

Information and Communication Platform as a Complex Approach for Solving Information Asymmetry Problems

Alla Ivashchenko¹, Yuliia Sybirianska² and Yevheniia Polischuk³

¹Kyiv National Economic University named after Vadim Hetman, Corporate finance and controlling department, Kyiv, Ukraine

²Kyiv National Economic University named after Vadim Hetman, Finance department, Kyiv, Ukraine

³Kyiv National Economic University named after Vadim Hetman, Investment activity department, Kyiv, Ukraine

(¹alla.ivashchenko@kneu.edu.ua, ²sybirianska@kneu.edu.ua, ³yivga_83@ukr.net)

Abstract. This research is aimed to analyse existing information asymmetry problems between business market participants, to define different dependences caused by the lack of information in business and develop complex approach for solving information asymmetry problems. The authors identified information asymmetry characteristic features, its role and impact on business development. The article reveals the risks and consequences of using distorted data flows for different business processes within organizations. Effects of information asymmetry on business were proven through conducted research in order to analyze problems of undertaking research activities of different educational institutions and underline features of doing business by SMEs. The authors developed the Information and Communication platform model as a way for reduction the information asymmetry level offering a complex approach for solving different types of information asymmetry problems.

Keywords. Information asymmetry, information flows, information dissemination, information asymmetry reduction, information and communication platform.

Key Terms. Data, ICTComponent, WebService, FormalMethod, BusinessProcess.

1 Introduction

Risk and uncertainty are always considered as components of doing business at any market. Economic laws and models are mostly developed on the assumption

that information should be equal, reliable and accessible for all market participants. Herewith existing small informative inaccuracies have not to be paid attention.

Besides, the lack of adequate information or its insufficiency among market participants might have a significant impact on the level of uncertainty in business environment and on the market efficiency on the whole.

Shortage of information in Ukrainian entrepreneurial sector is aggravated by a range of factors as fragility of economy, exclusion of incomplete information service market and absence of collaboration and cooperation similarly between participants of market (including companies, government, financial institutions, investors, educational institutions and others) and between different types of markets.

So, problems of information asymmetry removal between entrepreneurial sector, government, financial and educational institutions need to be solved to minimize the business risk level, to increase the level of funding for enterprises, small and medium sized in particular and to reduce the financial and information illiteracy among Ukrainian businessmen.

2 Related Work

2.1 Dialectical Essence of Information Asymmetry

The founders of the asymmetric information theory were G.Akerlof [1], M. Spence [2] and J.Stiglitz [3], who received the Nobel Prize for the development of this theory in 2001. According to the theory a seller and a buyer have different knowledge about a product.

B.Eichengreen argues that the asymmetric information environment could complicate the investor's choice, because in the conditions of lack of reliable and accurate information it is difficult to determine when and how the asymmetric information can affect their business [4].

According to E. Blankespoor, G.Miller and H.White, a problem is compounded by the fact that when big companies are compared to small firms and private investors, the first ones have a greater ability to obtain the necessary information. In other words, market participants themselves are responsible for the asymmetric information dissemination [5].

A. Jobst underlines one more reason that exchanges among the various co-operating partners also include asymmetric information [6]. It leads to the risk of fraud or deception, especially if payment obligations and agreements differ from the results of rational expectations.

The phenomenon of asymmetric information can be observed not only in the economic sphere. The policy of providing asymmetric information often uses technology of establishment a political myth as a specific symbolic environment [7].

To overcome this problem M. Spence believed that sellers have to give additional information about the quality of their products [2]. Such information may be represented by logos, trademarks, guarantees of the company reputation,

quality certificates, diplomas of various competitions and prestigious nominations, recommendations, level of qualification and the frequency of dividend payments as a signal of firm prosperity.

B. Black told that at the age of high technology the level of asymmetric information is quite significant. Companies working in this sector in many cases have no long history and produce a very specific product whose quality is difficult to assess by the laymen [8]. Venture capital firms, performing the detailed examination of the product and the firm, provide an indication to the market about its quality through investment activities.

R. Pinydck and D. Rubinfeld in their works believed that a stock exchange is an effective way to deal with asymmetric information. According to their views this is the place where information is aligned, and system of market prices acts as a tool for balancing or a specified indicator [9].

P. Healy and K. Palepu considered auditing companies to be a means of combating asymmetric information [10]. Investors require the availability of independent auditor reports from companies, even if there is no specific demand from government regulators. The level of company solvency and its creditworthiness is raised through auditor participation in doing business for potential investors. Meanwhile, the research results demonstrate that in general auditors do not provide any new information about a company or its current state, but only confirm the existing information.

So, as it can be seen, there are certain achievements and developments aimed at aligning information asymmetry. Our research methods are based on the theory of asymmetric information. Its tools are directed at improving the information flow facilitation through access to information about current financial and credit instruments aimed at stimulating the innovation activities of enterprises, particularly SMEs.

2.2 Theoretical Background of Information Asymmetry

Asymmetric information, sometimes referred to as information failure, is present whenever one party to an economic transaction possesses greater knowledge of the material than the other party. Almost all economic transactions involve information asymmetries. [11]

Financial markets exhibit asymmetric information by a financial transaction, one of the two parties involved will have more information than the other and the ability to make a more informed decision. Asymmetric information can lead to either moral hazard or adverse selection. Moral hazard occurs when a party will take a risk because that party will not feel the cost of the risk. Adverse selection is the undesired result when buyers and sellers have access to different information. Both moral hazard and adverse selection result in market failures. [12]

The main characteristic features like types of information asymmetry, reasons for occurrence in business, possible consequences and ways for reduction are described in fig. 1.

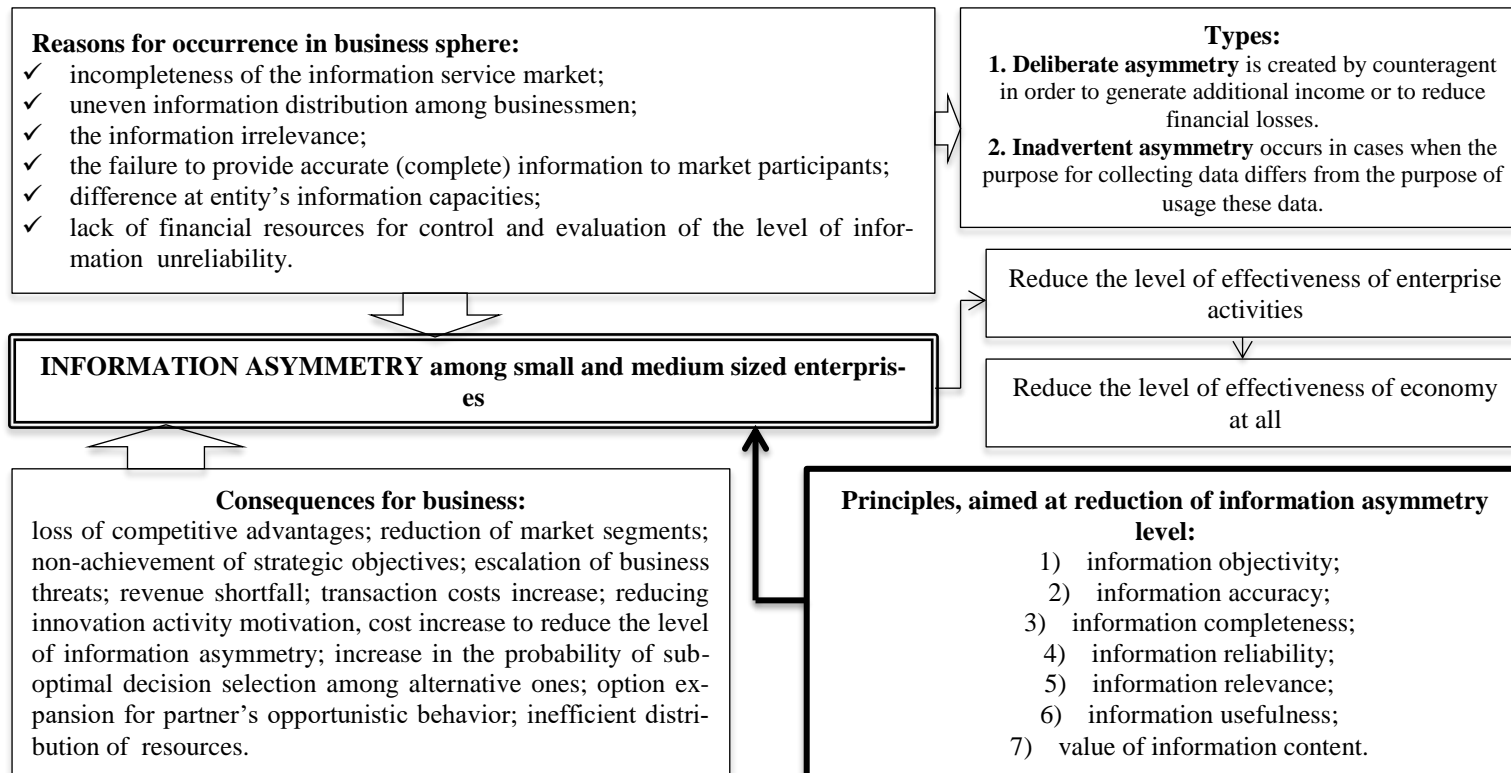


Fig. 1. Concept of information asymmetry identification role for business development (created by authors on the basis of [13, 14])

3 Information Asymmetry: Risks and Consequences

Aims of different groups of participants are variable and rarely inter-cross. Contrast of interest among market participants leads to information curvature or its unevenness regarding the same object. Features of entity cooperation with other participants and ways of information asymmetry with risks and possible consequences are shown in fig. 2

In fig. 2 there are different types of information disclosure depending on its users exemplified as government, investors, infrastructural participants, etc. If the main user of information is government in many cases some legal entities try to hide their real financial indicators and show the lower ones aimed at reduction of tax base.

One of the factors, which also influences information asymmetry level, is evaluation. Manipulation of different methods for evaluation of company objects can be the result of distorted data about assets, equity, loans, profit and property value of company [14, p. 139].

All these patterns of information asymmetry could lead to inability of property evaluation of different enterprises and national wealth in overall.

4 Effects of Information Asymmetry on Business and Research in Ukraine

4.1 Problems Caused by Information Asymmetry in Conducting Research

The survey to confirm for approval existence of information asymmetry in business, weakening demand for innovation and communication gap between theory and practice, exemplified as scientists and business representatives was conducted.

Firstly, more than 380 Ukrainian scientists were interviewed to reveal problems concerning ways of funding the research and their cooperation with business. As the result of the survey some problems related to information asymmetry were identified.

Thus, about 60% of interviewed respondents received funding for research from the State Budget of Ukraine. In 30% of cases, the financing was carried out by their self-financing. About 18% of respondents received funding for the implementation of research from other sources (including international funds). Only 5.5% indicated that the source of funding for research was from investment funds of private companies (Fig. 3). Bank loans are not popular for implementation of research in Ukraine. Despite excessive bureaucracy both at the stage of project submission for consideration (67% of respondents) and at the stage of the project reporting (44.7%) is among the destructive factors of the budget financing, it should be noted that nowadays the budget funding remains the most available source of financial resources for conducting research.

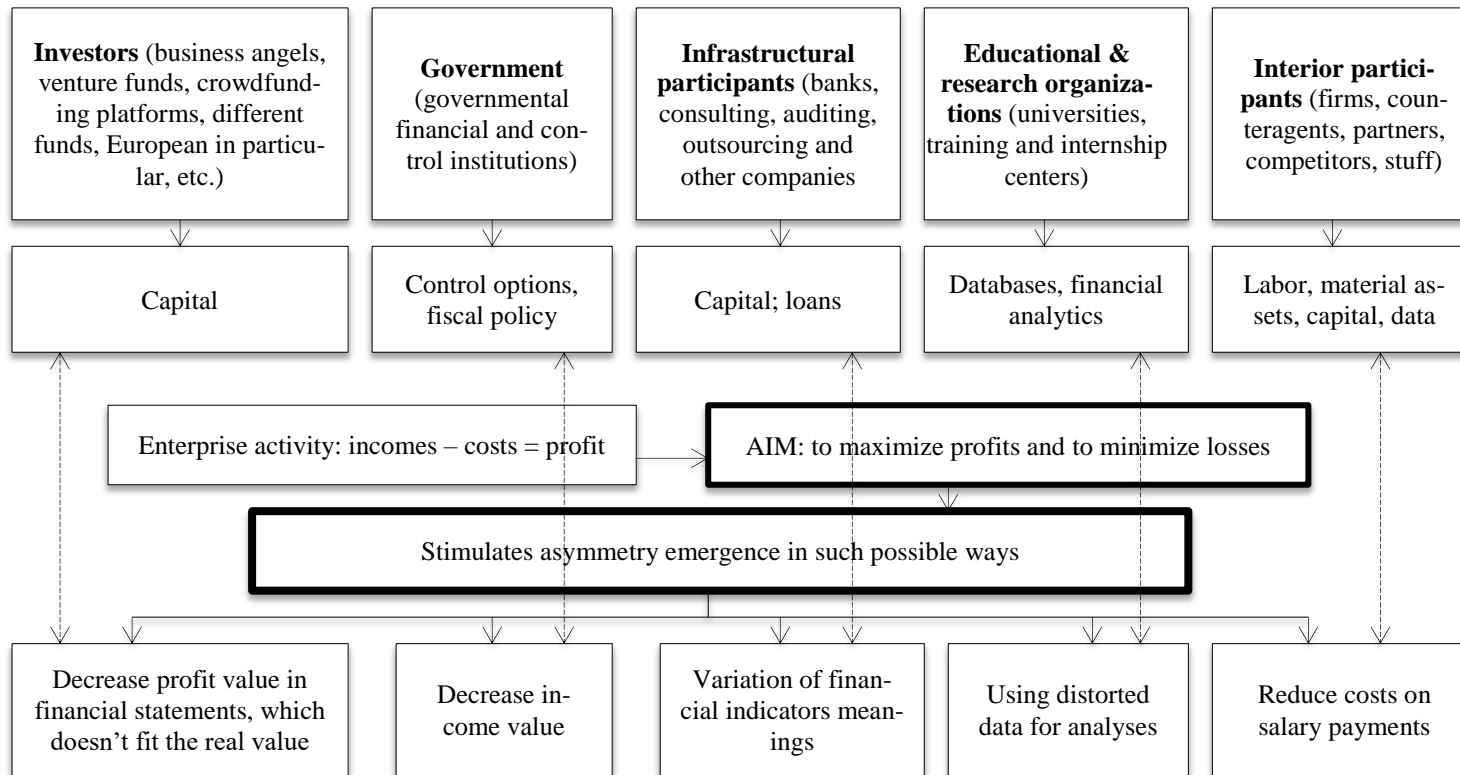


Fig. 2. Manifestations of information asymmetry in business (where “ \longleftrightarrow ” – information flows) (Source: compiled by authors)

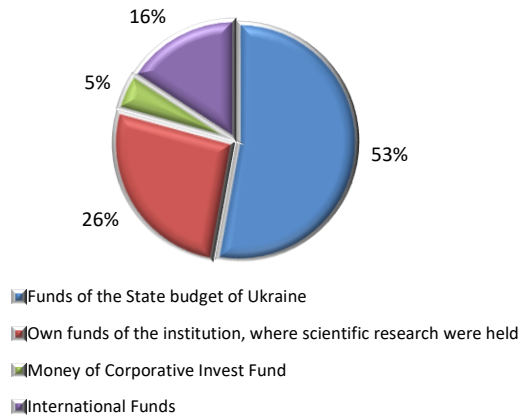


Fig. 3. Sources of research funding in Ukraine (Source: compiled by authors)

Respondents also indicated the inefficiency of information flows about available opportunities for research funding (35.5% of respondents). About 46% of respondents pointed out that information about possible funding sources does exist, but it is rather dispersed. Lots of resources for its searching and translation from foreign language are required to annihilate the problem.

About 22% of interviewed scholars considered that there was enough information to determine the potential sources of funding; almost 28% of respondents admitted that information was available, but in many cases, it would come too late for application preparation (Fig. 4).

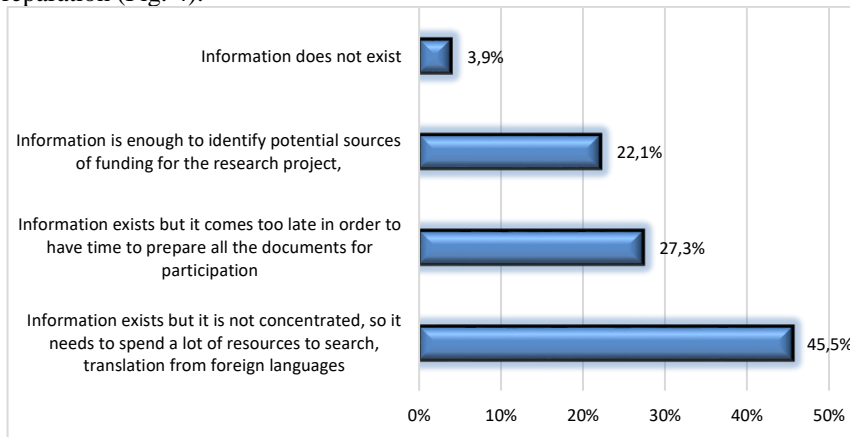


Fig. 4. Assessment of information availability on the sources of funding for research projects (Source: compiled by authors)

According to interview responses such factors as excessive tax burden (32%), lack of qualified project team (17%), lack of project management skills (26%), insufficient

knowledge of English or other foreign languages (22 %), lack of incentives of domestic science (22%), and insufficient creativity of team (6.6%) can be considered as demotivating (Fig. 5).

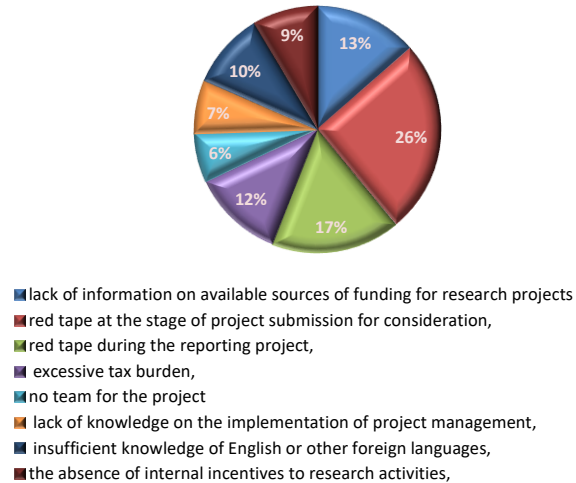


Fig. 5. Challenges of research activities (Source: compiled by authors)

It should be defined that during the design and implementation of research projects most participants did not involve third parties (almost 87% of respondents). From the authors` perspective, this factor reduces the objectivity of the research results, increases the corruption component and the gap between theory and practice.

However, respondents noted the urgent need for assistance such third parties as consulting (23.3%), auditing (11%), expert (27%) and law (8%) companies. More than 42% of interviewed individuals had no necessity in the services of these companies.

Almost 37% of them indicated that they were ready to cover the cost of third party`s services in the amount of 5 - 10% of the project value. Almost 28% were willing to cover the expenses of these services at the rate of 1 to 5% of the project cost. Only 9% were prepared to finance the costs up to 20% of project cost. This indicated that most respondents did not understand the mechanism of project cost formation. Such losses were related to overhead costs for the project (Fig. 6).

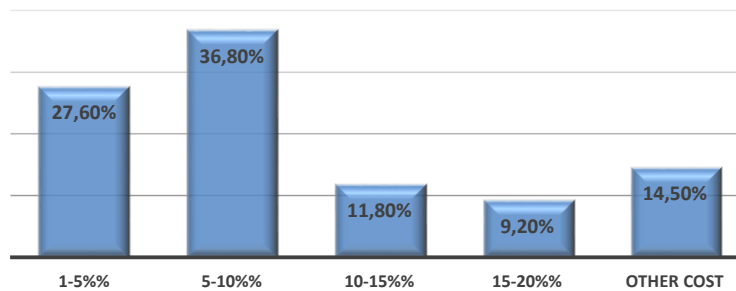


Fig. 6. Sum of money representatives are ready to pay for project support (Source: compiled by authors)

Secondly, in the survey the data about features of doing business in Ukraine were collected through the questionnaire of SMEs. Its detailed analysis is presented below.

4.2 Features of Doing Business by SMEs

SME sector in Ukraine covers about 99.9% of the total amount of legal entities and private entrepreneurs in 2015 (1.97 million) [15]. The following table (table 1) shows the structure of legal entities in Ukraine according to their dimension. The data in the table 1 prove that microbusiness is the most numerous group of SME's, over 95% of the total amount of legal entities in Ukraine.

Table 1. Number of Legal entities in Ukraine in 2010-2015 years

Years		Large	Medium	Small	Micro	Total
2010	units	586	21338	68316	2093688	2183928
	%	0,03	0,98	3,13	95,87	100
2011	units	659	21059	71083	1608819	1701620
	%	0,04	1,24	4,18	94,55	100
2012	units	698	20550	68103	1510776	1600127
	%	0,05	1,29	4,26	94,42	100
2013	units	659	19210	65021	1637180	1722070
	%	0,04	1,12	3,78	95,08	100
2014	units	497	16618	55159	1859887	1932161
	%	0,03	0,87	2,86	96,26	100
2015	units	423	15510	47555	1910830	1974318
	%	0,03	0,79	2,41	96,79	100

Source: Calculated by authors according to [16]

The survey was conducted in order to reveal features of doing business in Ukraine and define how information asymmetry influence business. The survey covers 483 legal entities (SME's) from different parts of Ukraine, mostly from Kyiv and Kyiv region (54% of interviewed). The majority of them are paying taxes according to the simplified tax system (68.7% as it is showed at fig 7 and 8).

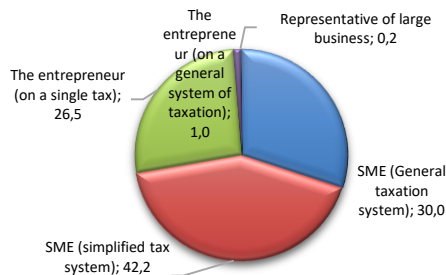


Fig. 7. Structure of interviewed legal entities

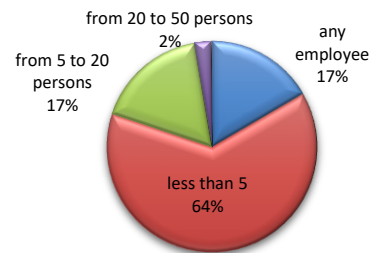


Fig. 8. The number of employees in interviewed SME's

(Source: compiled by authors)

About 86% of respondents told that the main source of their investments was their own savings or financial resources and only about 11% of them used bank loans. As it can be concluded, most small enterprises and entrepreneurs do not use investments, but they need them. At least 95% of respondents expressed the same opinion that they had been looking for investments, but more than 80% of them did not receive assistance from consulting, juridical, auditing and other companies in the process of looking for investment resources. But there are some factors impeding the attraction of investments by SME`s, high interest rates on credits, corruption, high level of shadow economy, rather high level of tax burden in Ukraine, low level of purchasing power in Ukraine, raiding and economic recession in Ukraine being among the most significant. All the survey participants consider that not enough conditions for simplifying investment and innovation processes in Ukraine and there is a lack of available useful information about the possible ways to attract financial resources are being created by the government (fig. 9).

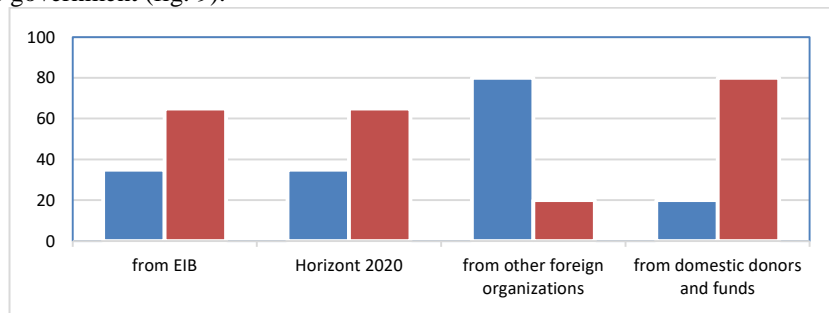


Fig. 9. The level of interviewed SME`s awareness with the possibilities of obtaining / implementing funding from different donors and sponsors (Source: compiled by authors)

There is an opinion expressed that available information is insufficient or unnecessary, others confront, that finding information is time- and resource-consuming. Therefore, they consequently require participation of other organizations, namely consulting, juridical, expert companies. Moreover, most of them (more than 80%) are ready to pay extra for investment project preparation done externally.

Simultaneously, many international funds actively functioning in Ukraine are ready to provide funding to SME`s (table 2).

Table 2. European funds of financial aid available for Ukrainian SMEs

Program	Duration,	Budget	Targets
COSME	2014-2020	2,3 bln. €	Facilitating SME output to foreign markets (providing analytical and advisory services related to export and import activities of enterprises); improving competitive environment; forming of doing business culture.
Horizon-2020	2014-2020	80 bln. €	Focus on research and innovations, including spheres that can be identified as research, innovation enterprises, and entrepreneurship. The program supports a wide range of activities.
East Invest	2010-2017	14 mln. €	Finance SMEs activities such as seminars, workshops, trade fairs, study visits, visits of SME`s investors, presentation tours, etc.
EU SURE	2016-2020	55 mln. €	At the national level it provides technical assistance and ad-

			vice on policy development to complete the processes of deregulation and create appropriate information web portal for SME; at the regional level it guarantees practical assistance for SME development and entrepreneurship skills through a network of business development centres.
EFSE	Permanently since 2005	974 mln. €	Provides agriculture and housing loans to SMEs (through local commercial banks, macro financial institutions or non-banking organizations).
DCFTA	2014-2024	10 mln. € EU' grant, 70 mln. € investments	Help SMEs to seize new trade opportunities with the EU and within the region which have been opened thanks to the DCFTA; improve SMEs' access to finance, enabling them to invest and increase their competitiveness; allow SMEs to integrate into global value chains by becoming business partners of foreign direct investors
UKEEP	permanent	3-10 mln. \$	Target EBRD financing for Ukrainian private companies in various sectors, whose aim is to invest in energy efficiency projects and renewable energy.
USELF	permanent	140 mln. €	Facilitate the implementation of projects aimed at using renewable energy in Ukraine. Provides loans to help at the stage of development of projects that meet the financial, technical, environmental criteria of the program.
Unlimit Ukraine	permanent	without limit	Support young and promising entrepreneurs who form a cluster of micro and small businesses in Ukraine, initiated by the European Business Association in collaboration with the Philip Morris Ukraine. It aims at giving a boost to young Ukrainian business growth and development.
STAREP	2014-2017	10 mln. €	Business support services; supports access to borrowers SMEs and financing through the upgraded accounting and financial reporting.
SME Facility	2010-2020	15,3 mln. €, 150 mln. € of investments	A wide range of financial services and products to SME that make affordable "long" money for them; borrowing, particularly in the national currency, loans, equity investments and guarantees.

In the table:

COSME - Competiveness of Small and Medium Enterprises

DCFTA - Deep and Comprehensive Free Trade Area

EFSE - European Fund for Southeast Europe) - ENR (European Neighbourhood Region

EU SURE - EU Support to Ukraine to Relaunch the Economy

STAREP - Strengthening Auditing and Reporting in the Countries of the Eastern Partnership

UKEEP - Ukraine Energy Efficiency Programme

USELF - Ukraine Sustainable Energy Lending Facility

Source: compiled by authors according to the information received from [17,18,19,20,21,22,23]

All respondents agree that there is an urgent need for the introduction of the unified information online platform to support innovation creation and implementation because it will simplify the process of locating sources and directions of available potential funding, help to solve the information asymmetry problems. Moreover, they are ready to use the services of this online platform

5 Information and Communication Platform as a Way for Reduction the Information Asymmetry Level

The performed analysis of information asymmetry showed that different problems arising from the lack of legal entity financing, financial and information illiteracy

among Ukrainian entrepreneurs, high-level business risks and other reasons exist at the modern stage of economy development in Ukraine. All the above mentioned problems could be solved by reduction the information asymmetry level. The latter can be achieved through the collaboration and cooperation of different institutions by relevant information dissemination needed for enterprises, small and medium sized in particular.

One of the solutions to the considered problems can be the Internet platform. It should be emphasized that in this research paper we just describe and explain the possibility and necessity of using such Internet communicative Platform and assess the possible risks and effects of its introduction into the practice. The creation of information web Platform is the final stage of conducting the research project “New paradigm of financial and credit support of small and medium business innovation activity”, which is funded by the Ministry of Education and Science of Ukraine in the time period of 2016-2018.

This information platform should include data about government regulation, funding, potential investors, different types of databases, counteragents, ways to optimize taxes and existing educational projects. The proposed complex approach (fig. 10) can be represented as information and communication platform and does not generate all possible combinations for information asymmetry reduction, but it gives a general idea about potential ways of its alleviation. However, the efficiency of the Internet Platform functioning is determined by the willingness of financial and governmental institutions to contribute to the IC platform development by sharing the required information.

The proposed platform could help to reduce the level of financial and information illiteracy among Ukrainian entrepreneurs by information asymmetry level reduction because of the data availability in such spheres as:

- 1) governmental regulation procedures (e.g. cases of financial monitoring, required set of licensing, certification and quality control actions, their institutions and mechanisms, implemented laws and acts regulating business);
- 2) funding programmes (available Chamber of Trade and Industry projects as domestic and international, grant programs of different funds (e.g. Horizon 2020, Erasmus +, Jean Monnet, etc.), programs of domestic and foreign governmental institutions (the Ministry of Finance of Ukraine, the Ministry of Economic Development and Trade of Ukraine, the Ministry of Foreign Affairs of Ukraine), projects donated by private funds, biddings and tenders (e.g. Prozzoro));
- 3) different investment programmes (shows availability of funding from business angels, corporate funds, venture funds, banks and non-banking institutions);
- 4) possible ways of tax optimization like creating technical and industrial parks, trusts, joint ventures and performing activity in free economic zones;
- 5) information from different databases, which can be accumulated at the platform (credit and insurance history bureau, statistical data, rates of bank and financial institutions, different nominations for business, etc.);
- 6) information about educational projects concerning business issues (trainings, seminars, conferences and others);
- 7) analytical reports and expert conclusions on different issues concerning business activity and decision making in financial and investment fields;

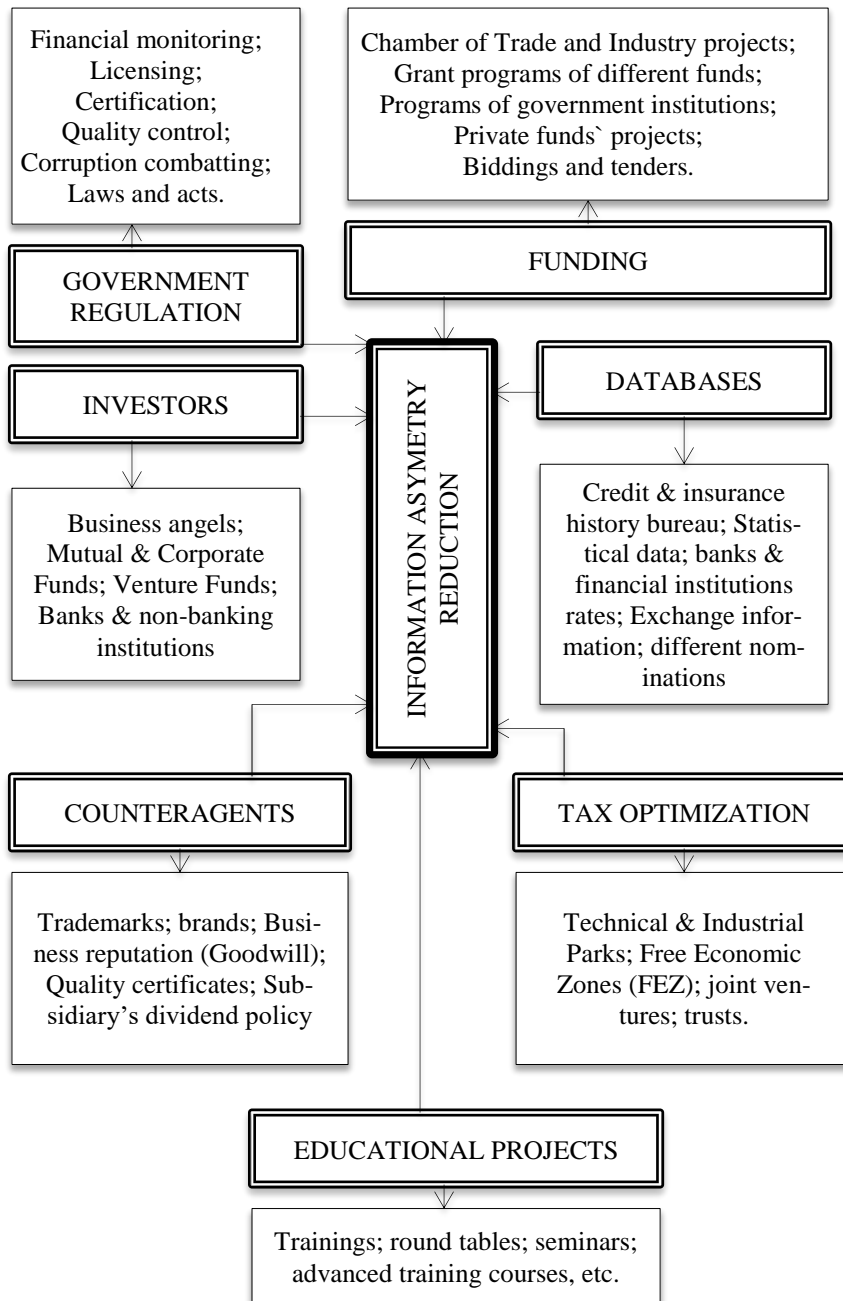


Fig. 10. Contents of Information and Communication (IC) platform as a complex approach for solving information asymmetry problems (Source: compiled by authors)

8) information about the counteragents' trademarks, brands, business reputation, quality certificates and other information required in the process of business decision making in a changing world.

Draft design of information and databases that can be found by different groups of stakeholders in the IC platform as presented at fig. 10. It can be used as a perspective tool of information asymmetry reduction, but its performance should be guaranteed by collaboration of the relevant institutions' efforts through their information swapping.

It is almost impossible to gather reliable and adequate information about different aspects in the Ukrainian realities, especially this entails data from credit and insurance history bureau, from government organizations about rules and methods for such mechanisms like control options, certifications, corruption combatting and others. The greater part of the information required for the platform (fig. 10) pertains to closed for the public. The described above Internet platform would be available via online software. Its main aim will be to find, accumulate, select, sort out and analyse data from different information resources including both governmental and private sectors on the request of business or individuals.

According to the experience of the European countries almost all types of presented at fig. 10 information are open access for public. Therefore these proposed ways for creating the integrated IC platform with mentioned contents could become an effective mechanism for asymmetry level reduction between Ukrainian enterprises, specifically for small and medium sized ones. These measures will allow to avoid different problems connected with distorted data and unreliable information from variable market participants and help to focus legal entities activity on their real purposes.

The information from the IC Platform might be useful for monitoring and checking different market members' reliability as well as for conducting different types of analyses according to the stakeholders requests.

6 Conclusions

The constant lack of research funding, distorted information flows, high level of information asymmetry on the market, poor quality of information and low level of its availability, a wide range of challenges with which organisations face to perform research activities, business illiteracy regarding sponsor and donor funding among SME's have been described in this study as the main factors slowing down business development. As is observed the majority of the issues mentioned are connected with information asymmetry and information flows. So, the authors paid special attention to finding the ways to decrease the information asymmetry level.

Information and Communication (IC) platform was proposed as a complex approach for solving information asymmetry problems in order to simplify access to the required information for enterprises, SME's in particular, regarding ways of funding and tax optimization, government regulations, availability of different educational projects and databases, etc. There exist certain problems in implementation of the proposed approach as it requires collaboration of all the

mentioned institutions` efforts through their information distribution. The prevailing amount of the necessary information does not apply to open access data in Ukraine.

The further research will focus specifically on finding the ways to strengthen collaboration between the institutions required for the successful implementation of IC platform for providing sustainable business growth and minimization of the information asymmetry level in Ukraine

References

1. Akerlof, G. (1970), "The market for lemons: Quality uncertainty and the market mechanism". *The Quarterly Journal of Economics*, Vol. 84, No. 3, pp. 488-500.
2. Spence, A.M. (1973), "Job market signalling". *The Quarterly Journal of Economics*, Vol. 87, No. 3, pp. 355-374.
3. Stiglitz, J.E. (2000). The contributions of the economics of information to the twentieth century economics. *The Quarterly Journal of Economics*, Vol. 115, No.4, pp.1441-1478.
4. Eichengreen, B. (2003), *Capital flows and crises*. Cambridge: MIT Press, Massachusetts.
5. Blankespoor, E., Miller G., and White, H. (2011), "Firm Dissemination, Direct-Access Information Technology and Information Asymmetry", Working Paper. Available at: <http://ru.scribd.com/doc/55916857/> (Accessed 12 Jan 2017).
6. Jobst, A. A and Sol, J. (2012), *Operative Principles of Islamic Derivatives Towards a Coherent Theory*. IMF Working Paper, Washigton DC: International Monetary Fund.
7. Cassirer, E. (1946), *The Myth of the State*. New Haven: Yale University Press.
8. Black, Bernard S. (1998), "Information Asymmetry, The Internet, and Securities Offerings". *Journal of Small and Emerging Business Law*, Vol. 2, pp. 91-99.
9. Pinydck, Robert S. and Rubinfeld, Daniel L., *Microeconomics*. 8th ed. Available at: [http://www.clicktocontinue.com/books/Microeconomics%20by%20Robert%20S.%20Pinydck%20&%20Daniel%20L.%20Rubinfeld%208th%20Edition\[Kalinel.DU\].pdf](http://www.clicktocontinue.com/books/Microeconomics%20by%20Robert%20S.%20Pinydck%20&%20Daniel%20L.%20Rubinfeld%208th%20Edition[Kalinel.DU].pdf) (Accessed 14 Jan 2017).
10. Healy, Paul M. and Palepu, Krishna (2000), "Information Asymmetry, Corporate Disclosure and the Capital Markets: A Review of the Empirical Disclosure Literature". *JAE Rochester Conference*.
11. Official site of content library "Investopedia", "Asymmetric information". Available at: <http://www.investopedia.com/terms/a/asymmetricinformation.asp>. (Accessed 12 Jan 2017).
12. Official site of content library "Investopedia", "How do financial markets exhibit asymmetric information". Available at: <http://www.investopedia.com/ask/answers/042915/how-do-financial-market-exhibit-asymmetric-information.asp>. (Accessed 10 Jan 2017).
13. Dyba, M.I., Zahorodnij, A.H. and Partyn, O.H. (2015), "Assymetry of accounting and analytical information and its impact on management decision making". *Problems of economy and management*. Vol. 815, pp. 271-275. [in Ukrainian]
14. Yevdokymov, V.V. (2011), "Assymetry of accounting analytical information and ways for its minimization". *Problems of theory and methodology of accounting, control and analyses*, Vol. 3 (21), pp. 135 – 146. [in Ukrainian]
15. The Strategy of small and medium business development in Ukraine. Project of the Ministry of Economic Development and Trade of Ukraine; from 17.11.2016 (official document). Available at: <http://www.me.gov.ua/Documents/Detail?lang=uk-UA&id=29c94bc5-77f2-44af-bbf4->

5f13e382a3b2&title=ProektPostanoviKabinetuMinistrivUkrainiproZatverdzhenniaStrategi iRozvitkuMalogoISerednogoPidprimnitstvaVUkrainiNaPeriodDo2020-Roku (Accessed 8 Jan 2017). [in Ukrainian]

16. Official website of the State Statistic Service of Ukraine. Available at: <http://www.ukrstat.gov.ua> (Accessed 9 Jan 2017).
17. Official website of the European Commission. Available at: <http://ec.europa.eu> (Accessed 12 Jan 2017).
18. Official website of East Invest. Available at: <http://www.east-invest.eu> (Accessed 10 Jan 2017).
19. Official website of the EBRD. Available at: <http://www.ebrd.com> (Accessed 14 Jan 2017).
20. Official website of the Ukraine Energy Efficiency Program. Available at: <http://www.ukeep.org> (Accessed 12 Jan 2017).
21. Official website of the Ukraine Sustainable Energy Lending Facility. Available at: <http://www.uself.com.ua> (Accessed 9 Jan 2017).
22. Official website of the European Business Association project “Unlimited Ukraine”. Available at: <http://unlimitukraine.com.ua> (Accessed 9 Jan 2017).
23. Official website of the World Bank. Available at: <http://web.worldbank.org> (Accessed 14 Jan 2017).