

NEW FORMS AND TRENDS OF INTERNATIONAL TRADE AMID THE GLOBAL CRISIS

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Abstract. *The present paper aims to discuss and to investigate the importance and impact of new theories of international trade, new forms and trends, technical instruments and facilities of the international trade on the background of trans-nationalization and integration in the global economy. In the present work, the existing studies on a new theory of the intra-industry trade (Balassa, 1967; Krugman, 1979; Helpman, 1998; Hamelss, 1995; Levinson, 1995; Fontagne, 1997; Freudenberg, 1997 and others), its role and the reasons of emergency are mostly developed in the line with the new forms of international transactions and technical instruments. The analysis is based on the WTO statistical data. In the global trade, the focus from the “money transactions” is carried over to the “transactions not involving money”. This process has provided the rapid expansion of buy-back transactions. This is largely due to the global crisis and certain transformation of the international economic environment. The findings have been made on how the compensation transactions promote the maintenance of the trade relations between the developed countries with the countries which are in the difficult economic situation, how the compensation transactions provide for the security and stability of the supply of raw materials. Why those transactions are the mutually beneficial instrument both for developed and developing countries? The role of the industrial product in compensation arrangements may be played by the joint development projects and cooperation in techniques and technology. Compensation arrangements in industrial products have emerged as a response to the international trade complications. Today it may be the way out from periodically rising crises. Largely, the Western technology and equipment gain access to the Eastern markets mainly through compensation transactions. The development of relations between the countries of the North and the South and search for the opportunities of industrial cooperation is carried out based on compensation and countertrade transactions. This paper emphasizes the importance and advantages of use of new opportunities of trade system and new trade forms and facilities for countries with small open economies (including Georgia), especially amid the integration in the modern global economy and the global downturn.*

Keywords: *Intra-Industry trade; compensation transactions; trade technologies; trans-nationalization; counter trade.*

Introduction

The development of the world economy amid the global crisis is characterized by a rise in the integration (as indicated by the processes related to NAFTA, MERCOSUR, the European Union and now the Eurasian Union as well). Depending on such processes, the developing countries require special support and development of international trade in order to save their economies.

At the modern stage of the world economy's development, a growing number of countries are expanding the scale of their participation in the world integration processes by means of foreign trade. The evidence of that is the statistical data of WTO: Since 1990, South-South trade – that is, trade among emerging and other developing economies – has grown from 8 per cent of world trade in 1990 to around 25% today, and is projected to reach 30% by 2030. Trade corridors between Asia and North America, and between Asia and Europe, now surpass the old transatlantic trade corridor, while trade corridors between Africa and Asia or Latin America and Africa are growing in importance. Even as the South's share of world trade expands, world trade as a whole continues to grow, meaning that developing countries have ever-richer and more diverse markets for their exports.

Participation in the international trade gives the countries (especially the developing ones) an opportunity to effectively use the resources possessed by them, develop the priority sectors, adopt the world scientific and technical achievements (since overcoming of socio-economic and production-technical backwardness is only possible by means of intensification of partner relations with the developed countries). In the process of formation of an open economy strengthening of economic ties takes place, which is an intensive factor of economic growth and structural rearrangement, it accelerates formation of market institutions and mechanisms in the country, etc.

The process of globalization of the world economy has resulted in major changes in the international trade and its participants and in the emergence of new trends therein. Therefore, the analytical review of the new theories of the international trade, especially of the intra-industry trade theory (Balassa, 1967), their importance and impact of the new forms and trends in international trade, technical instruments and facilities on the background of the trans-nationalization and integration in the global economy is very important.

The research of the new forms and trends of international trade is especially relevant for the countries with small open economies, such as Georgia. In September 2014 Georgia signed the EU Association Agreement (DSFTA), which regulations have been already entered in force. Consequently, the study of capabilities of new structure and directions of trade flows shall become the benchmark for the further economic development of the country.

Research methods

Analysis and synthesis, abstraction, deduction, induction and statistics methods have been used in the process of scientific research. The theoretical basis of the research consists in the existing studies on a new theory of intra-industry trade (Balassa, 1967; Krugman, 1979; Helpman, 1998; Hamelss, 1995; Levinson, 1995; Fontagne, 1997; Freudenberg, 1997 and others), the product life cycle theory (Vernon, 1969), their role and the reasons of emergency are mostly developed in the line with the latest foreign trade technologies, new forms of international transactions and technical instruments, the countertrade and barter transactions which have developed since the '80s. The WTO and OECD statistical data have been used for the analysis.

Conceptual issues of intra-industry trade

In the modern theories which propose the alternative interpretation of the international trade we can distinguish the theory of neo-technological directions: Posner's technology gap theory (1961); Kemp's scale effect theory (1964); Krugman's theory of imperfect competition (1979); Balassa's theory of intra-industry trade (1967); Vernon's theory of product life cycle (1969); Porter's theory of the competitive advantage of nations (1986), which in turn explain the nature and trends of the intra-industry trade (Balassa, 1967; Krugman, 1979; Helpman, 1998; Hamelss, 1995; Levinson, 1995; Fontagne, 1997; Freudenberg, 1997 and others).

The rise in the share of the global turnover mainly comes to the intra corporate trade (within the transnational corporations), the so-called intra-industry trade – the growth of the counter supply of similar (homogenous) industrial goods between one and the same industries of different countries, the increase in trade between the countries with similar resources etc.

The trend of growth of the intra-industry trade share has been increased over time. For example, in the UK it was 53.2% in 1970, 74.7% - in 1980, and in 84.6% - in 1990. The same trend in Germany was 55.8; 56,6 and 72,2% accordingly (Helpman, 1998, p.20). Later on, the review of the EU data has shown that the share of intra-industry trade is rather high and according to the Grübel-Lloyd index looks like this:

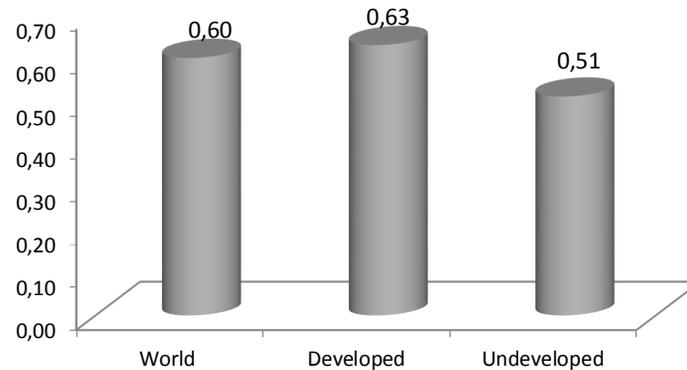


Figure 1. Average Grubel-Lloyd indices for European Union (27) across selected economies 2011

The chart shows that for 1996-2011 a trend of intra-industry trade growth in the EU, which reflects the close correlation with the change of the market situation; we have witnessed the trend of a steady growth of the intra-industry trade, which has been strengthening during the crisis.

As it is, the intra-industry trade theory has emerged from the rejection of the traditional trade theory (because traditional theories failed to explain some of the economic events of the second half of the XX century). However, in time they tried to integrate these two theories into one model.

According to the economists Fontagne (1997) and Freudenberg (1997), three models of the international trade are: the inter-industry trade, intra-industry trade with horizontally differentiated products, and the intra-industry trade with vertically differentiated products (Fontagne & Freudenberg, 1997). The horizontal differentiation of products means that there are different kinds of roughly similar products on the market (with similar quality and price), but the products may be differentiated not only horizontally (based on secondary signs), but also vertically (by quality and price). These differences may be related to the amount of the costs for the scientific research, conducting experiments and design, workforce qualification, advertisements and so on. Basis of specialization of the intra-industry trade with horizontally differentiated products is differences in quality of products, and costs related to the distribution of resources are potentially significant (in the level of income among the countries in connection with the possible differences). Basis of specialization of intra-industry trade with vertically differentiated products is the variety of products with similar attributes. Costs related to distribution of resources are insignificant (Fontagne & Freudenberg, 1997).

Several reasons explain the intra-industry trade in differentiated products:

- *The different taste of consumers* who want to have a great choice of products within one commodity group (Ballasa, 1967);

- *Overlapping demand* (Linder, 1961) in particular the country's export those industrial products for which there is a capacious internal market; as in the countries of about the same income level the consumers have similar taste, for each country it is easier to export goods, in the production and trade of which it has accumulated a great experience in the domestic market;

- *Scale effect* (Krugman, 1979). With the increase in the scale of production, which usually takes place in the framework of monopolistic competition, the production costs for each unit are declining. Therefore, for those countries there becomes feasible to specialize in the production and turnover of technologically homogenous, but differentiated products (the so-called intra-industry trade). For example, we may bring the trade in motorcars between the countries producing them.

Studies prove that the share of intra-industry trade will be higher when the trade partners are highly developed countries and have about the same level of development and when the trade partners have large territories and do not substantially differ in size.

The above reasoning is confirmed by the WTO modern research concerning the average rate of GL (Grubel-Lloyd) index (determining the intra-industry trade value) in the developed and developing countries in the years 1996-2011 and, hence, participation of the countries in the intra-industry trade (WTO, 2013, p.70). The study has found out that in the developed countries (the US, the EU, Canada and Switzerland) and rapidly developing industrialized countries (Hong Kong, China, Singapore, Malaysia and Thailand) the trend of involving in the intra-industry trade is more pronounced, while in the developing resource-rich countries (Algeria, Nigeria, Venezuela) and least developed countries (Central African Republic, Niger, Madagascar) a relatively less share comes to the intra-industry trade. There is a slight change in the GL index from 1996 until 2011.

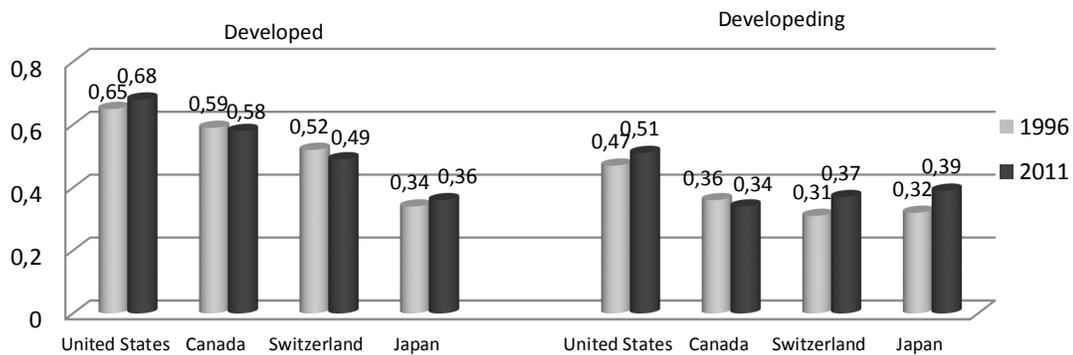


Figure 2. Average Grubel-Lloyd indices for the European Union (27) across selected economies 2011

The chart shows a rapid growth of the intra-industry trade in the developed homogeneous economies (the US, Japan), which is less manifested in Canada and Switzerland, which economy is not of strongly expressed homogenous nature. At the same time, the high rate of the intra-industry trade is observed between the developed (the US, Switzerland, and Japan) and the developing countries, which we believe can be explained according to the product life cycle theory.

The countries with developed economies like the US and the EU are involved in trade with other developed countries, while the developing countries, such as Malaysia and Thailand, have the intra-industry trade with other developing countries. Although China and the Republic of Korea are considered emerging economies, they are structurally closer to the developed economies, as they have succeeded in the economy, in contrast to other poor and resource-rich countries. Consequently, in recent years the intra-industry trade share of those two countries has been increasing as compared to the developing countries.

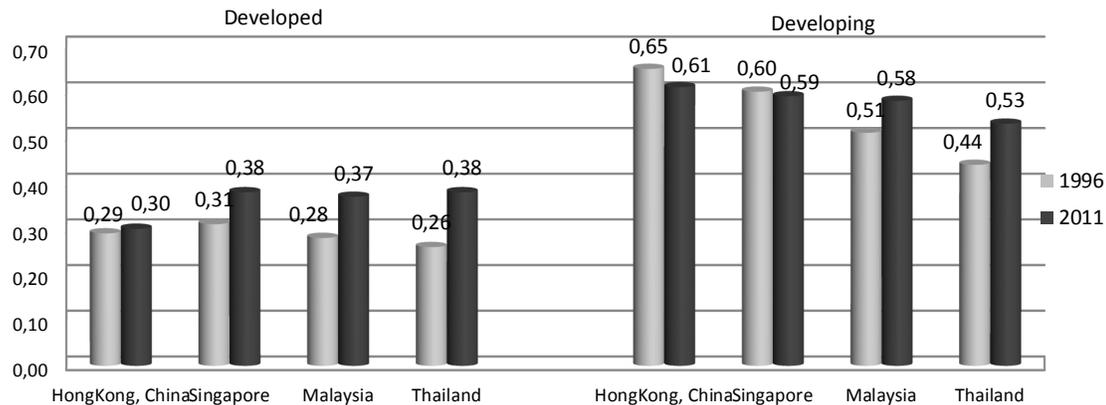


Figure 3. Average Grubel-Lloyd indices for four industrializing developing countries across selected economies, 1996-2011

Noteworthy is that the intra-industry trade growth in the countries with rapidly developing markets (Hong Kong, China, Singapore, Malaysia, and Thailand) is mainly associated with the production of small appliances. In some cases, the reduction of intra-industry trade of the said countries with economically less developed and developing countries is associated with the growth of intra-industry trade between the countries with fast-growing markets.

The GL Index of Japan compared to other developed countries is smaller than that of developing countries. This is because Japan is poor of natural resources and mainly imports raw materials. Its high GL Index compared to the Asian developing economies stems from its geographic proximity, as well as from the fact that the majority of those allegedly developing countries are actually the developed industrialized countries. This analysis is based on the statistical data on the intra-industry trade index published in 2013 by the World Trade Organization (WTO, 2013, p.70), however, it should be mentioned that WTO has not differentiated developing countries that complicates the research process.

Subject to the foregoing, we conclude that the intra-industry trade trend is increasing in most countries in 1996-2011 in spite of two world crises in 1998 and 2008.

The technological trend of the trade theory is characterized not only by the development of new theories and emergence of transnational corporations, but also by significantly changing of the structure of international markets, which of course should meet the new forms of economic relations. This issue is of particular importance also in terms of the international trade development, because the development and expansion of the economic potential of emerging economies stands on the agenda of overcoming the global crisis by the world economy. The review of the intra-industry trade theory and matching new forms of economic transactions related to it with the modern challenges will contribute to the reduction in losses arising from the inefficient use of financial, natural resources and human factor.

That is why we need to study comprehensively the forms and trends in international trade, technical tools and facilities against the background of trans-nationalization and integration in the global economy.

New technologies of international trade

Trans-nationalization of modern economies, development of the interrelated trade and transfer of pricing policies in the framework of corporations have ultimately had the essential impact on the organizational forms of international trade operations, international trade structure and, therefore, the international competition forms. In particular, all possible forms of compensation transactions have been developed. In the international activity, the compensation transactions are also called turnover operations, or the counter trade. There are many forms of counter trade classification and typology points. One feature is common to them; they represent a form of exchange of goods and services that are less dependent on the formation of demand and supply in international markets.

The counter trade includes:

a) commercial-compensation - trade operations, in framework of which the counter purchases mainly relate to goods and services. Hence, here we do not take into consideration the transfer of technology and techniques for export compensation. These operations are rather quickly realized and the terms of transactions rarely exceed 2-3 years.

The commercial buy-back has the following varieties:

Barter - natural exchange of one goods for another without using money. The barter trade also includes the binding (completed in financial terms) sales and purchases. For example: compensation of the exporter's raw materials through the supply of equivalent resources.

Offset transactions (commercial), which have common features with the natural barter (for example, execution of a transaction under one contract), and also have distinctive features. So, for example, there can take place the unsettled balance of the mutual supply and financial regulation of offset transactions. Two types of offset transactions have been extended in the world practice: the export settlement through the natural counter purchases (barter modification) and individual payments for export and counter offsets.

Counter purchases - operations, as a result of which the exporter is obliged to purchase (or to facilitate the purchase of) during a certain time period the product manufactured by the importer in the quantity which makes up a certain percentage ratio to the cost of sale (contract). To fulfill such obligation the exporter concludes (beyond a major export contract) one or more buy-back contracts. Payments, which are derived from the basic contract and the counter purchase contract are performed separately.

b) buy-back transactions of industrial products (or buy-back transactions mainly based on the industrial cooperation) are formally similar to counter purchases but mainly they are related to the export of machinery and industrial equipment in exchange for the purchase of equivalent goods manufactured with this equipment. Unlike the previous buy-back trade forms such transactions can be carried for quite a long time (15-20 years), and the counter purchase amount may exceed the amount of the originally supplied equipment.

There are two main forms of compensation transactions of industrial products: the counter industrial purchases, which represent the buy-back type of operations and offset trade. In case of the counter industrial purchases, the equipment supplier (exporter) undertakes to acquire the products that are manufactured on the specified industrial equipment, or the products manufactured simply on the same enterprise.

The essence of the offset contract is the liability, which is beneficial for the importer, which means that the exporter takes part in the assembly of equipment, supply of materials, acceptance of subcontract, or in the joint production process. The offset trade has developed in specific areas of business where the production cost is very high, for example: civil and military aircraft industry, airspace engineering and aeronautics.

Sometimes the compensation arrangements of industrial products include the requirements of importing countries that the importers should use the defined (minimum) share of local parts and assemblies or other local products. The industrial compensation transactions may involve an intermediary. In this case, the exporter will assign the risk related to the performance of counter-purchase obligation to the special company-intermediary (or compensation enterprise), which receives a certain bonus (discount) for the risk.

The varieties of technical instruments of the international trade in the global market are based on the support provided by the countries to the transnational companies. The expansion of the global market will lead to the sustainable strengthening and development of the economic functions of the countries. As for the compensation trade volume, it is difficult to bring the real figures, which will evidence the growth of its share in the global trade. According to the international statistics, this share varies from 5% to 40% (Wash.: Govt. 1991/102 ICT p.52).

More evident is the specialist's opinion that over the last 15-20 years the amount of compensation transactions has been increasing rapidly. Initially, such transactions were typical only for the "East-West" trade. However, thereafter the principle of compensation extended to the "North-South" and "South-North" trade. Dozens of countries transferred to the compensation regime after the first oil crisis (1972-1973), and many of them are still regularly apply the practices of reciprocal state procurements. Counter purchases are a more or less common form of commercial compensation, but the barter trade also continues to exist. It is relatively common in emerging and transitional economies, which have accumulated large foreign debts, and therefore have limited financial capabilities. The production buy-back is common in China, because the actual capabilities and domestic market size of this country are enormous. At this time, the counter industrial purchases and offset trade are more typical for those countries, which have the industrial and technological boosts (know-how), which are necessary for this type of transactions. Hence, the place and role of new forms of the global trade, are largely caused by the trans-nationalization of the world economy and trade.

It should be noted that the current mechanisms of foreign trade transactions become more complex and sophisticated. Even the Eastern and Southern African countries have begun to use the multilateral compensation system.

Noteworthy is the tripartite financial compensation practices, under which the payment to a country-exporter by the importer is made in the form of transfer acceptable to it (by foreign exchange credit or products), through a third country. Another novelty is the issue of so-called compensation bonds. This mechanism was used for the first time in Indonesia and Australia.

Therefore, in the global trade the focus from the "money transactions" is carried over to the "transactions not involving money". It is this process that has provided the rapid expansion of buy-back transactions. This is largely due to the global crisis and certain transformation of the international economic environment, which characteristics are:

Trade slowdown and instability; increasing instability of the raw materials and semi-finished products market. The compensation regime of trade allows the raw materials exporting country to mitigate the effect of the decline in the supply and to maintain the volume of raw materials export. Thus, at the end of the 1970-s 14% of oil exports of OPEC countries was the object of compensation transactions. (Helwin, 1995, pp.1031-1036).

Instability of exchange rates. Compensation trade allows countries which are more or less dependent on foreign trade to limit the risk of foreign exchange rate fluctuation;

Growth of neoprotectionism in the global trade. The policy, which is aimed at balancing the international trade relations and allows to mitigate different measures restricting the trade;

High amount of debt in some developed countries and many developing countries, the Eastern Europe and the CIS countries. Compensation agreements allow those countries to promote their imports in spite of the lack of foreign currency resources and problems with the foreign credit availability.

For developed countries, the buy-back transactions serve as a facility to maintain trade relations with the countries that are in the difficult economic situation. In this case, developing countries manage to overcome the double resistance from the side of their insolvency and instability of their currencies.

The compensation transaction system provides the security and stability of supply of raw materials. It is a mutually beneficial tool for both developed and developing countries.

For the companies that deliberately carry out an aggressive policy on the world market, the buy-back transaction conditions provide a serious advantage in the competitive struggle. The western technology and equipment gain access to the Eastern markets mainly through the compensation transactions. The development of relations between the countries of the North and the South and search for the opportunities of industrial cooperation is carried out on the basis of compensation transactions.

In the global downturn conditions it is impossible to carry out the anti-inflation (strict monetary) policy because of the interdependence of the economic agents of the world market in the commerce, foreign exchange and banking areas. The message “No currency, no contract” is outdated for today, and the business and governments of developing countries should change it with the slogan: “Agree to buy when you want to sell”.

The relationship based on compensation transactions provides stabilization of the primary raw materials market. Harmonization of interests of all market participants proceeds not only from the prices, but also from the volume of realized products and profitability of the transaction. At the same time, the instability in those markets largely characterizes the volume of supply (rather than price dynamics).

Conclusions

The role of the industrial product in compensation arrangements may be played by the joint development projects and cooperation in techniques and technology. Compensation arrangements in industrial products have emerged as a response to the international trade complications. Today it may be the way out from periodically rising crisis. The compensation transactions have significantly changed the international trade scheme. More extensively, the international trade and international competition under the impact of compensation transactions have undergone such structural changes that have penetrated the depths of the modern world economy structure. On the background of the integration of the developed economies, the national sovereignty of countries has limited and the effectiveness of national regulation policies has declined. For the international aspect, this has not caused disintegration, but on the contrary, has led to an increase in the interdependence through the changing role of the individual states in the global economy. The countertrade and barter transaction technologies have further strengthened the intra-industry trade and interdependence between companies and sectors as well.

The transnational economy is without doubt the oligopolistic system of conflicts and strong dictates. It creates the world of coalition relations. The situation makes the international trade a foothold for a collision of strategic alliances and the politics. In this processes, the only way for developing countries with small open economies (including Georgia) to maintain the economic sovereignty and political independence is to ensure the fast economic development and to find out and to establish a small (even microscopic, invisible) own niche in the international market. All these objectives cannot be achieved without an effective foreign trade structure and right long-run trade policy.

In our opinion, in this process Georgia is trying to make the right choice to form the efficient foreign trade structure and effective target-oriented trade policy

In our opinion, in this process Georgia is trying to make the right choice to form the efficient foreign trade structure and effective target-oriented trade policy where the countertrade and barter transaction should play an important role. In the conditions of the current global crisis and subject to the geopolitical considerations, Georgia has no way other than the regional associations and integration with the world trading system, that will be greatly promoted by the introduction of the advanced trading technologies. We believe that this trend will be accelerated by the Association Agreement (DSFTA), which is the free trade growth promotion factor in Georgia. However, it should be also noted that the implementation of this Agreement will be much more difficult due to the conflict of economic interests, but we hope that this problem is solvable by joint efforts.

References

- Balassa, B. (1970). Growth Strategies in Semi-Industrial Countries. *The Quarterly Journal of Economics*, 84(1), 24-47.
- Balassa, B. (1986). Intra-Industry Specialization: a Cross-Country Analysis. *European Economic Review*, 30(1), 27-42.
- Bernard, A.B., Jensen, J.B., Redding, S.J, and Schott, P.K (2007). Firms in International Trade. *Journal of Economic Perspectives*, 21(3), 105-130.
- Brown, R.H. (1995). The national export strategy. *Third annual report to the United States Congress. Business America*, 116(1110), 1-145.
- Fontagne, L., and Freudenberg, M. (1997). Intra-Industry Trade: Methodological Issues Reconsidered. CEPII Working Paper No. 97-02.
- Grubel, H., and Lloyd, P.J. (1975). *Intra-Industry Trade, the Theory and measurement of International Trade in Differentiated Products*. London: McMillan.
- Gvelesiani, R., and Gogorishvili, I. (2012). *Economic Policy*. Book II. Tbilisi: Universali Publishing House (in Georgian Language).
- Hellwin, L. (1995). Trade policy and distortions in intra -Asian trade. *Economics*, 27(11), 1031-1036.
- Helpman, E. (1987). Imperfect Competition and International Trade: Evidence from fourteen Industrial Countries. *Journal of the Japanese and International Economics*, 1(1), 62-81.
- Helpman, E. (1998). *The Structure of Foreign Trade*. NBER Working Paper No.6752, Cambridge.
- Hummels, D., and Levinsohn, J. (1995). Monopolistic Competition and International Trade: Reconsidering the Evidence. *Quality Journal of Economics*, 110(3), 799-836.
- Linder, S. (1961). *An Essay on Trade and Transformation*. New York: John Wiley and Sons.
- World Trade Organization (2011). News items, Economic Research and Analysis. Retrieved from https://www.wto.org/english/news_e/news11_e/rese_03oct11_e.htm.
- World Trade Organization (2013). World Trade Report. WTO, Factors shaping the future of world trade. Retrieved from https://www.wto.org/english/res_e/booksp_e/world_trade_report13_e.pdf.
- World Trade Organization (2014). World trade report. Trade and development: recent trends and the role of the WTO. Retrieved from https://www.wto.org/english/res_e/booksp_e/world_trade_report14_e.pdf.