introduced Innovations in 2000-2013**

Indicator	Total						Percentage of Total Quantity of Industrial Enterprises					
	2000	2005	2010	2011	2012	2013	2000	2005	2010	2011	2012	2013
<b>Number of enterprises engaged in innovation activity</b>	<b>19</b>	<b>49</b>	<b>62</b>	<b>79</b>	<b>83</b>	<b>69</b>	<b>4,8</b>	<b>12,9</b>	<b>15,7</b>	<b>20,6</b>	<b>22,3</b>	<b>17,6</b>
Funds were allocated under the following areas of innovation activity :												
- research and developments	3	16	6	11	11	9	0,8	4,2	1,5	2,8	3,0	2,3
- internal research works	x	x	5	9	7	6	x	x	1,3	2,3	1,9	1,5
- external research works	x	x	1	2	4	3	x	x	0,2	0,5	1,1	0,8
- acquiring of external knowledge	–	6	2	2	4	1	–	1,6	0,5	0,5	1,1	0,3
- purchase of machines, equipment and software	5	25	41	59	58	50	1,3	6,6	10,4	15,4	15,6	12,8
- industrial engineering, other types of preparing production output of new products, introduction of new methods of their production	1	11	x	x	x	x	0,3	2,9	x	x	x	x
- others (considering expenses on marketing and advertisement)	5	16	11	15	23	12	1,3	4,2	2,8	3,9	6,2	3,0

Further, on Figure 5 we would like to demonstrate innovation activity of industrial enterprises in Odessa region in 2005-2013. For instance, in 2013 only 17,6% of total number of examined enterprises were engaged in innovation activity. In 2012, proportion of innovatively active enterprises constituted 22,3%, that exceeded indicator of previous year by 4,7 %.

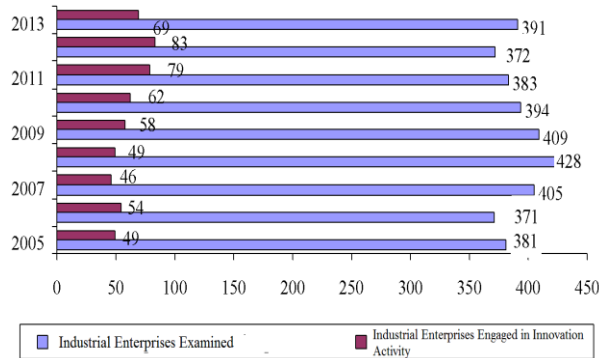


Figure 5. innovatively active industrial enterprises of Odessa region in 2005-2013. (units)

It should be noted that innovative products of enterprises are sold outside Ukraine. The most attractive machinery manufacturing industry – 92,9%; production of food, beverages and tobacco – 4,4%; other industries – 2,7% (Figure 6).

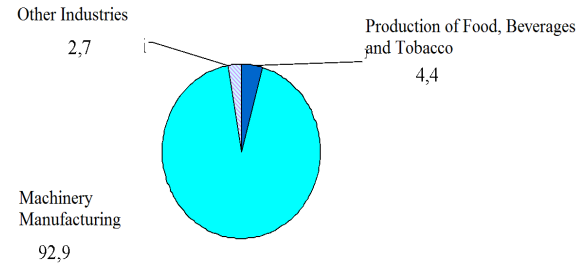


Figure 6. Structure of Sold Innovative Products outside Ukraine under Types of Economic Activity in 2013 (%)

Total amount of expenses on technological innovations include operating costs and capital investments on: conduction of research and developments, purchase of new technologies, industrial engineering, industrial engineering, other types of preparing production output of new products, introduction of new methods of their production; purchase of machines, equipment and software, other basic assets related to introduction of innovations, marketing, advertisement and other expenses. In the Table 5 it is provided information about number of industrial enterprises in Odessa region having implemented innovations during 2011-2013.

Table 5  
 Number of Industrial Enterprises Having Implemented Innovations in Odessa Region during 2011-2013

Enterprises	2011		2012		2013	
	Total	Proportion, %	Total	Proportion, %	Total	Proportion, %
Total:	41	100,0	51	100,0	49	100,0
- introduced new technological processes	17	46,3	23	45,1	23	46,9
- mastered production of new products	22	53,7	28	54,9	26	54,1
sold innovation products	33	x	39	x	41	x

Further, investment activity of enterprises in Odessa region will be considered.

It is important to remind that investment climate of state is a set of politic, law, economic and social conditions ensuring and contributing to investment activity of domestic and foreign investors. Thus, investment climate of Ukraine is often evaluated as unfavorable by many experts, even though Government decreed innovation-investment model of development. However, it should be emphasized that amount of investment considerably increased during the last years up to 2012 according to data provided by State Committee of Statistics. During the last two years, there is a tendency to recession conditioned by the world economic crisis.

Consideration should also be given to investment relations of enterprises in Odessa region with the countries of the world. Let us briefly define categorical system.

Direct Investment is a category of international investment activity showing aspiration of institutional unit being resident of some country to hold control or have substantial impact on enterprise performance, this enterprise being resident of another country.

Investment shall be considered direct investment if the capital/ proprietary rights of non-resident constitute no more than 10 % of statutory capital cost of enterprise-resident, (or) non-resident



has no less than 10% of voices in management of enterprise-resident. Direct investments are also investments gained owing to conclusion of concessionary agreements and joint investment activity agreements, obligations/claims on the credits and loans, trade credits and other obligations/ claims of enterprises-residents to direct investor(s).

Direct investment is a component of pay balance and international investment position of country. Development of pay balance and definition of international investment position is within cognizance of National Bank of Ukraine.

*Resident* is a legal entity and economic entity of Ukraine. Residents do not have status of legal entity (branch office, representational office, etc.), established and implementing their activity in compliance with legislation of Ukraine. These organizations are located on the territory of Ukraine.

*Non-resident* is a legal entity and economic entity that are not ranked as legal entities (branch office, representational office, etc.) established and implementing their activity in compliance with legislation of another country. These organizations are located on the territory of Ukraine.

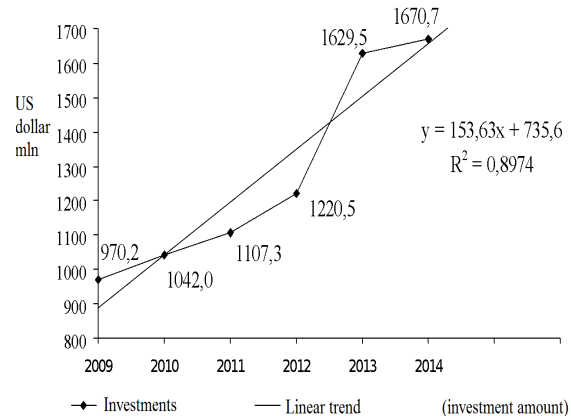
*Re-investment* is a business activity including implementation of capital and financial investments at the expense of revenue (profit), gained owing to investment operations [9, page 365].

The Table 6 presents data on dynamics of direct investment amount in Odessa during 2001-2014. Generally speaking, amount of direct investments is constantly increasing over the years. However, when comparing with each previous year, there is a negative trend. Rate of increase in early 2014 constituted only 2,6% versus this rate in 2006, that was 195,2%. As a reminder, financing of innovation activity was effected mostly at the expense of enterprises (see Table 3).

**Table 6**  
**Direct Investment in Odessa Region as per Countries**  
**in 2001-2014.**

Year	Investment Amount in the beginning of the year .US thousand	Chain Rate of Increase, %
2001	203029,7	...
2006	599343,5	195,2
2011	1107326,6	84,8
2012	1220519,4	10,2
2013	1629074,2	33,5
2014	1670722,4	2,6

Analytical alignments of dynamics lines (direct investment amount) with the use trend extrapolation method are represented by a diagram (Figure 7).



**Figure 7. Dynamics of Direct Investment Amount (stock capital)**

in Odessa Region in 2009-2014

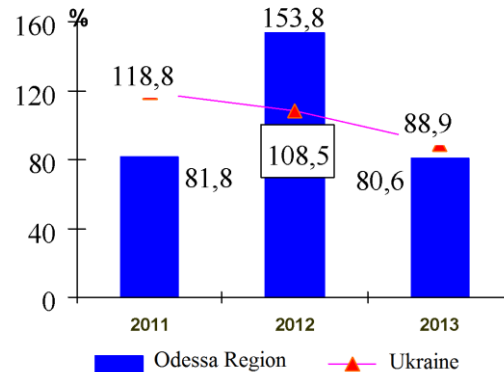
Next, let's give consideration to capital investments of enterprises located in Odessa region. Capital investments in amount of 11872,2 mln UAH were provided as financing by enterprises and organizations from all sources aimed at development of regional economics in 2013. They amounted less than these investments 2012 by 19,4%.

The most considerable funds (capital investments) (99,3% of the total amount) were invested into physical assets. It was invested 0,7% of total capital investments amount into physical assets.

Expenditures on purchase of existing buildings and facilities constituted 1,6%, of new houses and facilities, unfinished buildings – 36,0%, purchase of land fully owned – 0,2%. For improving objects conditions (complete overhaul) it was made 5,5% of all investments.

### Dynamics of Capital Investments Amount in Odessa Region in 2010-2013

Years	Spent (used) capital investments	
	presented in current prices, mln UAH	as % of previous year
2010	9723,8	...
2011	9347,3	81,8
2012	14631,2	153,8
2013	11872,2	80,6



Last year proportion of investments amount of enterprises in Odessa region in the national scope constituted 4,4%. Under this indicator, Odessa region ranked sixth place among regions of Ukraine (after Kyiv, Donetsk, Dnipropetrovsk, Kyiv region, AR Crimea), and under rates of growth it ranked 22<sup>nd</sup> place. Capital investments on average in amount of 4978,3 UAH were made in 2013 as per each inhabitant of Odessa that is lower than mean value in Ukraine and in other regions. Under this indicator Odessa region ranked ninth place [10, page 4].

Major sources of financing were *own investment resources* of enterprises and organizations at the expense of which capital investments were made in amount of 5243,8 mln. UAH. In comparison with 2012 proportion of these funds around the region in total increased by 5,8 percent points. Totally, it was spent around 20,7% of own funds through amortization charges (1083,7 mln UAH).

It was financed 372,6 mln UAH or 3,1 % of total investment amount (in 2012-2,9%) for regional development. In 2013 1025,0 mln UAH (or 8,6 % of capital investments) were spent for construction of own apartments and detached house.

#### Conclusion

To sum up, new technologies and processes have to ensure increase of productivity of labour and improvement of products quality, reduction in expenditures on their production, complex use of primary products, materials, fuel, energy, etc. Conducted economic and statistic analysis of enterprises innovation activity in Odessa region shows that number of industrial enterprises implementing innovations and volume of sales within period 2011-2013 are marked by positive development. Increase of investment attractiveness of domestic enterprises is one of the most important priorities of investment politics that in turn has impact on the level of investment market development as a whole and some economic sectors, in particular.. Investment politics is of great importance for development of society inasmuch as nowadays, it tends not only to ensure its financial stability today but also seeks it remaining stable further. The data abovementioned prove that the year 2013 is characterized by inconsiderable decrease of spent investment amounts that is conditioned by impact of financial economic crisis. Proportion of capital investments totally in Odessa region remains stable. Priority types of economic activity for investments remain transport and communications activity, real estate business, industrial production, invested with a half of total investment amount of

the region. Analysis of construction work scope demonstrated that though in 2013 it was noted increase of construction work scope the problem of customers' funds absence and high percentage rates of credits remains essential problem. More than half of total investment amount in the region are made into the activities mentioned above. Thus, conducted research provides with opportunity of making integrated managerial analysis of innovation-investment activity, determination of innovation and investment potential of domestic industrial enterprises.

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