# 4th INTERNATIONAL MULTIDISCIPLINARY SCIENTIFIC CONFERENCE ON SOCIAL SCIENCES AND ARTS

SGEM 2017



										1	M	OL	E	R	N SCIENCE
									co	NI	EF	REN	VC	E P	ROCEEDINGS
															VOLUME III
-	-	-	-	-		2	-	-		-	-	-	-	-	-
				F	IN	AN	C	E							

ECONOMICS & TOURISM

24 - 30 August, 2017 Albena Co., Bulgaria

DISCLAIMER

This book contains abstracts and complete papers approved by the Conference Review

Committee. Authors are responsible for the content and accuracy.

Opinions expressed may not necessarily reflect the position of the International

Scientific Council of SGEM.

Information in the SGEM 2017 Conference Proceedings is subject to change without

notice. No part of this book may be reproduced or transmitted in any form or by any

means, electronic or mechanical, for any purpose, without the express written

permission of the International Scientific Council of SGEM.

Copyright © SGEM2017

All Rights Reserved by the SGEM International Multidisciplinary Scientific Conference on

SOCIAL SCIENCES and ARTS

Published by STEF92 Technology Ltd., 51 "Alexander Malinov" Blvd., 1712 Sofia, Bulgaria

Total print: 5000

ISBN 978-619-7408-15-7

ISSN 2367-5659

DOI: 10.5593/sgemsocial2017/13

SGEM INTERNATIONAL MULTIDISCIPLINARY SCIENTIFIC CONFERENCE ON

SOCIAL SCIENCES AND ARTS

Secretariat Bureau

E-mails: sgem@sgemsocial.org

URL: www.sgemsocial.org

44. ANALYSIS OF THE IMPORT SUBSTITUTION IN THE RUSSIAN MARKET OF INFORMATION TECHNOLOGIES, Prof. Dr. Rezeda Kundakchyan, Dr. Natalia Grigoryeva, Dr. Alina Battalova, Kazan (Volga Region) Federal University, Russia
45. INDICATING FINANCIAL HEALTH OF CZECH COMPANIES WITH THE SUPPORT OF MODERN METHODS OF MULTI-DIMENSIONAL DATA PROCESSING, Dr. Martina Cernikova, Dr. Sarka Hyblerova, Dr. Olga Malikova, Dr., Ing. Marian Lamr, Klara Cisarova, Technical University of Liberec, Czech Republic
46. INFLUENCE OF SALES CHANGE ON THE FINANCIAL INDICATOR IN THE CONSTRUCTION COMPANY, Eva Vitkova, MSc, Ph.D., Jitka Chovancova, MSc, Ph.D., Daniel Vesely, MSc, Brno University of Technology Faculty of Civil Engineering, Czech Republic
47. INFORMATION FUNCTION OF THE FINANCIAL MARKET AND THE PRICING OF MARKET ASSETS, Prof. Dr. Rustam Akhmetov, Kazan (Volga Region) Federal University, Russia
48. INFORMATION SCOPE OF FINANCIAL STATEMENTS OF SMALL ENTITIES IN POLAND IN LIGHT OF ACCOUNTING PRINCIPLES, Marzena Strojek-Filus, Dorota Adamek-Hyska, Katarzyna Tkocz-Wolny, Aneta Wszelaki, University of Economics in Katowice, Poland
49. INFORMATION SYSTEMS AND FINANCIAL DATA PROTECTION, Larisa Egorova, Financial University under the Government of the Russian Federation, Russia
50. INNOVATIVE INFRASTRUCTURE AS THE FACTOR OF EFFICIENCY INCREASE OF INDUSTRIAL ENTERPRISES' ACTIVITY, Assoc. Prof. Dr. Olga Vladimirovna Demyanova, PhD in Economics Chulpan N. Zaidullina, PhD in Economics Pugacheva M.A., PhD in Economics Girfanova E.Yu, Kazan Federal University, Russia
51. INSURANCE MARKET POTENTIAL AS THE FACTOR OF ENSURING ECONOMIC SECURITY: METHODOLOGICAL ASPECTS, Associate Prof. Elena V. Kostyaeva, Associate Prof. Irena V. Plotnikova, Novosibirsk State Technical University, Russia
52. INTRODUCTION OF THE NEW APPROACH TO THE PROTECTION OF CONSUMERS IN THE FIELD OF INSURANCE, Karel Urbanovsky, Masaryk University Faculty of Economics and Administration, Czech Republic
53. INVESTMENT POLICY AND INVESTMENT CLIMATE: REGIONAL REALITIES, Phd Glebova Irina Assoc. Prof., Phd Kotenkova Svetlana Assoc. Prof., Phd Galiakhmetov Ruslan, Kazan (Volga Region) Federal University, Russia419

## ANALYSIS OF THE IMPORT SUBSTITUTION IN THE RUSSIAN MARKET OF INFORMATION TECHNOLOGIES

Prof. Dr. Rezeda Kundakchyan<sup>1</sup>

Dr. Natalia Grigoryeva<sup>2</sup>

Dr. Alina Battalova

- Kazan (Volga region) Federal University, Russia
- <sup>2</sup> Corresponding author, e-mail: nat-grig17@yandex.ru.

#### ABSTRACT

Information technology is currently one of the most important labour productivity drivers to increase economic efficiency. The aggravation of the geopolitical situation occurred in Russia over the past few years has demonstrated the vulnerability of the domestic financial sector and some other national economy branches to foreign manufacturers and suppliers of various software that led to the intensification of import substitution in this area. The conducted analysis has revealed that information technologies create a brand new infrastructure for economic agents. Consequently they could enter foreign markets more easily, expand globally and participate actively in the international labour division. Moreover, the authors prove the demand for the establishment of economic ICT clusters in Russian regions with the view to intensify the state orders placement in the field.

Keywords: macroeconomics, information technologies, import substitution, economic growth.

### INTRODUCTION

During the past two decades information technology has been an important driver of economic growth in the world. The IT products application field has extended significantly that resulted in the increased efficiency of industrial production, public sector enterprises and services.

According to the World Economic Forum, the competitiveness index of the state economies has a high level of correlation with the index of ICT development in these countries [1].

Global reforming of the Russian economy and its integration into the world community are accompanied by serious restructuring of the enterprise's planning, logistical support, pricing, foreign trade, financial and credit relations [2; 3]. The Russian IT industry development strategy states that the domestic industry meets less than 25% of the Russian markets demand and largely at the expense of the service sector. (IT systems implementation services, pre-commissioning, consulting, etc.). Of all consumed in Russia IT products only 25 percent of all software (for 30 billion rubles) and about 80% of IT services (for 120 billion rubles) are produced domestically. As far as IT equipment is concerned, almost all domestic needs are met by imported products.

Currently Russia produces about 0.6 percent of the world IT products that requires the expansion of import substitution activities. There is a good reason to discuss the issue at a time of worsening geopolitical situation and the introduction of political and economic sanctions against certain Russian companies, because "for many centuries the main trigger, which launched a new wave of development of import substitution in the country, has been the geo-economic and geopolitical threats" [4]. Despite the fact that for effective development of cooperative relations, economic and trade cooperation should be built based on the specialization of the region [5] this process can be controlled.

#### RESULTS

Economists have always been concerned about human behaviour patterns [6]. Under present circumstances the study of economic agents' behaviour in the field of import substitution is worth considering. How will they behave in the present context? What trends are taking place?

Some Russian super-computers manufacturers were subject to sanctions as well, that demonstrates the importance of the sector for the national economy. The threat of International payment systems default (Visa and MasterCard) has proven the Russian financial sector vulnerability to a number of software manufacturers and providers. This is detrimental for national security.

The impact of information technology on economic processes is significant. Technological progress contributes to the increased productivity through automation and mechanization of certain operations, which creates the preconditions for economic growth through more efficient allocation of resources. Sustainable economic growth, in turn, reduces the level of social inequality and contributes to a more equitable distribution of wealth (according to the research of Simon Kuznets [7]). This meets the purpose of maintaining stability and sustainable development in modern society as well as the purpose of the state as an economic entity concerned with increasing social welfare.

Wealth distribution and the logic of this process have historically been some of the most topical issues in economic science. In recent years researchers have proven that growth alone is not enough to reduce social inequality (for example, Tomas Pickett [8]). The main force contributing to a more equitable distribution of wealth is freer distribution of knowledge, skills and information, according to which private capital grows faster than the national economy as a whole (T. Pickett), make us conclude about the inevitability of separate local centres of economic growth. Thus, economic growth and economic development are always targeted.

This, in turn, justifies the creation of clusters and accelerated development zones as centres of economic growth. In addition, since the introduction and application of IT leads to the increased labour productivity and optimized business processes, the brisk growth of domestic IT market is viewed as a critical task for the national economy and a topical area of research.

Import substitution is defined as the reduction or cessation of imports of a specific product through the development of domestic production of the same or similar goods. The main role in stimulating domestic demand for domestic products belongs to the government and the government should serve as a source of final demand. Moreover, the policy of import substitution should be shaped and implemented at the regional level, taking into account technological, personnel, and resource potential of the territory.

The development of the IT-sector historically was based on state orders – as, for example, in the Silicon valley in the United States. In this case in terms of market space structuring, the presence of large market participants is important as they could engage in the development of major government contracts. This is the way financial investments could be shared by the industry participants through a system of subcontracts. The world practice confirms the fact that large companies form the aggregate demand and supply, and determine the most important parameters of competition in the industry.

At the same time, researchers cannot determine the primary element in this process. On the one hand, integration processes can influence the development of the market, on the other hand, integration is a response to the market's parameters.

Many foreign researchers notice the impact of macroeconomic factors on the integration processes. Moreover most of them view M&A (merger and acquisition) deals as a manifestation of integration processes. A deeper consideration is given to the issue in many developed countries, however even in these states there is no consensus [9], but even there, there is no consensus regarding the use of particular terms and their classification features.

For example, Changqi W. and Ningling X. [10] argued that mergers and acquisitions depended on the external environment: economic growth, degree of competition, political and economic changes. Some researchers emphasize the importance of not economic but political, legal and other factors [11]. Karelina M. investigates into the integration activities of business entities in the Russian regions. In her research she states that there are various approaches to the examination of economic integration problems and prospects. Alongside this the author mentions the current debate about the role of integration processes in the development of regional economic processes. [12]. It is obvious that such processes promote structural changes in the economy that will not only lead to changes in market forces in the regions but contribute to the establishing of network interaction among related industries (which leads to the corresponding clusters in particular areas and influences development trends of the industry).

According to the Russian Federation Strategy of the IT industry development for 2014-2020 and for the perspective till 2025, the structure of the Russian IT-industry in terms of company's size is currently insufficiently balanced. In particular, there are no world leaders among Russian companies, around which a stable unified system that is integrated in the global IT industry could be built. At the same time, the country hosts a number of midsize by international standards product and service companies, which could serve as a basis for the development of the unified Russian IT system [1].

The strategy involves achieving a number of quantitative indicators for the IT industry development and "improvement of the institutional environment with minimal direct regulation" [1] that should facilitate the formation of conditions for the industry sustainable development in the long term.

Expenditures for ICT in the Russian Federation grow over 2009-2014 (figure 1).

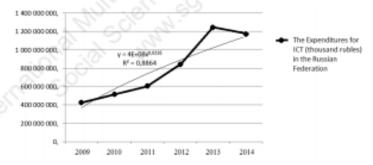


Fig. 1. The Expenditures for ICT (thousand rubles) in the Russian Federation, 2009-2014 [13]

The calculations show that over this period the growth in expenditures for ICT are weakly correlated with economic growth (GDP growth rate): the correlation coefficient is 0,1727 (the relationship is positive, weak).

The number of used advanced technologies in the Russian economy is also growing – there is severe linear dependence in the medium term (figure 2).

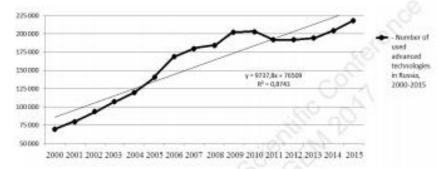


Fig. 2. Number of used advanced technologies in Russia, 2000-2015 [13]

The number of used advanced production technologies correlates with indicators of economic growth, the correlation coefficient is -0.7836. This relationship may indicate that in the period of high economic growth the economic agents have insufficient incentives for investment in development and modernization of production with the aim of increasing competitiveness and survival in market conditions.

The slowdown in economic growth may contribute to the occurrence of structural reforms due to the need of economic agents to adapt more actively to the changing conditions. However, some sources claim that the number of mergers and acquisitions due to the crisis period declined significantly.

Global IT market witnessed many M&A contracts. The acquisition of Hewlett-Pakkard (HP) its competitor Compaq Cumputer in 2001, which provoked skepticism among investors and analysts, is widely known [14]. In 2008, Hewlett-Pakkard acquired Electronic Data Systems for 13.9 billion dollars [15]. In 2011, HP continued its acquiring policy having bought Autonomy, which was engaged in big data analytics and software development. Other world leaders in IT were involved in M&A in various periods of time as well. Oracle, Microsoft, Google, Facebook, Dell, etc.

The volume of mergers and acquisitions announced in 2015 around the world, exceeded 5 trillion dollars, and it is noted that the greatest activity was observed in the pharmaceutical industry and the technology sector.

#### CONCLUTIONS

Integration trends are relevant for the Russian IT-industry as well. Some researchers have noted that it is almost impossible to find IT companies, even among the first-ranking ones, specializing in certain business areas in the Russian market. Russian IT companies are typically involved in a number of diverse functions: the seller of equipment (produced themself or previously purchased from other manufacturers), software developer, service provider at various levels (technical support, etc.), reengineering services, consulting, partner of foreign companies.

One of the reasons to concentrate business in the Russian IT-market is the desire to obtain synergies, to diversify activities with the purpose of reducing risks. The fact that the Russian customers prefer to receive a complete package of services from one economic agent of the contractor is also important.

In addition, information technologies are creating new quality of infrastructure for business. The use of modern technologies: Predictive analytics, Big data, network interaction, and etc. allow economic agents to become familiar with external markets and to navigate on them. Due to IT we can easier establish relationships with our customers and/or suppliers from third thereby creating additional opportunities for domestic producers on foreign markets. This allows to describe the fact that in the consequence of Russian Ruble devaluation, statistical agencies recorded the export growth in sometimes unexpected areas – textiles, food, etc.

The creation of economic clusters in the field of IT in the Russian regions will accelerate the process of import substitution in the sector, since the result is a network or community, which creates a certain environment for the exchange of skills and knowledge and can contribute to the creation of new technological solutions in this area. In addition, it is necessary to activate the placement of state orders for the creation of national solutions in the field of information systems and software.

Thus, information technologies allow to create absolutely new infrastructure for the business, which indirectly helps economic actors to enter foreign markets, be more competitive in global markets. The creation of economic ICT clusters in Russian regions, and enhancing public orders for the development of domestic software and the development of domestic IT equipment will accelerate the process of import substitution in the domestic IT market.

## CONFLICT OF INTERESTS

The authors confirm that the provided data do not contain any conflict of interests.

#### REFERENCES

- [1] Russian Technology Platforms, Open Innovations / Moscow International Forum for Innovative Development, Russia, Moscow, 2012. URL: http://er.economy.gov.ru/wps/wcm/connect/dc28893e-592d-49af-b7bf-16ca03eb799c/Information+materials+of+russiantechnology+platforms+%28english%29.pdf?MOD=AJPERES&CACHEID=dc28893e-592d-49af-b7bf-16ca03eb799c.
- [2] Kundakchyan R., Zulfakarova L., Astafieva L. Actual problems of increased efficiency of use of the region's resource potential // Journal of Economics and Economic Education Research, vol. 17/Special Issue 1, pp. 74-79, 2016.
- [3] Kundakchyan R., Battalova A. The Problem of Food Security in Russia // Mediterranean Journal of Social Sciences, vol 6, No 3, pp.773-776, 2015.
- [4] Bruton J. H. A Reconsideration of Import Substitution / Journal of Economic Literature, vol. 36(2), pp. 903-936, 1998.
- [5] Gadelshina L., Kundakchyan R., Vakhitova T., Zulfakarova L. Role of interregional cooperative relations of Russian constituent entities in strengthening the common economic space // Journal of Economics and Economic Education Research, vol.17/Special Issue 1, pp. 59-67, 2016.
- [6] Grigoryeva N., Grigoryeva O. The dependence of opportunistic behaviour from economic growth / American Journal of Applied Sciences, vol. 12. № 3, pp. 222-228, 2015.
- [7] Kuznets S. Toward a Theory of Economic Growth / National Policy for Economic Welfare at Home and Abroad. Garden City (N.Y.), pp. 12–77, 1955.
- [8] Piketty T. The Evolution of Top Incomes: A Historical and International Perspective / American Economic Review, Oxford University Press, vol. 96, №2, pp. 200–205, 2007.
- [9] Nakamura H. R. Motives, Partner Selection and Productivity Effects of M&As: The Pattern of Japanese Mergers and Acquisition / Thesis (Ph. D.), Institute of International Business, Stockholm School of Economics, 2005.
- [10] Changqi W., Ningling X. Determinants of Cross-Border Merger & Acquisition Performance of Chinese Enterprises / Procedia Social and Behavioral Sciences, vol. 2, pp. 6896–6905, 2010.
- [11] Yan L., Ming L. The Analysis on Non-Economic Influencing Factors in Transnational Mergers Made by Chinese Energy Firms Based on ESP Paradigm / Energy Procedia, vol.5, pp. 69-73, 2011.
- [12] Karelina M. Empiricheskij analiz integracionnoj aktivnosti biznes-struktur v regionax Rossii // Ekonomika regiona, vol. 4, pp. 54-68, 2015.

- [13] Edinaya mezhvedomstvennaya informacionno-statisticheskaya sistema (EMISS) // Oficialnyj sajt. URL: http://www.fedstat.ru/indicators/start.do.
- [14] The Compaq Acquisition Comes Full Circle; The 2001 Deal That Nearly Tore H-P Apart Is Now Set To Be Sold Off / Wall Street Journal. URL: http://www.wsj.com/articles/SB10001424053111903596904576516914051864044.
- [15] HP to Acquire EDS for \$13.9 Billion / Press Release, May 13, 2008. URL:
  http://www8.hp.com/us/en/hp-news/press-release.html?id=169924#.VwYnXfmLTIV.