Theoretical and Methodological Aspects of the Supply Chain Integration to Free Trade Zones

Z.K. Rajabova[1], O.R. Rajabov [2], M.M. Osmanov[1], T.A. Aigumov[3], M.G. Isaev[1], U.G.-G. Magomedova[2], B.A.Bachiev[2]

[1] *FSBEI HE "Dagestan State University"; 43a, M. Gadzhieva st., Makhachkala, Russia,*

[2]*FSBEI HE Dagestan State Agrarian University named after M. M. Dzhanbulatov; 180, M. Gadzhieva st.,*

[3]*FSBEI HE Dagestan State Technical University; 70 Imam Shamil Ave., Makhachkala, Russia,*
[1]r-zk@mail.ru
[2]Makhachkala, Russia, filek08@rambler.ru
[3]dgtu05@mail.ru

***Abstract*— The interdependence of resources in a global marketplace, the advancement of technology and rising national economic constraints have compelled companies to excel in their supply chain performance. To that end, Free Trade Zones (FTZs) may help supply chains improve their bottom line while generating economic development to their geographical regions. These zones have become a tool in most countries to stimulate the attraction of foreign investment, expand exports and / or create import-substituting industries, create new jobs, often in poles of economic growth, especially when forming complex zones in depressed regions through supply chain system. All these free economic zones allow states to realize mainly regional advantages in the efficiency of economic growth, the socio-economic development of the region, and have a multiplier effect on the development of the entire national economy of the free economic zone.**

***Keywords*—** *Free economic zones, supply chains, economic development, industrial park, techno polis, information infrastructure.*

Introduction

Issues related to ensuring the openness of national economies and their integration into the global supply chain management are becoming increasingly important for many countries of the world in the context of globalization of the world economy. Due to this, they want to receive economic benefits from participation in the international division of labour. One of the effective tools that contribute to the development of supply chain integration to free trade zones foreign economic activity is joint venture zones.

Free economic zones function in many countries of the world. According to various sources, at present, there are up to 2,000 free economic zones, including more than 400 free trade zones, the same number of scientific and industrial parks, more than 300 export-production zones, and more than 100 special-purpose zones (environmental, economic, offshore, tourist, etc.) Free economic zones in many countries have become a tool to stimulate the attraction of foreign investment, expand exports and / or create import-substituting industries, create new jobs, often also at the poles of economic growth, and especially when forming complex zones in depressed regions. Examples include China, Mexico, Brazil, India, the USA, Taiwan, the Republic of Korea, etc. At the same time, rich foreign practice also knows examples of the unsuccessful functioning of free economic zones, such as in Senegal or Mauritius [1-3].

Almost all of these free economic zones allow states to realize mainly regional advantages in accelerating economic growth and socio-economic development of territories, and exerting a multiplier effect on the development of the entire national economy. Specifically for Russia, the question of studying this issue has become very relevant following the signing by the President of the Russian Federation Vladimir Putin of the Law on the Establishment of Free Economic Zones in Crimea.

This is also facilitated by the fact that the creation of free economic zones is considered as an alternative option for investors against the background of the imposition of sanctions and increased control over the funds that enter the domestic economy through offshore companies [4]. It should also be noted that the accumulated foreign experience in the practice comprising the functioning of various types of free economic zones is also important for Russia, where free economic zones have been operating since the early 1990s and have not yet shown their effectiveness and significance for the economic development of its regions and the entire economy of the country as a whole.

International Journal of Supply Chain Management
IJSCM, ISSN: 2050-7399 (Online), 2051-3771 (Print)

2. Basic requirements for a free economic zone (using SCM)

In general, integrated supply chain in free economic zones are a very relevant topic for modern economic research. Silicon Valley is an extensive technology park located in California, USA. The history of the Valley dates back to 1971, when silicon began to be used in the manufacture of semiconductor devices. It is silicon that the region owes its name to. Silicon Valley is one of the three largest technology centres in the United States (the other largest centres are located in Washington and New York) [5]. According to other sources, more than 386,000 IT professionals work in the San Francisco Bay Area, which gives Silicon Valley the right to be considered the largest technology centre in the United States. The average wage in Silicon Valley is $ 144,800 per year. There are 286 IT workers for every 1000 employees.

One of the key points in the development of the Valley was the creation of the Stanford Industrial Park based on the supply chain to manage delivery from producer to costumer. After World War II, the number of students at Stanford University increased sharply, and there was a need for additional finance. The university owned a large plot of land (about 32 km²), which it did not have the right to sell (in accordance with the will of Leland Stanford, the founder of the university). In this situation Professor Frederick Terman, the Dean of the Faculty of Engineering, proposed renting land for long-term lease for use it as an office park. Thus, the school began to receive income from land rents, and companies could use leasing tools. The introduction of restrictions on such rents for high-tech companies allowed solving the second main problem of the university: Stanford graduates were able to find work in the immediate vicinity of their alma mater. Problems of companies related to the search for highly qualified specialists were also resolved.

In Silicon Valley, all the conditions for the training of IT-specialists are created. Stanford Private Research University is one of the most prestigious educational institutions in the world. Each year, Stanford accepts about 9,000 students. Many graduates subsequently continue to live and work in Silicon Valley.

The technology park is financed from various sources: foundations established by universities or charitable organizations, local municipalities, federal departments and ministries, industrial firms, as well as at their own expense.

In the valley, there are head offices of more than three thousand enterprises, many of which are engaged in the production of computers and software development. Some of the best known are Apple, Intel, Google, Facebook, AMD, eBay, ElectronicArts, Nvidia, Yahoo! and others.

The main requirement put forward by the management of the technopark to its member companies is to conduct research and development in the field of high-tech industries and in accordance with the specialization of the park to the priority areas of research conducted at the base university. Therefore, all types of activities, both scientific and administrative, that are directly or indirectly associated with the research and development of venture capital firms are allowed within the framework of the technopark.

Silicon Valley attracts many investors, scientists, entrepreneurs, supply chain managers and skilled IT-specialists. This place is the dream of any programmer. Here, creative approach is appreciated and a huge number of innovative developments are available. In addition, the region is characterized by a low level of state intervention in production.

Technopolises of Japan. Japan is known as the country with the most advanced science. It is second only to the USA and China and shares the third and fourth place with Russia by its number of scientists and engineers (850 thousand). In terms of the share of R&D expenditures, Japan is also among the top five countries in the world. The Technopolis program was first formulated in 1980 based on the initial steps of the supply chain in a special document prepared by the Ministry of Foreign Trade and Industry of Japan under the title “Look into the 80s”. It provided for a balanced and organic combination of high-tech industry, science and advantageous living space. Specifically, it was a question of creating research and production towns (technopolises) in different parts of the country, but outside the largest urban agglomerations, where conditions should exist for research activities, for high-tech production, and for training personnel.

Some experts believe that the concept of “growth poles”, which was quite popular at that time, was the basis of this program. At the same time, the main criteria for the location of future technopolises were quite clearly formulated: proximity (no more than 30 minutes’ journey) to a “mother city” with a population of 150-200 thousand people, which would provide public services; proximity to an airport, and even better to an international airport or high-speed railway station; the presence of a basic university providing training and research in high technology; a balanced set of industrial zones, research institutes and residential quarters; advanced information network; favourable living

conditions conducive to creative scientific work and thinking; planning future actions involving all three stakeholders: business, universities and local authorities.

In 1983, the law on technopolises was adopted, and its implementation began. At first, the program provided for the creation of only seven to eight technopolises. But it turned out that 40 of 47 Japanese prefectures expressed their desire to participate in it. Therefore, in 1983-1984 the projects of 14 technopolises were approved and then their total number was brought to 26. An analysis of the location of these technopolises allows us to draw a number of interesting conclusions. For example, almost all of them were created outside the Pacific belt. Further, 12 of them belong (according to V.V. Krysov) to semi-peripheral, and 14 to peripheral regions of Japan. Finally, the fact that technopolises appeared in all economic regions of Japan, but in the largest number (6 each) in such truly peripheral regions as Tohoku and Kyushu.

In general, we can say that technopolises in Japan have already become an important link as the supply chain system not only in the territorial organization of science, but also in the entire territorial organization of the economy of this country.

3. Supply Chain Integration Free economic zones in Western Europe

Technoparks in Western Europe. Western Europe is one of the world's leading regions for the development of science and research. The number of scientists and engineers here exceeds 850 thousand people (a similar indicator for the countries of Central and Eastern Europe is 300 thousand). Nevertheless, it lagged noticeably behind the USA and Japan for a long time, primarily in the R&D in the field of the latest engineering and technology achievement. Thus, R&D expenses per inhabitant in the EU countries averaged $ 200, while in Japan they reached 470 and almost $ 600 in the United States. But nevertheless, the technological gap between the Western Europe and the other two main regions of the western world has a tendency to shrink. This was especially evident with the intensification of Western European integration processes. At the same time, R&D expenditures, which are the largest in the Big Four countries — Germany, France, Great Britain and Italy, also increased. They are followed by Sweden, the Netherlands, Switzerland, Spain, and then Belgium, Austria, Finland, Denmark, and Norway. Moreover, the structure of R&D budgets in different countries is not the same. In most of them, general university funds come first, but it is defense in the UK and France, and, for example, agriculture in Ireland. On the whole for the European Union, such budgets are dominated by defense spending, general university funds, production and technology costs, and energy.

The forms of the territorial organization of science in Western Europe are very diverse. Among them there are relatively small “incubators” that provide assistance to new firms associated with high technology. There are various types of technoparks: scientific, technological, industrial, etc. There are larger technopolises with a wide profile. In the second half of the 1990s, the total number of various science parks in Western Europe has already exceeded 300.

In Western Europe, its own geography of science began gradually to take shape, after the United States. Scientists at the Institute of Geography of the Russian Academy of Sciences have identified three main stages of the development of R&D and their location, which can be traced by the example of Western Europe.

At the first stage, research institutes and laboratories were created mainly at universities and other centres of education and science. They gravitated accordingly either to small university cities (Cambridge in the UK, Heidelberg in Germany, Leiden in the Netherlands), or to metropolitan cities and other large metropolitan areas (Paris, Lyon in France, London, Edinburgh in the UK, Berlin, Hamburg, Munich in Germany, Rome, Milan, Turin in Italy).

At the second stage characterized by an increase in applied research, scientific and technical centres began to emerge in old industrial areas: for example, in the Ruhr region (Germany), in Midland, Lancashire, Yorkshire (Great Britain).

At the third stage corresponding to the modern stage of scientific and technological research, a noticeable territorial separation of the scientific centres from the education and industrial centres began to take place. These centres arising both in previously developed areas and in areas of relatively new development have become objects of attraction for the population and the latest industries, thereby acquiring an independent role in the formation of the territorial economic structure of the respective countries.

Studies have shown that the main factors in the formation of such technoparks and technopolises should be considered: the presence of a good transport and information infrastructure, qualified scientific and technical personnel, a developed financial and entrepreneurial system, and a favourable environmental situation.

All these factors, in turn, contribute to ensuring a high

quality of life, the formation of a particularly attractive overall image of a science park or area.

Three technology parks dominate the European IT market - Medicon Valley, Cambridge, and E.S.T.E.R. Let's consider each park separately.

Cambridge Science Park was opened in 1975 near the university of the same name in UK. The main goal of creating this technology park was to strengthen ties between educational institutions and the high-tech industry. New firms are created here; the country's wealth is growing, new technologies are being developed and old ones are being improved in the process of exchanging ideas and human resources.

The region's employment rate is actively increasing, mainly due to the creation of jobs for highly qualified specialists and university graduates. There are also events and programs to introduce students to the high technology industry.

Cambridge Park has more than 80 companies involved in various areas of information technology. Many companies are in close collaboration with Cambridge University. The region also has branches of large world companies, such as, for example, Toshiba.

Most Cambridge Science Park firms receive technical and financial assistance from the University of Cambridge. Businessmen make contacts with scientists and can always get the help they need.

Technopark E.S.T.E.R (France). The original model of growing and supporting high-tech companies, as well as a dynamically developing innovative ecosystem with a large number of participants was demonstrated by one of the largest technology parks in Europe, E.S.T.E.R.

Technopark E.S.T.E.R is one of the largest technology parks in France, created in 1993 and located near the city of Limoges on the territory of 210 hectares. Residents of the technology park specialize in the production and development of technologies in a number of areas: ceramics, composite materials, electronics, optics, telecommunications, biotechnology and pharmaceuticals, ecology, etc. The technology park has 189 resident companies with more than 2527 employees. The infrastructure of the technology park includes: 4 technology transfer centres, a technology incubator, 3 laboratories, 2 training centres, and a financial centre.

The technology park model is focused on creating all conditions for the development of innovative business at certain stages of its formation, which literally allows them to grow companies. The source of new research teams and start-ups is the University of Limoges (about 20 thousand students), which faculties train professional personnel in the main technological areas of the technology park. Thanks to close cooperation between enterprises and the university located on the territory of the technopark, professional orientation of students is realised involving the passage of relevant practice and participation in research projects.

In 1997, Denmark and southern Sweden created a joint "state" called the Medicon Valley. At the moment, there are industrial enterprises and scientific laboratories in the "state". Scientists at Medicon Valley are developing new approaches in the treatment of cancer, diabetes and other diseases. 14 groups of scientists from the University of Copenhagen are engaged in personal medicine research aimed at developing individualized treatments and medicines. Scientists from the Valley argue that in the next decade the idea of personal medicine will be realized.

The number of Medicon Valley companies is constantly growing. At the same time, not only own enterprises are opened in the valley, but also branches of well-known pharmaceutical and biotechnological companies, which include the American pharmaceutical company Biogen. The region has created favourable conditions for labour legislation and taxation, which attracts many companies.

Much attention is paid to training. There are 14 universities in the region that train specialists.

4. Experience in the functioning of supply chain on free economic zones in China and India

Supply chain managers have long valued Foreign Trade Zones (FTZ) because they're secure areas under U.S. Customs and Border Protection (CBP) supervision generally considered outside CBP territory upon activation. Located in or near CBP ports of entry, they're the United States' version of what are known internationally as free-trade zones. When learning the experience of the functioning of free economic zones in developing countries, it should be noted that one of the most successful there is the Chinese practice of the functioning of technology-innovative zones. In China, there are 53 parks of new and high technologies. This type of free economic zone was approved by the State Council of the PRC in the late 1980s, called the industrial parks of new and high technologies (new and high-tech industrial parks). The basis was the Report on the Study of a New Technological Revolution approved by the State Council in 1984, and "The Decision of the Central Government on the Reform of the Scientific and Technical System" in March 1985.

In the same year, the State Commission on Science and Technology approved four principles for choosing the location and formation of new and high technology parks: a well-developed infrastructure which was mainly invested by the state, a dynamically developing territory; creation of a park on the basis of small, specialized and advanced projects; projects are selected and subsidized by the state.

The first territories for the formation of new and high-tech parks in China were four districts: Beijing, Shanghai, Wuhan and Guangzhou. The first park of new and high technologies in China was the park in Shenzhen in 1985. In the 1990s the number of parks increased: 26 state parks of new and high technologies in 1991, and a year later another 26 projects were approved. In total, 53 parks of new and high technologies at the state level and 61 parks at the regional level have been created in China.

The main industries of the Shanghai High-Tech Park are represented by information technology, modern biotechnology, and the pharmaceutical industry. The leading production facilities of China are located here, among which the National Industrial Base for Biotechnological and Pharmaceutical Production in Shanghai, the National Base for the Production of Information Technologies, the National Industrial Base for Information Security, and the National Base for Technological Innovations should be highlighted. The total number of registered companies is 287 with foreign and national capital; the total investment reaches 4.4 billion dollars. In 2010 total high-tech fleet revenue amounted to 53.38 billion yuan.

The Incubator is intended for the production of innovations in the field of science and technology, for the exchange of innovations, the creation of high-tech enterprises, and for the training of managerial personnel. Geographically, the incubator is located in Hizuhai, a zone with high concentration of technology parks, where there are also 18 universities, 113 research institutes, including the Shanghai branch of the Chinese Academy of Sciences and the Shanghai Academy of Sciences.

Shanghai High-Tech Park also includes the Kaohejin Innovation Centre. It is a private structure which belongs to the Shanghai Corporation for the Development of the Kaoheziyan High-Tech Park, which created the necessary infrastructure. The centre is a business incubator for the production and support of technology-intensive enterprises, promoting the commercialization, industrialization and internationalization of scientific and technological achievements.

The innovation centre has existed for over 15 years. There are more than 300 technology-intensive enterprises in the field of biotechnology, information technology, new materials, etc. on the territory of 29 thousand square meters. The total capital of registered companies is 65 million yuan.

Supply chain managers may also wish to look into alternatives beyond freight intermediaries for FTZ expertise. Smaller coastal niche seaports like Tampa, Portland, and San Francisco are also helping shippers enter the “The Zone.” The University of Science and Technology of Shanghai High Technology Park has been operating since 1991 as a state university in the field of scientific and technological achievements, and since 1998 it became part of the Shanghai zone for the development of high technologies based on the principle "One district - six parks." The territory of the university is 1 sq. km. The university is one of the top 10 innovative incubators in Shanghai for the transfer of high technology. It includes Incubation Base, Shibey Industrial Park, and Business Achievement Student Park.

Another example of successful Chinese practice in the development of technology innovation zones is the Quindao High-Tech Industrial Park in Shandong. It is located in the east of Quindao and it has an area of 67 sq. km. The park has been operating since 1992 and includes two main areas of development: the development of new and high technologies within the framework of the National Zone for the Development of New and High Technologies and the development of tourism within the framework of the National Tourist Centre Shilaoren.

Quindao has a favourable and well-developed transport infrastructure and communication system, a favourable condition of nature environment, and the necessary means to develop modern high-tech industries. For the future, it is envisaged that the high-tech park will become the most important zone for the investment development of state technologies and the most influential industrial centre for the development of high technologies in the province of Shandong and northern China as a whole.

In the north of the high-tech park there is the base for the development of high-tech industries and enterprises, in its centre there is a research base with universities, institutes and research centres; the south of the park is a tourist area. Much attention has been paid to creating an adequate basic and supporting infrastructure, in which 293 million dollars (2.4 billion yuan) have been invested.

In total, 638 companies with foreign capital and joint

ventures are registered in the high technology park of Quindao; their total investment is 2.4 billion dollars. Among them, 62 companies invested in the high-tech park more than 10 million dollars each. The total GDP of the Quindao High-Tech Park is 8.6 billion yuan, or 1.04 billion dollars, and the total export volume reaches 240 million dollars. Qingdao's economic growth thanks to the deployment of high-tech park being the most dynamic in Shandong. Among the foreign TNCs that invested in the high-tech park economy, one can distinguish such world-famous TNCs as Coca-Cola (USA), Hewlett Packard (USA), Daewoo Automotive Components (Republic of Korea), Grandlink Group (Singapore), and the production facility with largest capacity was created by the famous American electrical corporation Hayer.

In general, the Quindao high-tech park ranks third among the national high-tech industrial parks in China, and the income of the Shilaoren resort is the largest among all resort and tourist centres in China.

The Ningbu High-Tech Park is another prime example of the successful development of a provincial high-tech park in China, although it was established in 1999. The initiators of the formation are the Chinese Academy of Sciences and the Ningbu Municipality. The size of the territory is 32.9 sq. km. It is planned to turn the high-tech park into an integral part of the "four zones, three gardens, a river and a bridge" territory model located in the east of Ningbu.

In the high-tech park, 90 investment projects are being implemented, the total investment in which exceeds several tens of billion yuan. 200 enterprises and more than 40 research institutes are located here, including: Jetszian Talent Market, Jetsziang Doctoral Training Base, Ningbu Industrial Park for Entrepreneurship Promotion, Ningbu Doctoral Candidates Park, and Ningbu Training Park for Higher Education.

The industry structure of the Ningbu High-Tech Park is represented by microelectronics, including the production of chips and their packaging, the production of semiconductors and electronic components; production of photoelectronic components and the provision of communication services, including the production of optical filters, liquid crystal and plasma screens, mobile phones and accessories, optics products, etc. Also, a base for the production of software for multimedia tools and office management has been created the park. The pharmaceutical industry is also developed. At the end of 2002 the high-tech park ranked first among provincial high-tech parks in terms of overall development indicators. It is planned to turn Ningbu into a multifunctional city for the development of new and high technologies conducting R&D, with business incubators, developed industries, commercialization of scientific and technological achievements, and residential areas for people working here.

In general, the Chinese zones of technological development are characterized by dynamic evolvement; their performance indicators are given in the table 3 below.

Table 3 The performance indicators of the technological development zones in China

Indicator	
Total territory, thousand sq. km	421,79
Total GDP, in $ 100 millions	221,3
The volume of industrial production, in $ 100 millions	613,3
Tax revenues, in $ 100 millions	366,2
Export volume, in $ 100 millions	194,4
Import amount, in $ 100 millions	179,0
Volume of contracted foreign investment, in $ 100 millions	106,4
Volume of actually used foreign investments, in $ 100 millions	59,2

In general, the Chinese experience in creating advance technology and innovative zones is recognized as one of the most successful in the world.

Special (free) Economic Zone in Bangalore (India).

The Government of India pays considerable attention to the creation and development of special (free) economic zones (free economic zones). Free economic zones are specially designated geographical

zones created to expand exports, create jobs, and attract new investments and technologies to accelerate the pace of economic growth. Special, more liberal laws apply in a free economic zone compared to the rest of the country, stimulating the attraction of both foreign and domestic investment.

The first such zone in India (and Asia) was created in 1965 in the city of Kandla (state of Gujarat). At the initial stage of its development, the founder of the zones was exclusively the government of the country.

In accordance with applicable laws of free economic zones, they can be created by both the central government and state governments, as well as on the initiative of business representatives. Free economic zones are established with the approval of a specialized Council under the central government. State, private and public-private enterprises may be established on their territory. 100% participation of foreign capital is allowed in the "automatic approval" mode (approval of the Indian authorities is not required).

In accordance with the rules for the creation and functioning of a free economic zone, they are divided into multidisciplinary, specialized, warehouse and free trade zones, zones in seaports and airports. Depending on this, there are restrictions on the minimum production area, the minimum amount of investment, the placement of non-core infrastructure, etc. Special conditions are stipulated for the free economic zones specializing in the field of information technology, biotechnology, processing of jewelry and precious stones, as well as for the free economic zones located in the economically backward areas of the country and in the union territories (administrative entities of India, which have a significantly smaller area than the states).

Bangalore (India) is the world's largest specialized high-tech special (free) economic zone. A cluster of several IT and technology parks formed in Bangalore in the 1990s after the authorities created the most-favoured-nation regime for export-oriented IT services and software companies. Since 1991, the number of IT companies working in the cluster has increased from 13 to more than 2.2 thousand.

From 2000 to 2011 the export of IT services increased from 1 to 17 billion US dollars. Outsourcing operations through Bangalore are conducted by 400 companies from the list Fortune 500.

In April 2000, the Government of India adopted a special policy in the area of the free economic zone. In order to give stability to the functioning of the free economic zone, the Government of India adopted the law on special economic zones (SEZ Act, 2005) and the rules for the creation and functioning of free economic zones (FEZ Rules, 2006), which are the fundamental documents regulating their activities.

Along with the SEZ Act, 2005 and SEZ Rules, 2006, the activities of the free economic zone in India are regulated by the decisions of the special committee (Empowered Group of Ministries), headed by the Minister of Foreign Affairs. It also includes the ministers of finance, industry and trade, communications and information technology, and the deputy chairman of the Planning Commission under the Government of India. This committee submits legislative initiatives to the government of the country to amend the regulations governing the activities of the free economic zone.

Now in Bangalore there are more than one and a half thousand companies in the field of information technology and thousands of companies in other industries. The list of these companies includes almost all the giants of electronic business, which are represented by subsidiaries with foreign capital, as well as joint ventures.

Due to the IT development, Bangalore became the fourth in the list of the largest technological clusters in the world. It should be noted right away that the IT industry includes software services, Information Technology Enabled Services (ITES), including business process outsourcing (BPO), and hardware. The state provides benefits in the cluster as in special economic zones.

Incentives for enterprises located in the free economic zone:

- No license to import is necessary;
- Duty-free import of capital goods, materials, spare parts, consumables, etc.
- Duty-free acquisition in the domestic market of means of production, raw materials, consumables, spare parts, etc.
- A company is exempted from paying income tax in the amount of 100% of profit for a period of 5 years from the date of profit declaration, then another 5 years in the tax amount of 50%;
- Production, provision of services, processing, assembly, repair, recycling, packaging, etc.
- Sales to the domestic market are permitted with the full payment of customs duties in accordance with the legislation in force for the internal customs zone;
- Full freedom to conclude subcontracts (contracts);
- Simplified customs checks of exports and imports; unimpeded return of imported goods recognized as defective; issuance of loans in the amount of up to 100% of the value of fixed assets, saving of foreign currency in the account;

- Duty-free import / purchase of specific goods for the establishment of enterprises.
- The opening of foreign branches of Indian banks is permitted in the free economic zone, for which the Reserve Bank of India has established preferential standards of activity;
- External commercial borrowings for up to 3 years on the terms developed by the Reserve Bank of India are allowed for Companies located in the free economic zone;
- Urgent commodity transactions on certain conditions are allowed for companies located in the free economic zone;
- Transactions for the supply of goods and services from the internal customs territory of a country into the free economic zone are considered as export.

Bangalore is one of the few clusters that have emerged in response to foreign demand. The main factors that influenced the emergence and development of the cluster in Bangalore are government efforts, high-quality education in the field of information technology, an excess of cheap qualified English-speaking workforce, the promotion of the Indian diaspora in Silicon Valley to the development of offshore business in Bangalore, and the role of transnational corporations that opened up their subsidiaries in the city. It should be noted that, unlike Silicon Valley, Bangalore is characterized by large companies which activities are focused on gradual improvements in customer service, rather than small start-ups aimed at technological breakthroughs.

A very important contribution to the formation of the Bangalore cluster was made by the Indian diaspora in Silicon Valley. US Indians have greatly helped U.S. corporations open subsidiaries in Bangalore. According to C. Chamineyd and D. Wang, social capital is weak in Bangalore and is represented mainly by networks of alumni associations. The dynamic of cluster development in Bangalore is largely determined by the multinationals operating there. The most important associations are NASSCOM, The IndUS Entrepreneurs and Software Process Improvement Network. State support for the development of interaction between companies and institutions in Bangalore is practically absent.

In general, Bangalore accounts for about a third of the total Indian export of software and IT services, which is provided by one and a half thousand large and small companies. According to the observations of Indian analysts, many of those who left Bangalore in the 70s to find work in the USA subsequently returned to their homeland to open their own company here. This confirms the conclusion of CNN, which several years ago qualified the capital of the “Indian miracle” as one of the most attractive places for doing business in developing countries.

Summary

The interdependence of resources in a global marketplace, the advancement of technology and rising national economic constraints have compelled companies to excel in their supply chain performance. The analysis allows us to make a general conclusion that world experience in the development of international economic relations cannot be imagined without the functioning of free economic zones which are parts of the state territory on which goods placed there are considered from the point of view of levying import customs duties and taxes as being outside the customs territory and not subject to ordinary customs control. A free economic zone is a unique “workshop” for the formation and production of those economic relations that are initially absent in the country. It is in the free economic zone where these relations are subject to development and testing, and if they show their effectiveness, they can be transferred to the whole country.

Conclusion

The main purpose of this article was to broaden the debate about the factors conditioning both the structure and the content of ties in supply chain relations by including geo-economic variables. In general, the creation of special (free) economic zones in certain regions will contribute to a qualitatively new economic and social development through new jobs, construction of residential areas, and adequate infrastructure: modern roads and engineering networks. According to a survey of residents, the advantages of locating production facilities within special economic zones are associated with tax benefits, including a decrease in payroll tax by 12%, a decrease in property tax; the presence of a favourable customs regime with respect to equipment imported for use in production or in research (when it is not necessary to prove that the reason for its importation is not related to subsequent resale); increasing the image of a resident of a free economic zone and a special economic zone, which is important for an investor; renting land plots, and office spaces; availability of adequate infrastructure.

References

[1] Asiaei, K., Jusoh, R., Bontis, N. (2018). Intellectual capital and performance measurement systems in Iran. Journal of Intellectual Capital, vol. 19, № 2, pp. 294-320.

[2] Barth, M.E. (2018). The Future of Financial Reporting: Insights from Research. Abacus, vol. 54, № 1, pp. 66-78.

[3] Castilla-Polo, F., Ruiz-Rodríguez, M.D.C. (2018). The disclosure of intangible assets in financial institutions: a Content Analysis. Revista Espanola de Financiacion y Contabilidad, vol. 47, № 1, 2, pp. 81-123.

[4] Ciupitu, S.A., Niță, M. (2018). The impact of intellectual capital on the responsibility and sustainability of the company. Example of an assessment of the socially responsible investment. Quality - Access to Success, vol.19, № S1, pp. 173-178.

[5] Danko, T.P., Grishina, O.A., Kitova, O.V., Ivolgina, N.V., Solovyova, M.G., Seifullaeva, M.E., Sekerin, V.D. (2018). Management of intangible assets' potential at oil companies: Market positioning, place and role of business reputation – Goodwill of companies. Journal of Applied Economic Sciences, vol. 13, № 1, pp. 143-149.

[6] Haji, A.A., Ghazali, N.A.M. (2018). The role of intangible assets and liabilities in firm performance: Empirical evidence. Journal of Applied Accounting Research, vol. 19, № 1, pp. 42-59.

[7] Kulikova, L.I., Akhmedzyanova, F.N., Ivanovskaya, F.N. (2016). Ways to distort the value of assets used by companies in preparing financial statements. International Business Management, vol. 10, no. 24, p. 5705-5709.

[8] Kulikova, L.I., Druzhilovskaya, T.Yu., Druzhilovskaya, E.S. (2018). Problems of Practical Application of International Financial Reporting Standards for Fixed Assets by Russian Companies. Journal of Engineering and Applied Sciences, vol. 13, No. 3, p. . 569-574.

[9] Kulikova, L.I., Goshunova, A.V. (2016). Assessment of the quality of a management system: the example of professional football clubs. Journal of the Academy of Strategic Management, vol. 15, No. Special. issue 1, p. 122-127.

[10] Leo, B. (2018). The Deteriorating Usefulness of Financial Reporting Information and the Methods of its Circulation. Accounting and Business Research, vol. 48, No. 5, p. 465-493.

[11] Loyarte, E., Garcia-Olaizola, I., Marcos, G., Moral, M., Gurrutxaga, N., Florez-Esnal, J., Azua, I. (June 2018). Model for calculating the intellectual capital of research centres. Journal of Intellectual Capital

[12] Mukhametzyanov, R.Z., Nugaev, F.S. (2016). Financial statements as an information base for the analysis and management decisions. Journal of Economics and Economic Education Research, Special Issue 2. Arden 17. pp. 47-53.

[13] Quaranta, A.G., Di Gabriele, N. and Zigiotti, E. (2019). Impairment of intangible assets and disclosure by Italian banks. Managerial Finance, Vol. 45 No. 2, pp. 311-330.

[14] Vetoshkina E.Y., Tukhvatullin R.S. (2015) Economic Efficiency Estimation of Intangible Assets Use Mediterranean Journal of Social Sciences. 2015. T. 6. № 1 S3. C. 440-443.