# ON ARRANGEMENT AND SOME RESULTS OF STATISTIC OBSERVATIONS OF INNOVATIVE ACTIVITIES IN THE RUSSIAN FEDERATION

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***Abstract:***
In the paper the issues connected with measuring innovative activities in the system of state statistics of the Russian Federation are observed, as well as the assessment of key results of measuring innovative activities. Besides the main provisions of the methodology of statistics measurements adopted in the system of state statistics of the Russian Federation in comparison with the recommendations of Oslo Manual, as well as the key results of statistic observations – the level of innovative activity, innovation costs and results, innovation financial sources are analyzed. Based on the issues indicated, the tasks and directions of the development of methodological approaches and arrangement of national statistic observations in the sphere of innovations are defined.

***Key words:***
innovations, management, statistic observation

***JEL Classification*:** O32

## 1 Introduction

The focus on the topicality of innovative basis of macroeconomic development of national economy is traditional. The resultant innovative activity is becoming a priority for providing competitive advantages of some companies, more efficient use of resources (due to the growth of productivity factors, as well), more complete demand satisfaction, and, in general, improvement of the level of business activity and positive transformations in social-economic processes. For efficient state regulation and satisfaction of information needs of the participants of innovative process (including innovative companies and organizations of innovative economy infrastructure in the person of owners and managers) the complete and truthful information about the situation, factors and results of innovative activities in regional, national and global scale is becoming more topical and useful. It becomes all the more actual when considering the technological development of the economy not just as a result of the activity of individual economic agents or state and public institutions, but from the viewpoint of national innovation system (NIS) concept [3]. Application and development of NIS concept proposed by C. Freeman [1], B.-A. Lundval [2] and R. Nelson require analysis of the totality of relationships including relevance, development, transfer and deployment of knowledge. Development of efficient NIS should be based on objective, reliable and comprehensive information about the level of development of particular organizations, the state of public institutes (including property, law, development and financial institutes), situation in the national system of finance and in research sphere, availability of social demand in innovations, character and degree of interaction between subjects

of innovative activity. It is obvious, that a key role in development of the system providing information on national-scale economic situation belongs to state statistical bodies.

The history of state statistic observation and measurement of innovative activity in the Russian Federation (RF) dates from 1995 and it is still going on. Sufficient changes in methodological approaches to innovation statistics within this period should be pointed out. The main direction of these changes – adaptation to the innovation statistics methodology formed by international institutions. Such techniques as Frascati manual dedicated to the methodology of research activity statistics and Oslo manual determining the methodology of statistic measurement of innovative activity, general provisions of methodology contained in the provisions indicated are fixed by international standards CIS-2008. Changes in the approaches to statistic changes in innovations should be definitely considered positively. First of all, they allow taking into account the world experience in absorbing the essence and role of innovations in the development of possibilities and tools for measuring the innovative activity. Second, the approach to international standards of statistic measurements is targeted at the formation of one information area on the tendencies, results and factors of innovative activity, and, consequently, the formation of prerequisites to conducting international comparisons, determination of problems in national innovative sphere in comparison with more developed economies; international comparisons become especially topical under the conditions of Russia joining WTO. At the same time, a number of conditions (including onrush of business entities, focusing of governmental authorities on the problems of innovative development, low technology level of some native enterprises) result in the situation when existing state system of statistic measurement of innovative activity does not satisfy the present-day needs in many respects.

## 2 Paper objectives

Taking into consideration topicality of the system of information support for NIS development processes, need for integration of Russian economy into the global economic space, it seems necessary to analyze principles and methods of statistical monitoring of innovative activities being applied in the RF. Main objective of the research is analysis of the system of statistic measurement of innovative activity in the RF and its conformity to the tasks of shaping and development of national innovation-driven economy. Author made critical analysis of applied methods of statistical monitoring of innovative activities and compared them to the provisions of Oslo Manual, taking into consideration the tasks of NIS development. Based on results of the comparison and on data of government statistics in the sphere of innovation, production and finance, the assessment of innovative activity in native business has been expanded and supplemented, some proposals on development of innovative activity measurement system have been brought forward.

## 3 Methods

According to stated objectives, methods of collection and processing of statistical information applied by Federal State Statistics Service (FSSS) are considered in the paper. Comparative analysis has revealed essential differences between methodological approaches applied by FSSS and Oslo Manual recommendations. Methods of time series and structural analysis have been used for analysis of innovative activities. Grouping method has been applied for better structuring of innovative activities.

## 4 Results

Results of two lines of research are discussed in the paper. At first methodological approaches applied by FSSS are compared with the approaches described in Oslo Manual. Based on the results

of the first research line, statistic measurements of innovative activity made by FSSS have been analyzed to assess the innovative activity of Russian employers and substantiate lines of development of native system for statistic measurement of innovative activity.

To evaluate the results of the development of native methodology of statistic measurements of innovative activity (including "the approximation" to the methodology adopted by OECD[1] and WPSTI[2] fixed by CIS standard) we compared separate provisions contained in Oslo manual and norms envisaged by Russian regulating documents in statistics[3] by the following criteria:

1. approaches to the determination and classification of innovations;
2. statistic units;
3. character of the information about innovations;
4. obligation to execute and general summation;
5. collection of the information on innovative activity costs;
6. evaluation of innovation results;
7. characteristics of innovation financial sources;
8. evaluation of factors preventing innovations.

The summation of the investigation results of the comparison degree of national system of statistic measurements of innovative activity with the provisions of leading international standards are given as a comparative table (Table 1).

Table 1 – Comparative characteristic of a national system of innovative activity statistic measurements and level of correspondence to the provisions in Oslo manual.

| Comparison criterion | Focus of Oslo manual | Focus of the form "Information on an organization innovative activity" requested by the Federal Office of State Statistics |
|---|---|---|
| Innovation types | Food<br>Process<br>Organization<br>Marketing | Technological, marketing, organizational, i.e. those in the Russian system of innovative measurements use the approach indicated in the 1st and 2nd versions of Oslo manual that complicate the international comparisons and detalization of research. |
| Statistic units | It is proposed to consider *an enterprise* as a statistic unit. At the same time, it is envisaged that we shouldn't mix the notion "an enterprise" with "a legal entity", since legal entities, being independent in legal aspect, are not always independent as economic subjects. | Information about the innovative activity is requested for *legal entities*. There are no attempts to connect the information on certain legal entities with actual companies. In this approach there can be errors in some factors: innovation costs, innovation financial sources, results of innovative activities, information sources to form the innovative policy, etc. |
| Character of innovations | "Both qualitative and quantitative details on the innovative activity can be collected during the innovative research". The priority of quantitative measurements in respect of costs and results of innovative activity is pointed out. | Mainly qualitative characteristics and assessments of innovative activity are requested. Qualitative factors are available, however, only the insufficient methodological support of their formation is presented. |
| Execution obligation | The arrangement of complete and random investigation, mainly in optional form, is permitted. | The legislation envisages the directive for complete investigation. |

[1] Organization for economic cooperation and development
[2] Eurostat working party on science, technology and innovation statistics
[3] Order of the Federal Statistic Office No 373 dtd 25.08.11 "On the approval of statistic tooling for the arrangement of federal statistic observation of the activity in science and innovations"

| | | |
|---|---|---|
| Collection of information on innovation costs | The availability of difficulties for collecting the truthful information is accepted as the details on innovation costs are not specified in organization records. The necessity to combine the information on innovation costs with the details obtained from other sources (including those to check the reliability) is indicated. The innovation costs are recommended to be split into current and capital ones, by types of innovations as well. | The collection of information on innovation costs is arranged only by the group “technological innovations”. The costs division into capital and current is not available (accordingly, it is hard to compare innovation costs with the information obtained from other sources). The explanations to the identification and collection of innovation costs are not complete. |
| Evaluation of innovation esults | It is recommended to conduct mainly the quantitative assessment of results by each type of innovations. | The collection of qualitative assessments without the differentiation by innovation type is arranged. |
| Characteristic of innovation financial sources | The assessment of financial sources is indicated as complicated, therefore the qualitative characteristic is accepted. The differentiation of financial sources by innovation type is recommended. | The quantitative information on financial sources is requested. The differentiation by innovation type is not envisaged, the financial sources are considered only by technological innovations. The difficulties with referring the financial volumes by a certain source with a definite technological innovation can be assumed. |
| Evaluation of factors preventing the innovations | The qualitative assessment for collecting the recommended factors (specially systematized and grouped) is envisaged. | The composition of factors is close to the recommendation of Oslo manual. Some factors require clarification (it is desirable to bring them into compliance with the manual recommendations). |

*Source: own development*

In the national state system of statistic measurements of innovative activity, despite certain difficulties of collecting the initial information and discrepancies with current international standards, the sufficient arrays of information being of significant interest are formed, both in respect of managing the innovative activities and developing the system of innovative measurements itself. Based on the data of Federal Service of State Statistics we analyzed the main results of innovative activities in RF. We investigated the following aspects of innovative activity and approaches to its measurement: level of coverage of enterprise array (as legal entities), level of innovative activity, assessment of cost volume for innovations and results of innovative activity, composition of sources for financing innovations.

The results of this research can be presented by the following factors and conclusions.

*Array coverage*

State system of statistic observation in RF (as inherited from the Soviet onв) envisages the directive approach to providing the information to the bodies of Federal Service of State Statistics (FSSS). The statistic investigation of innovative activity is no exception. Medium and large businesses must annually provide the data based on the form No №4-innovation "Information on innovative activity of a company”. Companies in the category of small businesses must provide reports based on the form No 2-MP-innovation "Information on technological innovations of a small business” once in two years. At the same time, the managers of companies are personally responsible as stipulated in the civil legislation.

As our research demonstrated (the research results are given in Table 2), the actual array coverage cannot be called sufficient: statistic observations of innovative activity in 2009-2010 covered under 40% of medium and large businesses and under 10% of small businesses. Similar proportion was observed in previous periods as well.

Table 2 – Calculation of the share of enterprises (legal entities) covered by statistic observations of innovative activity

| Factors | 2009 | 2010[4] |
|---|---|---|
| 1. Large and medium companies that provided state statistics based on the form No 4-innovation, thsd. units[5] | 35.6 | 36.4 |
| Including: Industry | 24.4 | 24.5 |
| Services | 11.2 | 11.9 |
| 2. Companies – small businesses that provided state statistics based on the form No 2-MN, thsd. units [6] | 22.6 | |
| 3. Number of legal entities (not small businesses, non-for-profit companies, financial and loan institutions), thsd. units[6] | 93.7 | 92.0 |
| Including: Industry | 40.6 | 39.1 |
| Services | 53.1 | 52.9 |
| 4. Number of small businesses[7] without micro enterprises, thsd. units[8] | 227.8 | |
| 5. Share of large and medium companies (legal entities) covered by statistic observation of innovative activity, % | 37.99 | 39.56 |
| Including: Industry | 60.09 | 62.58 |
| Services | 21.09 | 22.51 |
| 6. Share of small businesses (legal entities) covered by statistic observation of innovative activity (without micro enterprises), % | 9.92 | |

*Source: own development*

According to the table, statistical monitoring arranged by FSSS bodies does not ensure required percentage of coverage. In 2009 it made under 40 % for large and medium-sized enterprises and under 10 % for small enterprises. The fact requires additional analysis of principles and procedure of statistical data acquisition. Regulatory and legislative acts related to collection of statistical information provide for prescriptive manner of statistical reporting on the part of enterprises according to the principle of complete statistical monitoring.

*Innovative activity*

The native system of innovation state statistics considers “innovative activity” as a separate parameter for observing the innovative activity (Table 3). In this respect, the share of innovative enterprises is studied. At the same time, enterprises performing only technological innovations are taken as innovative enterprises.

[4] Data for 2010 are given only for medium and large businesses as the periodicity of statistic reporting for small businesses is once in two years (odd years)

[5] Statistics innovation in Russia [on-line]. [cit. 2012-08-25]. URL: http://www.gks.ru/free_doc/new_site/business/nauka/ind_2020/pril3.pdf

[6] Data from FSSS official website. URL: http://www.gks.ru/free_doc/new_site/business/prom/kol_yur2009.xls . [cit. 2012-08-25]., URL:http://www.gks.ru/free_doc/new_site/business/prom/kol_yur2010.xls [cit. 2012-08-25].

[7] In accordance with the Federal Law No 209-OZ dated July 24, 2007

[8] Data from FSSS official website. URL: http://www.gks.ru/free_doc/new_site/business/inst-preob/pmu.htm [cit. 2012-08-25].

Table 3 - Specific weight of industrial companies performing technological innovations [9]

| Factors | 000 | 001 | 002 | 003 | 004 | 005 | 006 | 007 | 008 | 009 | 010 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Specific weight of industrial companies (without small business) performing technological innovations, % | 0,6 | ,6 | ,8 | 0,3 | 0,5 | ,3 | ,4 | ,4 | ,6 | ,4 | ,3 |
| Specific weight of small business performing technological innovations, % | ,3 | ,5 | | ,6 | | ,6 | | ,3 | | ,1 | |

FSSS data given in Table 3 demonstrate a vividly low specific weight of innovative enterprises. A similar factor by the data of CIS-2008 in the majority of EU countries exceeds 30%, and in Germany is over 60%. It can be assumed that FSSS assessments are somewhat underestimated due to the incomplete coverage of the array studied, and, possibly, are not completely correct to the data extrapolation performed. Nevertheless the data presented are correlated with the general notion on the low level of business activity in the innovative sphere contained in the papers of Russian economists [5], [6]. This conclusion is supported by statistic data on the innovation costs and volumes of innovative products.

*Assessment of cost volume for innovations*

We processed FSSS information on the amount of costs for technological innovations in accordance with Oslo manual. First, to assess this parameter of innovative activity we used the results of statistic research in other spheres – finance of enterprise, business activity of enterprises, manufacturing activity of enterprises, state of fixed assets and investments of enterprises. Second, we used the assessment indexes recommended in the manual – innovation costs in percent to the turnover (additionally we compared the innovation costs with the value of gross and net profit). The results obtained are given in Tables 4 and 5.

Table 4 – Assessment of the cost share for technological innovations in the volume of turnover and profit of enterprises

| Factors | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|
| Costs of technological innovations, bln rubles | 126 | 189 | 208 | 276 | 359 | 350 |
| Turnover of companies (legal entities) in RF, bln rubles | 28 287 | 35 603 | 44 578 | 53 819 | 52 219 | 63 541 |
| Costs for the production and sale of products (goods, works, services) of companies (legal entities) in RF, bln rubles | 18 152 | 22 006 | 27 226 | 33 391 | 32 682 | 38 877 |
| Gross profit, bln rubles | 10 135 | 13 596 | 17 351 | 20 429 | 19 537 | 24 664 |
| Net profit, bln rubles | 3 226 | 5 722 | 6 041 | 3 801 | 4 432 | 6 331 |
| Share of costs for technological innovations in the volume of turnover, % | 0.44 | 0.53 | 0.47 | 0.51 | 0.69 | 0.55 |
| Share of costs for technological innovations in the general volume of manufacturing costs, % | 0.69 | 0.86 | 0.76 | 0.83 | 1.10 | 0.90 |
| Share of costs for technological innovations in the volume of gross profit, % | 1.24 | 1.39 | 1.20 | 1.35 | 1.84 | 1.42 |
| Share of costs for technological innovations in the volume of net profit, % | 3.90 | 3.29 | 3.43 | 7.27 | 8.10 | 5.53 |

*Source: own development (*according to FSSS data)

Characterizing the results obtained we can point out that the amounts spent for innovation costs (in the average for RF) are very insignificant and comparable with the volumes of activity and financial results of enterprises. The results obtained should be surely assessed negatively, moreover, the topicality of innovation costs is also conditioned by depreciation (and amortization) of industrial fixed assets – in the end of 2010 the depreciation of fixed assets was 47.1%[9]. This fact discovers additional tasks of statistical monitoring of innovative activity that relate to the following problem. High level of depreciation of the active part of fixed assets and extended period without renewal of equipment stock at many domestic enterprises [10] assume that innovative activity cycle, proposed by J. Shumpeter [11] as further development of the theory of business cycle by N. D. Kondratyev [4], has been shifted and disturbed.

Table 5 – Structure of innovation costs

| Types of costs for technological innovations | % | | bln rubles | |
|---|---|---|---|---|
| | 2009 | 2010 | 2009 | 2010 |
| Purchasing of machines and equipment | 51.2 | 54.5 | 183.8 | 190.6 |
| Research and development | 27.3 | 20.6 | 98.0 | 72.1 |
| Production design | 7.2 | 7.4 | 25.8 | 25.9 |
| Other types of production preparation | 4.6 | 7.3 | 16.5 | 25.5 |
| Purchasing of new technologies | 1.5 | 1.3 | 5.4 | 4.5 |
| Purchasing of software | 1.3 | 1.2 | 4.7 | 4.2 |
| Marketing research | 1.6 | 0.6 | 5.7 | 2.1 |
| Personnel training | 0.2 | 0.2 | 0.7 | 0.7 |
| Other costs | 5.1 | 6.9 | 18.3 | 24.1 |
| Total | 100 | 100 | 359 | 350 |

*Source: own development* (according to FSSS data [9])

From Table 5 it is seen that the largest share of innovation costs is for purchasing the fixed assets – over 50%; in monetary terms this factor was 190.6 bln rubles in 2010. At the same time, other sources of FSSS data indicate that the total of fixed assets was 6,625 bln rubles in 2010. The discrepancy of these factors can indicate that either Russian enterprises that invest into fixed assets are mainly orientated at the simple reproduction of fixed assets, or the request order for the value of innovation costs (contained in the form 4-innovation in the statistic reporting of companies) is incompletely methodically substantiated and results in errors.

*Assessment of volumes of innovative products*

In this research we used the recommendations of Oslo manual on the comparison of the volume of innovative products with the total turnover. The results of the assessments obtained are given in Table 6.

Table 6 – Turnover share for new products

| Factors | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|
| Volume of shipped innovative goods, works, services, bln rubles | 545.5 | 714.0 | 916.1 | 1 047.0 | 877.7 | 1 165.7 |
| Volume of innovative costs, bln rubles | 125.7 | 188.5 | 207.5 | 276.3 | 358.9 | 349.8 |
| Turnover of companies (legal entities) in RF, bln rubles[10] | 28 287.3 | 35 603.0 | 44 577.6 | 53 819.4 | 52 219.3 | 63 540.6 |

[9] Data from FSSS official website . URL: http://www.gks.ru/free_doc/new_site/business/osnfond/STIZN_vs.xls [cit. 2012-08-25].

[10] Data are given on FSSS official website. URL: http://www.gks.ru/wps/wcm/connect/rosstat/rosstatsite/main/enterprise/industrial/# [cit. 2012-08-25].

| | | | | | | |
|---|---|---|---|---|---|---|
| Volume of innovative goods, works, services per 1 ruble of costs for technological innovations | 4.34 | 3.79 | 4.41 | 3.79 | 2.45 | 3.33 |
| Share of innovative goods in the company turnover, % | 1.93 | 2.01 | 2.06 | 1.95 | 1.68 | 1.83 |

*Source: own development (*according to FSSS data)

The factor "Volume of innovative goods, works, services per 1 ruble of costs for technological innovations" is presented in FSSS manual "Statistics of innovations in Russia" [9]. Certainly the comparison of costs and results has a definite meaning. However we have to agree with the provision of Oslo manual on the inconsistency of the totals of innovation costs and results in the current period.

The factor "Share of innovative goods in the company turnover" looks more informative and meaningful. Its value in the period investigated is about 2 percent, which is an additional evidence of low innovative activity in Russian business sector.

*Sources for financing innovations*

The composition of financial sources and their structure are given in Table 7.

Table 7 – Structure of sources for financing innovations, %

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|
| Company's own funds | 78.7 | 77.3 | 79.6 | 72.3 | 74 | 69.1 |
| Budget funds (federal, RF subjects, local) | 5.1 | 4 | 4.2 | 3.1 | 3.4 | 5 |
| Commercial funds | 0.1 | 0.1 | 0.1 | 0.1 | 0.01 | 0.01 |
| International funds | 1.5 | 0.6 | 0.3 | 0.1 | 3.5 | 2.7 |
| Other funds (credits and loans, venture funds) | 14.6 | 18 | 15.8 | 24.4 | 19.1 | 23.3 |

*Source: own development* (according to FSSS data [9])

From Table 7 it is seen that Russian entrepreneurs mainly use own funds to finance innovative activities. The second source by its importance – "other funds" is mainly presented by credits. The share of other sources is very insignificant. At the same time, the influence of financing from commercial funds is beyond the statistic error. The priority of own funds is explained not by the sufficiency of own capital and insufficient volumes of investments but high barriers to attract borrowings (mainly a high interest rate of credits) and low solvency of Russian enterprises, as well as by insufficient activity of native institutes of development [7].

The high cost of credit resources is demonstrated by the data of Central Bank of RF given in Fig. 1.

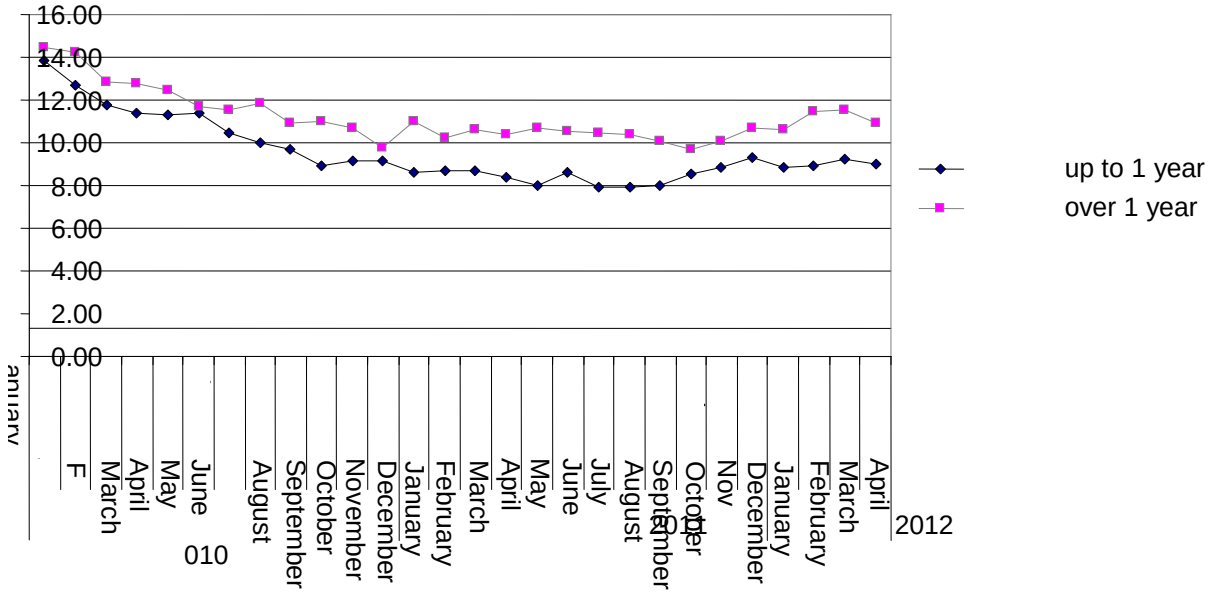


Fig. 1 – Average interest rates of credits given by credit institutions to nonfinancial organizations in rubles[11]

The availability of formal obstacles for Russian enterprises to obtain credit resources – low solvency level should be pointed out separately. In the crediting practice Russian banks consider the financial state as the main criterion when assessing the solvency of potential debtors. The official reporting of the majority of Russian banks demonstrates the unsatisfactory state of financial stability and solvency (average factors are given Table 8).

Table 8 – Average factors of financial state of Russian enterprises[12]

| Coefficients | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011*) |
|---|---|---|---|---|---|---|---|
| Coefficient of current solvency | 122.2 | 123.7 | 130.7 | 129.2 | 129.4 | 134.3 | 181.7 |
| Coefficient of own working capital provision | -12.5 | -13.3 | -10.5 | -14.1 | -18.8 | -14.1 | -16.5 |
| Autonomy coefficient | 56.2 | 57.1 | 55.9 | 50.5 | 51.6 | 52.4 | 44.6 |

The financial state of "an average" Russian enterprise can be characterized as unsatisfactory due to the deficiency of own working capital and low current solvency (minimal possible coefficient of covering current liabilities with working capital is assessed, as a rule, at the level not below 2). At the same time, despite the average statistics, there are definitely successful enterprises with high solvency. Besides, credit institutions often make decisions based on other parameters of a debtor – loan security, third-party guarantee, etc.

## 5 Discussion

It should be concluded that when arranging the statistic observation of innovative activity neither total nor properly arranged selected research was conducted. As a result, to obtain the substantiated results of statistic measurements the additional study of the array to accept and substantiate

[11] Data from the official website of Central Bank of Russia. URL: http://www.cbr.ru/statistics/?Prtid=pr [cit. 2012-05-07].

[12] Data from the official website of FSSS. URL: http://www.gks.ru/wps/wcm/connect/rosstat/rosstatsite/main/finance/# [cit. 2012-08-25].

the representativity of the research by basic characteristics of the general array (including the branch belonging, size, geographic region, etc) is required, as well as for further treatment of the primary statistic information.

Several reasons of insufficient coverage of innovative activity research can be called. First, the liberal legislation envisaging the weak responsibility measures for improper execution of FSSS requirements on providing statistic reports; second, the improper control for providing the data from the territorial bodies of FSSS, third (and mainly), difficulties experienced by representatives of companies when filling the given statistic reporting form.

Besides, considering the reasons of insufficient activity in providing the information on innovative activity, we should agree with the conclusions on the issue in Oslo manual [8]: “underestimate of the importance of innovations and corresponding tools of state policy by the local business community. Managers are often inclined to hide the finances… The targets of the investigation should be declared definitely, and the questions should be formulated distinctively”.

In this connection the following propositions look substantiated and worth attention [8]:

1. Results of innovative investigations should be published and widely distributed – to encourage business subjects to participate in further rounds, to increase the knowledge of investigations and use of investigation results by researchers and politicians;

2. Inclusion of a considerably shortened “innovative” application form into some investigation of business activity conducted;

3. Formation of the proper legislative and normative-legal base to collect the innovative statistics.

Quality of statistic measurements in innovative sphere depends on support of statistic data collection from business itself. In this connection, business should be more actively informed about topicality and results of statistical observations and measurements related to innovative sphere to encourage and motivate its participation in innovative surveys.

Analysis and comparisons made by author revealed some impediments for innovate activities: in particular, in financial sphere. Despite a certain decrease in credit rates, the credit cost is still high. This is even more obvious in comparison with the data of average profitability of assets of Russian enterprises: in 2010 – 6.7%; in 2011 – 7.0%. In other words, an “average” enterprise in RF is not able to attract credit resources without the negative effect for the results of its activity. This is especially significant if we are talking about financing innovation costs with initially high risks and taking into consideration low creditability of an “average” Russian enterprise. In general, when working out the state support of innovative enterprises we should take into account a vivid discrepancy between financial and actual sectors of economy, as well as the necessity to develop specialized institutions of financial infrastructure of innovative economy.

Existing state system of statistic monitoring and measurement of innovative activity is presently at the formative stage and requires further development. In particular, we need to increase statistical monitoring coverage, further develop methodology of statistical information collection and processing to ensure conformity with international standards, better take into account peculiarities of national accounting and reporting system. The methodology of collection and processing of statistical information about innovation activity should, in the first place, provide more detailed information about innovation activity (separately by product and process innovations, borrowings and venture capital funds, etc.), in the second place, define more precisely the methodology of data collection on innovation costs (based on existing business and tax accounting policies of capital investment, research and development investment, purchase and formation of intangible assets, etc.); in the third place, apply matching and weighting methods, including the ones recommended by Oslo Manual. So, for instance, the present-day FSSS system does not take into account such indicators as "share of innovative goods in total company turnover”, “percentage share of innovation costs in total turnover”, does not compare company innovation costs with aggregate investment and financial result, which in some degree downgrades information content of the research results.

Information collected in the state system of statistic monitoring of innovation activity indicates low level of innovation activity of Russian enterprises and presence of significant barriers (primarily financial ones) impeding innovative activity. That requires systemic state support of innovative entrepreneurship. At the same time, efficient national policy in innovative sphere is closely related to availability of information on innovative processes and results.

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