Global innovation trends in trade development and their social and economic implications

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Global innovation trends in trade development and their social and economic implications

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Abstract. This paper observes global innovation trends (GIT) of trade development including digitalization of economy. Based on a number of approaches to GIT, their conglomerate nature is shown; the lack of consistency and analysis of social and economic consequences of GIT is revealed, including major staff reductions in trade and the related sectors. It is offered to study GIT on the basis of a two-level model of global trends and social and economic implications, as well as to estimate them according to 4 subsystems: 1) GIT development including digitalization of trade and structural changes in its business processes and management; 2) identification and assessment of the GIT social and economic implications in foreign and domestic trade environment; 3) formation of damping mechanisms to compensate the negative effects of GIT in trade and enhancing their positive effects; 4) identification and implementation of positive synergistic effects. A range of suggestions to prevent the growth of SMEs bankruptcies in Russian trade and to improve efficiency of the "Digital Economy of the Russian Federation" program is given in the article.

1. Introduction

The deployment of the fourth industrial revolution in the world, including the digitalization of the economy, has a number of socio-economic consequences.

Trade is one of the agents of economic development in the Russian Federation that is crucially important for the country's development, for instance, for employment. In Russia the contribution of trade amounts to more than 20% of GDP and the number of employees in the sector exceeds 10 million people. Despite the decline in recent years the pace of development remains positive. Over the past 7 years trade turnover has increased by more than 80% (table 1), despite the recent slowdown (figure 1):

Table 1. Retail trade turnover of the Russian Federation, mln. rub. [1].

Years	Total, mln rub.	Food products	Non-food products	Turnover of trading organizations	Sales at retail markets and fairs
2010	16512047.0	8002168.2	8509878.8	14457153.8	2054893.2
2011	19104336.5	9104324.3	10000012.2	16898443.1	2205893.4
2012	21394526.2	9961361.5	11433164.7	19126304.5	2268221.7
2013	23685913.5	11143008.9	12542904.6	21453829.3	2232084.2
2014	26356237.3	12380805.5	13975431.8	24057249.0	2298988.3
2015	27526793.2	13412264.0	14114529.2	25358189.2	2168604.0
2016	28305594.6	13746346.5	14559248.1	26298361.0	2007233.6
2017	29813334.4	14435782.9	15377551.5	27877885.5	1935448.9

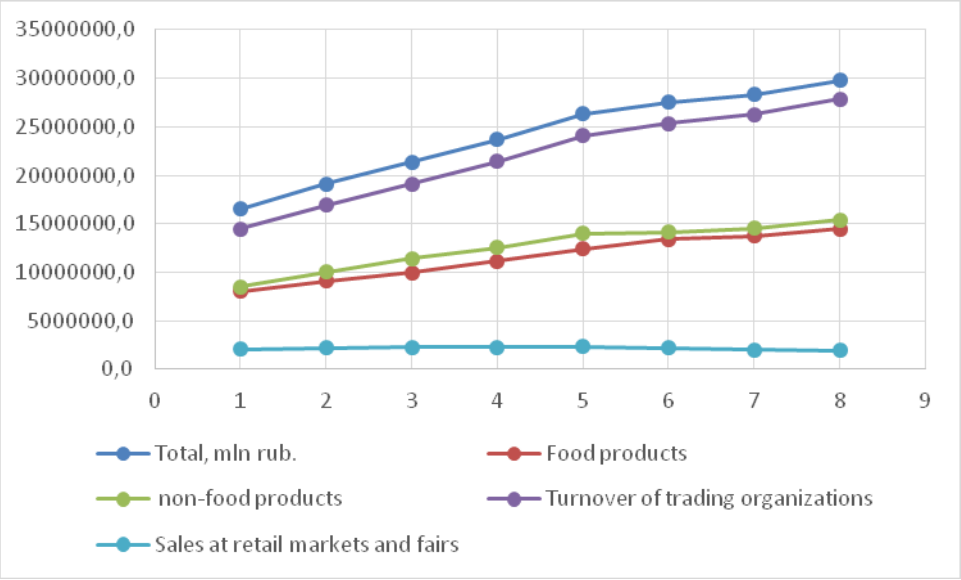

Figure 1. Dynamics of turnover growth of retail trade in Russia (2019- 2017), mln rub. [1].

The attention of scientists in the recent decades has been mainly focused on the problems of improving economic efficiency of trade and increasing the return of resources [2–3]. However, the problems of GIT are not comprehensively studied which can lead to negative consequences in the development of the Russian economy.

2. Systematic approach to the scientific category of GIT trade

Trend is understood as a common tendency, direction and development of changes within social and economic variables. However, the processes under our study are specific and require a separate definition.

A number of works on the analysis of GIT in trade development emphasize opposite view points on the impact of digitalization. They also distinguish the growth of e-commerce and development of the specific aspects of digitalization [2–4]. Major attention is focused on the need for its development. Some papers pay attention to the possible negative consequences of digitalization: Yansiti, Karim Lakhani (2017): “Digitalization and the trends it generates are currently only exacerbating dangerous levels of income inequality, undermining national economies, and even leading to social instability” [6].

In the field of digitalization the following aspects are usually defined as innovations [7]: "technologies of the big data (BigData), Blockchain technologies, Internet of things (Internet of Things — IoT), neural networks (artificial intelligence), virtual and augmented reality technologies, 3D printing, mobile devices, intelligent sensors, etc."

Foreign studies suggest taking GIT into account in trade [8]: investing into the future growth, finding sources of growth in micro markets, extracting value from Big Data technologies, Advanced Analytics, outsourcing sales functions, studying social sales, close interaction with marketing, application of automation and artificial intelligence.

Reza Sisakhti (2016) suggested 12 key trends shaping the trade industry [9]: growth of buyer power, verticalization of labor force in trade, shift to understanding the buyer's problems, reduction of boundaries between sales and marketing, use of hybrid sales models, etc.

Today, digitalization of technological and managerial processes that form the structure-forming core of megatrends in globalization has come to the forefront of GIT [10].

GIT result in the complicated and contradictory consequences. In the studies of GIT the special emphasis is put on their individual, conglomerate features with no regard to their social and economic consequences. In our view, this is a one-sided and non-systemic approach. The category of GIT should, first of all, take into account the social and economic consequences. This paper suggests to understand GIT as the established and clearly manifested processes affecting the dynamics of development or decline of the trading system in general; as well as its subsystems and main components caused by innovation, covering an increasing number of its elements every year and causing social and economic consequences that significantly affect the economy and social sphere of countries and regions.

3. Global trade trends (GTT) and their social and economic consequences

In our view, global trade trends should be taken into account in terms of their social and economic consequences, rather than their individual local characteristics.

Global trends of changes in the external trade environment include:

– *changes in the way of thinking and behavior of consumers who have access to global markets, sales and new market opportunities to choose the most profitable purchases*.

Systemic consequences of this trend:

– *consumer changes.* Consumer is becoming more and more influential in terms of trade. It is important to note that consumer is also becoming more demanding, disloyal and inclined to change the preferences very quickly. Moreover, consumer turns into the object of powerful marketing influences, both open and hidden. In their struggle for consumers, trade organizations begin to reduce costs which can worsen the quality of goods and sales;

– *global changes in international policy and strengthening of its impact on trade (implementation of various trade restrictions, sanctions), growing instability of the world economy, "overheating" of the global financial system and dominance of global trade corporations.*

The use of digital technologies is accompanied by a new hidden trend – digital dominance of large businesses over the SMEs. Big business has much more opportunities to develop effective strategies and operational plans and respond quickly to changes in consumer preferences;

Systemic effects:

– strengthening of macroeconomic instability, growth of inter-country conflicts in the trade sector, including trade wars and bankruptcy of SMEs;

– *global and local changes in technologies and types of trade (adapted to regional peculiarities), as well as human resources involved in sales processes, and rapid development of* e-commerce, which in the last 3 years has increased by 3.5 times amounting to 4.5 trillion dollars in 2017 [11].

Systemic effects:

significant reduction in the number of employees in trade, increase in bankruptcies of trade companies, growth of outsourcing, strengthening of the large companies competitiveness with great opportunities for digital technologies on the Internet.

4. Global trends of changes in the internal trade environment

– *emergence of new technologies that transform the basic processes of trade, including robotics, e-commerce, service automation and minimizing staff.*

Many experts made a mistake while considering these trends to be somewhere in the distant future. However, according to the McKinsey Global Institute research (2018) [8] today 40% of the labor force in trade can be released due to automation. According to our estimates, similar innovations in Russian trade enterprises can lead to a reduction of 60–70% of employees.

– *reduction of a number of intermediate links in the economy*, firstly, numerous intermediaries in the transition to digital technologies.

5. Conclusions

1. Existing approaches to the study of GIT are very diverse, but at the same time they violate the principles of consistency and do not take into account their most significant social and economic consequences. We suggest to study GIT on the basis of a two-level model of global trends and social and economic consequences, as well as to evaluate them on the basis of 4 subsystems:
   – subsystem of GIT development including digitalization of trade and structural changes in its business processes and management;
   – subsystem of identification and assessment of the GIT social and economic implications in foreign and domestic trade environment;
   – subsystem of development of buffering mechanisms for negative effects and enhancing ones for the positive effects in trade;
   – subsystem of identification and implementation of positive synergistic effects of the global trends within trade.
2. From our point of view, it is necessary to include an additional section in the "Digital economy of the Russian Federation" program [12], taking into account the problem of employment for the large contingents of the released trade workers, who, according to our estimates, will amount to 10–14 million people in Russian trade and related industries, or 13% of the total labor force in Russia with an increase in the rate of digitalization. At the same time, the major part of the redundant trade workers is engaged in routine low-tech operations, thus, they do not have experience in creating their own business. The ongoing discussions on the problems of digitalization do not result in finding a solution to them [13].
3. State support for SMEs in trade can contribute significantly to resolving the employment problem. First of all, it is necessary to support the growth of their competitiveness in the field of digital technologies. This could be facilitated by a new state program of free transfer of digital technologies for SMEs.
4. Digital technologies significantly change the internal management environment of trade organizations. However, workers of trading enterprises are not sufficiently skilled in this area which, in fact, stops the process. The Ministry of Industry and Trade of the Russian Federation together with the leading Russian universities should develop and provide free access to modular training programs for employees of SMEs in the field of implementation of new digital technologies.

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