

## Freeport of Vladivostok as the Competitiveness Increase Tool for Russian Fish Export

Olga Vorozhbit and Olga Korneyko  
Vladivostok State University of Economics and Service, Vladivosak, Russia

**Abstract:** The logistical support of commodity circulation restructuring on the Russian market of fish products require the appropriate investments, the priorities are particularly acute in the Far East region where the logistics capabilities are limited and are absent often. The activization of such a development institution use as the Free Port of Vladivostok (FPV) is the tool for the investment activity improvement within the region in general and within fish logistics in particular. A deeper study of the factors which determine the effect of FPV on the development of the logistic infrastructure in Primorsky Krai will enable a better understanding of the laws on which the modern economic processes are based and will allow to assess the prospects of this state policy instrument. The traditional methods of scientific analysis, economic and mathematical statistics, the technical-economic and logical analysis, the graphical modeling, etc. were used as the methodological basis of the study. The necessity and the essential need for investment in the fish logistics of the region is substantiated. The theoretical aspects of a free port mode application practice were revealed. FPV benefits and preferences were studied. The estimation of changes in the fish logistics in the region was performed. This estimation took place during the years of market reforms. The barriers of investment development for Primorye fish logistics were determined unavoidable under FPV terms. The analysis showed that FPV mode does not solve the problems of a more effective use concerning the national vehicles with the aim of fish enterprise structure interest reorientation from the foreign to the domestic market. The main result will be related to closer integration with global markets and the Russian fish export competitiveness increase.

**Key Words:** Free port of Vladivostok, food security, competitiveness, exports, closer

---

### INTRODUCTION

**Issue description:** The Fishing Activity (FA) of Primorye Territory perform the function of a backbone element for the regional economy and also determines largely the problem solution success within the national scale, the provision of food security not only for the macro-region of the Far East, i.e., the region where the main production facilities are based with an adequate supply of resources and professional staff. Due to the fact that the Primorye fishery enterprises produce about 20% of fish and up to the quarter of the processed fish products, the development of FA within the Primorye Territory should be interconnected and subordinated to common strategic objectives of the state (Karaseva, 2010a).

Referring to the “food security” term, let’s note that it is an essential element of the state national security as a whole. In Russian Federation the discussions on the issue of national security provision criteria and methods in various spheres of life began in the early 1990s. According to the Russian Federation national security strategy until 2020 and the Doctrine of the Russian food safety as a safety criterion the proportion of domestic

agricultural, fishery and food products in the total volume of commodity resources is determined within the domestic market of the relevant products which have certain thresholds. In particular, the threshold is defined as “no <80%” in relation to fish products. Currently there are no threats concerning the performance failure of a predetermined criterion, i.e. Russia has no dependence on imports concerning this product. But a relative supply value of domestic and imported fish products to the Russian commodity market does not reflect the actual level of qualitative, stable, uninterrupted and adequate supply of fish products for all population residing within the Russian Federation territory (Karaseva, 2010b; Korneyko, 2011). In particular, the business structures of Primorye Territory did not develop the markets of the Volga, Southern and Siberian federal districts, the Crimea and Sevastopol where the lowest level of fish consumption is observed. It is 10-15% lower than the national average one (10.5 kg per person on the average). The expansion of supply geography is caused not only by the need to improve the availability of fish products but also by the need to solve the problems of import substitution in the current foreign policy situation of Russia. However, the data in Table 1 show that import is

Table 1: The results of Primorye Territory fishing industry during 2012-2015

Indicator name	Un. of meas.	2012	2013	2014	2015
Catch of fish and non-fish species	Thous. of tons	831.9	798.0	778.0	739.3
The production of fish, including canned fish	Thous. of tons	669.2	667.3	646.6	646.7
The supplies for domestic market	Thous. of tons	263.0	232.0	215.5	307.5
The share of domestic supplies in total product output	%	39.3	31.2	30.6	44.9
Exports	Thous. of tons	452.1	568.4	523.2	116.9
The share of exports in total product output	%	67.7	76.5	80.5	77.4

Compiled by the author on the basis of the statistics Federal service of the Primorsky Territory

still present in the fish-processing activity of Primorye Territory enterprises. This is indicated by the fact that the sum of such indicators as the “proportion of deliveries to the domestic market in the total output of goods” and “the share of exports in total product output” is >100% (Minenko and Petruk, 2015).

A slight increase of the delivery share to the domestic market in the total output of fish products by the end of 2015 did not change the export-oriented nature of the fishing activity in the region (Table 1).

The situation is complicated by lack of modern logistic technologies for fish cargo transportation. The unsatisfactory nature of transportation organization process is expressed in extensive terms of cargo delivery along the route Vladivostok-Moscow (14-20 days). Obviously, the limited shelf life of fish products requires the development of innovative logistics practices in the organization of goods movement within the market. The material and technical basis of fishery logistics is in the critical condition. Thus, 95% of refrigerator wagons and thermal wagons exhausted their service life and are operated under the terms of their extension. It should also be noted that there are no certification points and car thermal property testing in Russia. The unsatisfactory condition of the rolling stock reduces the quality of the transported fishery products, causes the risks of its defrosting. The position is worsened by rail transport congestion, especially during the fishing season. An important negative role in the solution of fish product delivery to the domestic market is played by high tariffs for rail transportation and port services.

In order to provide consumers with high-quality fish products the following problems have to be solved in the field of product distribution: distribution cost decrease, reduced delivery time and service quality improvement (Kuz'micheva, 2012). This means that you need to raise the level of base logistics in fish and fish product supply. All of the abovementioned problems are associated with the operation of logistic infrastructure, they lead to the decrease of land transport use in Primorye and thus, to the reorientation of fishery enterprise interests from the domestic market of fish products to the foreign one. In terms of sanctions which restrict the imports of fish from the EU, United States, Australia, Canada and the Kingdom of Norway and the strategy of import substitution

declared by Russian Federation Government, such a trend would create the threats for the solution of national food security problems.

Meanwhile, the efficiency of goods movement in the fish market is one of the few strategies available for the solution of abovementioned problems. The logistical support for the restructuring of goods movement at the Russian fish market will require the appropriate investments the priorities of which are particularly acute in the Far East where the logistic possibilities are limited and are absent often. Thus, the transport infrastructure investment is a common investment priority in the Primorsky region and their results are very numerous and related not only with more efficient use of the national vehicles to reorient the interests of fishery business structures from the external to the domestic market. The investment will lead to closer integration with global markets will increase the competitiveness of Russian exports will reduce import costs and will increase employment.

**The role and characteristics of free economic zones in regional economies:** Taking into account the intense global competition, the supply chain efficiency is one of a few strategies available for competitiveness improvement (Rodrigue, 2012). The global production networks are reinforced with the efficient logistics support. Industrial networks need a sufficient transport bandwidth, as well as the high-tech capabilities to manage these flows, in order to ensure reliability and timeliness (Jennings, 2010; Manuj and Mentzer, 2008)

In its turn, the investment in maritime infrastructure will require some significant efforts in the private sector, as well as the development and the strengthening of the state sector institutional capacity. The enhancement of such a development institution use as the Free Port of Vladivostok (FPV) is the tool for the regional investment activity increase in general and in fish logistics in particular.

It should be noted that the use of such an institution, as Free Economic Zones (FEZ) of various types became a noticeable trend of contemporary world development. Port zones are an important tool for the world economy, an integral part of modern international economic relations. It is the most ancient form of FEZ which enabled

entrepreneurs to store, check, package, label and transfer the goods of different countries under the exemption from customs duties and other charges, the administrative barriers and formalities. This type of FEZ is also relevant today.

At the present time, according to some sources, the world has more than 400 “free ports” which are used for transit, warehousing and trade. “Free ports” as the only kind of FEZ existed until the end of the 11th century (Korneyko and Vorozhbit, 2010). The establishment and the operation of zones contributes to the overall recovery of the economy at the national and regional level. At the same time, national and regional authorities seek for investment attraction and economic activity stimulation in specific, limited areas of the country where the rules can be applied to improve business climate.

The theoretical basis of the free economic zone mode application practice in general and a free port in particular are the different trends of economic theory, proclaiming the freedom of trade and the non-interference of a state (Baggs, 2005; Friedman and Friedman, 1997; Fuller and Geide-Stevenson, 2003; Lind, 2011). In the 18th century Adam Smith and other classics understood clearly that liberal trade relations contribute to the national well-being growth (Marx, 1848; Marx and Engels, 1937; Melitz, 2003; Oyama *et al.*, 2010). However, the theoretical basics of the relationship between trade and economic growth were always fragile in the long term. In accordance with the standard neoclassical model of growth, public policy can not influence a steady state and the exogenous technological progress acts as the “engine of growth”. Thus, the differences in trade regimes are not linked with the changes of a long-term growth. The emergence of “new growth” theory in the late 1980-ies marked the recognition of the following fact in economic theory: the economic growth may be associated with the liberalization of trade. However, GDP growth says nothing about the distribution of gains from trade, so it does not act as the full assessment of trade policy liberalization impact. In this regard, during recent years, scholars turn more frequently to the study of trade liberalization effect on certain categories of economic agents such as consumers or entrepreneurs. In particular, Grossman and Helpman (1991) argue that the country openness to trade has an impact on domestic technologies, increases the investment attractiveness of the region, makes the production process to become more efficient.

Among modern foreign authors, dealing with the development of export-oriented and import-substituting economies, highlight G. Helleiner, W. Milberg, A. Razmi, R. Blecker are the most important ones (Ilina, 2013;

Helleiner, 1995). During the years of market reforms in the fishing logistics of the region the following significant changes took place: The loss of fish cargo specialization among port facilities due to a significant decline of fish product handling;

A high level of berthing fund physical and moral deterioration which is an important link in the development of transport and logistics supply chain of fish products to the domestic market with the aim of further processing. The emergence of new technologies for fish transshipment.

The expansion of motor vehicle use. The geography of fish cargo delivery includes not only the regions of Siberia and the Far East but also the central part of Russia. The motor transport enables to transship fish at the terminals which are not equipped with refrigerators or railway tracks as well as to optimize the logistics of fish product distribution by the substantial reduction of delivery costs and time. Besides, according to Russian legislation this type of transport provides for a limited list of supporting documents. However, the use of motor vehicles on the Russian domestic market increases the level of risk which requires the additional costs for cargo insurance.

Container packaging for fish cargoes. The interest in this type of transportation is explained by its cost-effectiveness and such obvious advantages as the reduction of shippers’ costs in a cargo package and the formation of a package. The automation of freight, warehousing and commercial operations and the reduction of their number; productivity increase; the decrease of vehicle downtime under loading operations; the reduction of the need for covered seaport warehouses; the improvement of transported goods security; the increase of loading and unloading place capacity; the organization of multimodal transportations with minimum costs; the provision of carrier services implementation according to “door to door” principle, etc. According to the presented Fig. 1, Vladivostok occupies a significant place among Russian, the Baltic States and Finland ports according to container volume which is conditioned primarily by the geographical location of a region (the climatic conditions friendly for a pool, the availability of non-freezing seaports near the Trans-Siberian Railway, the availability of qualified labor).

The emergence of new stevedores which do not use large refrigerators and therefore which do not have the associated costs. The increase of port terminal number in Primorye from three to ten which may transfer the fishery products

The increase of refrigeration capacity for simultaneous storage from 58-83 tons. However, the average occupancy rate of refrigerators in the region

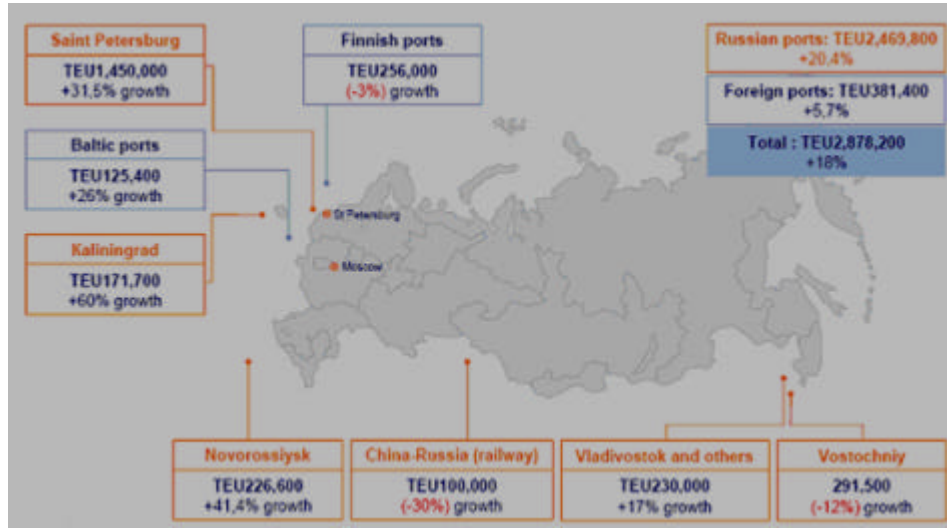


Fig. 1: Container amount distribution through the ports of Russia, the Baltic States and Finland (TEU-twenty-foot equivalent-the standard unit of traffic flow quantity measuring, the capacity of container terminals or cargo transport vehicles)

Table 2: State support measures for business activity within FPV terms

Benefits/taxes	Free port of Vladivostok	Russian Federation territory
Tax on profits	The federal part, the rate of 0% for 10 years The regional part - the rate of 5% for 5 years Next 5 years, no>10%	2% 18%
Insurance fees	Pension Fund 6% Social Insurance Fund Federal Fund of Compulsory Medical Insurance Total: 7.6%	30% 1.5% 0.1%
Free customs zone regime	Simplification and acceleration of border pass control procedures (single supervisory body in PPGG-FCS). The application of the free customs zone procedure.	
Accelerated amortization		Only in the cases provided by the art. 259.3. of RF Tax Code
VAT	The accelerated procedure of VAT refund is provisioned within 15 days	3 months - a desk audit and 12 days The issue of the decision on compensation

makes about 50% which is associated with the use of direct cargo transshipment options (from a ship to a wagon, from a ship to a car). However, the part of investment projects for the introduction of new refrigeration capacities into operation remain unfulfilled (the project of “DV-Port” LLC (Dalmoreproduct port) and a large 10000-th “Diomidovsky refrigerator”); The increase of port tariffs for fish storage and transshipment (60% and 190 respectively over the last 10 years).

**Free port of vladivostok as the tool of the region investment activity increase:** Then, let’s consider what additional benefits the Freeport mode provides to stimulate the investment activity in fish logistics.

Free port of Vladivostok (FPV) is the part of the Primorsky Territory which includes 15 municipalities and 15 international border crossing points where the measures of the state support for business are established

(Table 2, Fig. 2 and 3). The free port may provide the performance of a special legal regime for business and investment activity implementation, the best conditions for business and investment activities are created in relation to the same areas, operating in the Asia-Pacific region. The porto-franco residents will receive a number of preferences: tax incentives, the simplification of customs and visa procedures, the maximum reduction of administrative barriers. The government also plans to introduce a free customs zone mode which, in particular will allow to exempt the imported equipment from the payment of import duty and VAT. Special working conditions will be introduced for educational and medical institutions as well as for a number of enterprises in the field of aquatic culture, fishing and ABR conservation including the protection of fish breeding areas.

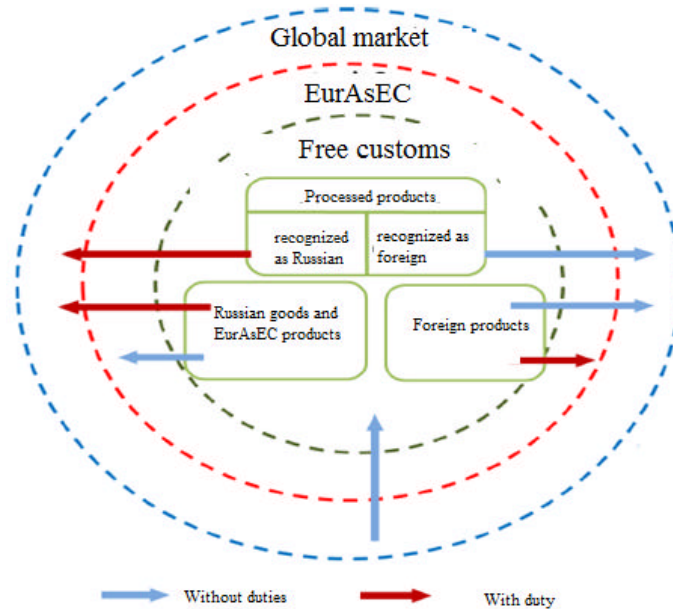


Fig. 2: Favourable customs regime within FPV terms

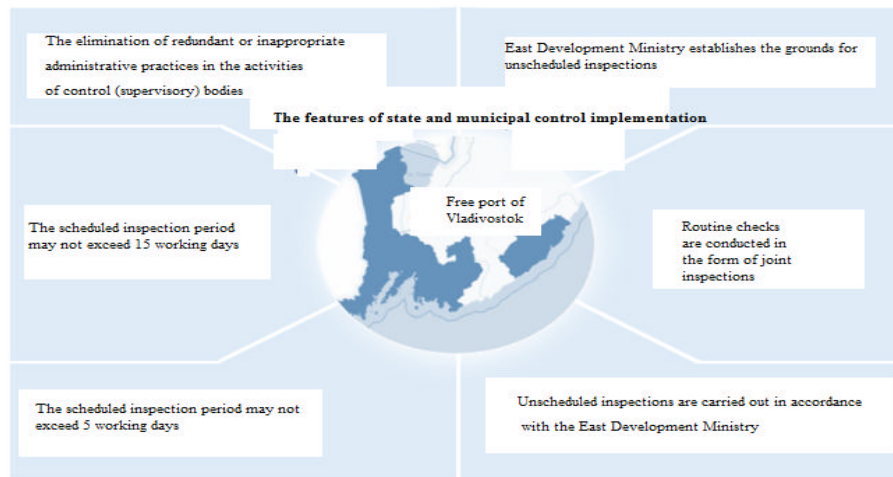


Fig. 3: Administrative pressure decrease within FPV terms

As you see, very attractive environment for business is created in the Primorsky region. The measures aimed at the construction process speeding up will help to increase the attractiveness of the region investment climate. These measures include:

- The documents for territorial planning, public hearings-from 10 to 40 days
- The permission on conditionally permitted type of use, public hearings-up to 15 days
- The urban plan issuance 10 days
- The permission on the decline from the extreme parameters of permitted construction, reconstruction, public hearings-up to 15 days, the decision acceptance after commission recommendation receipt 5 days
- The issuance of a building permit, an object commissioning 7 days (Krasova and Ma, 2015)
- Unscheduled inspections are carried out in accordance with the East Development Ministry

In accordance with RF legislation the application of customs, tax and administrative incentives and preferences is possible only for FPV residents and only on its territory (Konvisarova *et al.*, 2015). This localization does not allow the rail and road transport operators to use this state support instrument for investment activity. Obviously, the FPV mode is focused primarily on the port infrastructure which is also an important trading and logistics platform whose level of activity reflects not only the intensity of its infrastructure use but also material-technical capabilities, established for its operation support. The residents of the port will produce the significant resources for the financial coverage of terminal reconstruction projects, the construction of new logistic centers and the modernization of hydrotechnical structures. New technological possibilities of port infrastructure will enable fishery enterprises to reduce overhead costs and improve their competitiveness on the foreign market mainly. The competitiveness of the Primorye fish products can be improved also by the refusal from the raw material orientation of the regional fish exports and their processing depth increase at the new production capacities created by the Freeport residents. And then the fish cargo handling will be the fundamental aspect of maritime transportations in the region.

Thus, the investments in port infrastructure will not eliminate the whole list of problems faced by fish product supply chain participants within the domestic market of Russia. Moreover, even the implementation of all privileges and preferences in FPV terms will not eliminate all the barriers of fish logistics investment development. These include the following factors:

The existing sanction barriers reduce the foreign investment attractiveness of FPV and reduce the investment opportunities of domestic investors due to the closure of access to the technological equipment on the world market.

The absence of long-term rights to the wharf infrastructure among port operators reduces their motivation for investments in hydrotechnical structures; The unequal competition among the operators of private and public piers, the competitiveness loss risks among the operators;

Significant lease payments for the piers which are not refundable in infrastructure as investments. Significant costs for the reconstruction of regional motor roads do not have the potential sources of funding in the current conditions. The absence of a legal framework for state pier privatization which would increase the independence of port enterprises, including the making of investment decisions within a single port area.

**Summary:** The availability of developed infrastructure is not only an important guarantee of a free port stable functioning, but also a basic condition for its creation. Therefore, it is necessary to establish all necessary incentives to attract domestic and foreign investors to FPV port logistics. It should be noted that the implementation of the project concerning the organization of the logistics zone in the region will require significant efforts from a state and private business. First of all, according to the state they are expressed in the creation of high-quality regulatory framework, the establishment of investment priority system, in the application of state support mechanisms for investment activity. We must not forget that in order to perform an investment breakthrough in region logistics substantial financial resources are required. Only the state has such significant resources. Therefore, public authorities are involved in FPV project implementation not only as a regulator but also a direct participant, using various forms of public-private cooperation. According to the author, the search of interaction mechanism between science, government and business organizations may be developed in the direction of a free economic zone upgrade, in particular, its transition to the cluster form of an organization which takes into account the Primorye region specificity.

Of course, the existing sanction barriers put away the implementation of measures in respect of a foreign investor. However, there are some reasons to believe that the regional authorities will use FPV tools to strengthen the relationships with potential investors instead of waiting for geopolitical changes.

## CONCLUSION

This study allows to make the following conclusions. From the standpoint of the Russian food safety doctrine criteria the import dependence in our country is absent in respect of fishery products. However, this does not mean that there is no need to increase the level of fish product availability for certain regions which are not covered by delivery geography. The unsatisfactory level of basic logistics complicates the solution of this problem. The increase of investment activity in fish logistics within the region, perhaps using a free port instrument, confirming its efficiency as in the world practice, so in various areas of economic theory. The analysis showed that the Free Port of Vladivostok regime will not solve the problems of national vehicle more efficient use to reorient the fishery structure interests from the foreign to the domestic market. The main result will be related to closer integration with the global markets and the Russian fish exports competitiveness increase.

## REFERENCES

- Baggs, J., 2005. Firm survival and exit in response to trade liberalization. *Can. J. Econ.*, 38: 1364-1383.
- Friedman, M. and R.D. Friedman, 1997. The case for free trade. *Hoover Digest*, No. 4, October 30, 1997, <http://www.hoover.org/research/case-free-trade>.
- Fuller, D. and D. Geide-Stevenson, 2003. Consensus among economists: Revisited. *J. Econ. Educ.*, 34: 369-387.
- Grossman, G.M. and E. Helpman, 1991. Trade, knowledge spillovers and growth. *Eur. Econ. Rev.*, 35: 517-526.
- Helleiner, G.K., 1995. Trade, trade policy and industrialization reconsidered. *World Development Studies* No. 6, October 1995, UNU World Institute for Development Economics Research (UNU/WIDER), Helsinki, Finland, pp: 1-55.
- Ilina, O.B., 2013. The evaluation and the selection of processing industry specialty of a special economic zone. *Econ. Entrepreneursh.*, 10: 129-134.
- Jennings, R.J., 2010. Globalization: A smarter supply chain for the future. CAPS Research Critical Issues Report, Tempe, AZ., USA., September 2010.
- Karaseva, O.V., 2010a. Reorientation issues in respect of Primorye fish products to the domestic market of Russia. *Russian Entrepreneursh.*, 2: 129-134.
- Karaseva, O.V., 2010b. The methods of economic sustainability evaluation among fish enterprises. *TINRO News*, 160: 329-334.
- Konvisarova, E., I. Samsonova and O. Vorozhbit, 2015. The nature and problems of tax administration in the Russian Federation. *Mediterr. J. Social Sci.*, 6: 78-83.
- Korneyko, O.V. and O.Y. Vorozhbit, 2015. The Prospects of Primorye Fishery Activity Development in the Conditions Vladivostok Freeport. *Biblio-Globus Publ.*, Moscow, Russia, Pages: 180.
- Korneyko, O.V., 2011. The prospects of entrepreneurship development on the basis of marine biotechnologies in the Primorye region. *Entrepreneur Guide: The Collection of Scientific Works*, Moscow, Russia, Issue 11, pp: 214-222.
- Krasova, E.V. and Y. Ma, 2015. Free port of Vladivostok: Development conditions, prospects, risks. *Econ. Social Changes: Facts Trends Forecast*, 6: 108-122.
- Kuz'micheva, M.B., 2012. The synergistic effect of logistic approach use at the Russian meat market. *Meat Ind.*, 9: 12-15.
- Lind, M., 2011. Free trade fallacy. *Prospect*, 5: 211-250.
- Manuj, I. and J.T. Mentzer, 2008. Global supply chain risk management strategies. *Int. J. Phys. Distrib. Logist. Manage.*, 38: 192-223.
- Marx, K. and F. Engels, 1937. *The Civil War in the United States*. Portage Publications Inc., Colorado Springs, CO., USA.
- Marx, K., 1848. On the question of free trade. Speech to the Democratic Association of Brussels at its Public Meeting of January 9, 1848. <http://marx.libcom.org/works/1848/01/09ft.htm>.
- Melitz, M.J., 2003. The impact of trade on intra-industry reallocations and aggregate industry productivity. *Econometrica*, 71: 1695-1725.
- Minenko, K.A. and G.V. Petruk, 2015. The influence of external factors on small-business activities in food industry. *Int. J. Applied Fundam. Res.*, 8: 937-941.
- Oyama, D., Y. Sato, T. Tabuchi and J.F. Thisse, 2010. On the impact of trade on the industrial structures of nations. CORE Discussion Papers RP 2342, Universite Catholique de Louvain, Center for Operations Research and Econometrics (CORE), pp: 19.
- Rodrigue, J.P., 2012. The benefits of logistics investments: Opportunities for Latin America and the Caribbean. Technical Notes IDB-TN-395, April 2012, Inter-American Development Bank, Washington DC, USA., pp: 1-65.