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Strengthening of a firm competitiveness through industrial policy: a literature review

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Түйін

Бұл зерттеудің мақсаты – индустриалды саясат және оның жергілікті компаниялардың бәсекеге кабілеттілігін арттыру мүмкіндігі, фирманың кызмет нәтижелеріне және осы саясаттың нәтижесіне әсер ететін факторларды іріктеуге арналған түрлі жұмыстарды талдау болып табылады. Бұл мақала осы саладағы өткен және жаңа жұмыстарды талдай отырып, теорияға өз үлесін қосады. Осы тақырып бойынша жасалған әдеби шолулар мен түрлі зерттеулердің синтезі көп жақты нәтиже береді. Егер зерттеудің кейбір бағыттарында тұжырымдамалар мен жалпы қабылданған теориялардың жалпы даму тенденциясы байқалады, ал индустриалды саясатты жүзеге асырудағы индустриалды ұйымдар теориясы экономистер арасында белгісіздік пен маңызды пікірталас туғызуда. Индустриалды саясатты жүзеге асыру, сайып келгенде «үлкен серпіліс» тұжырымдамасы мен басқа да тұжырымдамалар бойынша қаржылық ресурстардың жеткіліксіздігі себебіне байланысты нәтиже бермеуі мүмкін. Кейбір зерттеушілер экономиканың нақты саладағы өзара тәуелді және өзара байланысты бар өндіруші конгломераттарды қолдау түріндегі кластерлік тәсілді ұсынады. Дегенмен кез келген индустриалды саясатты жергілікті компаниялардың бәсекеге қабілеттілігін жоғарылаты бар өндіруші конгломераттарды қолдау түріндегі кластерлік тәсілді ұсынады. Дегенмен кез келген индустриалды саясаттың негізгі мақсаты жергілікті компаниялардың бәсекеге қабілеттілігін — экспорттық хиттің пайда болуы.

Түйін сөздер: бәсекеге қабілеттілік, бәсекеге қабілетті күш, даму, салаларды ұйымдастыру, индустриалды саясат, салалар, өндірістік сектор.

Аннотация

Целью данного исследования являются анализ различных работ, посвященных индустриальной политике и ее возможности повышать конкурентоспособность местных компаний, выделение факторов, влияющих на результат такой политики и на результаты деятельности фирм. Статья вносит свой вклад в теорию посредством анализа прежних и новых работ в данной области. Литературный обзор и синтез абсолютно различных исследований по данной теме дают многосторонний результат. Если в некоторых направлениях исследований наблюдаются общие тенденции в развитии концепций и общепринятых теорий, то теория индустриальной организации в части способов реализации индустриальной политики испытывает неопределенность и вызывает полемику среди экономистов. Реализация индустриальной политики может в конечном итоге не дать результатов в связи с недостаточностью привлеченных финансовых ресурсов, как утверждает концепция "большого толчка", или по другим причинам. Часть исследователей придерживается мнения в правильности вертикального подхода в реализации политики посредством поддержки определенных секторов экономики, тогда как другие экономисты предлагают кластерный подход в форме поддержки конгломератов взаимозависимых и взаимосвязанных производителей из различных отраслей. Тем не менее существует общее мнение, что основной целью любой индустриальной политики является повышение конкурентоспособности местных компаний. Данное исследование выделяет симптом наличия конкурентных преимуществ – появление так называемых хитов экспорта.

Ключевые слова: конкурентоспособность, конкурентная сила, развитие, индустриальная организация, индустриальная политика, производственный сектор.

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Abstract

The aim of this paper is evaluation different studies related to the industrial policy and its capabilities to increase competitive power of domestic companies, highlighting factors that affect results of such policy and performance of firms. This paper contributes to the theory analysis of old studies and recent research results. Overview of too different studies on the topic gives multidimensional results and the paper contains synthesis of various studies from the field. If in some topics it is observed general tendency in developing concepts and compromise theories by economists, theory of industrial organization experience uncertainty in how industrial policy should be organized. Realization of industrial policy can eventually give nothing as a result of small financial resources attracted for conducting of the policy as concept of "big push" claims or another reasons. Part of empirical studies state for vertical realization of industrial initiatives by supporting of defined sectors of economy when others suggest cluster approach to assist conglomerate of interdependent producers from distinctive industries. Nevertheless, all share the view that the goal of industrial policy is increasing of competitiveness of local companies. And the study highlights the sign of such competitive odds by appearance of so-called "hits" in export.

Key words: competitiveness, competitive power, development, industrial organization, industrial policy, industries, manufacturing sector.

Introduction

Industrial policy including different instruments such as trade policy, fiscal policy, industrial programs, tax levels and others is considered as a basis of stable and in some cases rapid development of an economy. The central aim of industrial policy is a support of local producers to strengthen their competitive advantages and increase their share not only in local market but in international trade. Not all instruments give expected results. It depends on how and in what extend those instruments were used and whether their use was in accordance to the need.

One of the earliest researchers in the sphere of industrial policy Nicolas Kaldor argued that economic growth can be provided mainly by manufacturing sector [1]. Many other empirical works concerning the subject were implemented afterwards. They included panel data for a long period achieving 55 years and for 67 developing countries [2]. Industrial growth can be supported by subsidies, import tariffs, and other governmental policies [3, 4, 5, 6]. However, there is a debate on how industrial policies must be organized in order to increase competitiveness of industries: whether investment is enough to realize such a policy [7, 8] or location is right regarding agglomeration concept [9, 10]?

In spite of many empirical works in the field and recommendations, a lot of governments continue to find industrial policy ineffective in their case [11]. Most of nations in the world remain poor. The number of developing countries is expected to be about the same in the medium term. If some of them improve economic development and increase competitiveness of local plants by industrial

programs implementation, others spend enormous resources and get nothing.

Researchers base their study on existing theory, previous empirical and theoretical work with meticulous analysis of relevance and critical approach of them. They try to choose results of research from journals with the highest citation rate and from the same field of study as theirs since empirical research can mislead sometimes and give not appropriate receipt. Moreover, recommendations of honorable institutes like World Bank may be wrong and fruitless [11]. It is related to dubious statistical data that were used in corresponding analysis, different approach to resolve the problem in different regions [12], change of context, appearance of new factors that were absent before, and other reasons.

In that sense the aim of the study is an overview of different research concerning industrial policy and its potential of influence on competitiveness of producers. The study is focused likewise on finding factors that influence on effectiveness of industrial policy and on competitive power of companies. The aspect is considered as important and timely.

Methodology

It is employed literature review method to highlight new findings, main directions and approach, their similarities and differences in the subject of study. Different sources such as empirical and theoretical literature, foreign and local were used to find existing disputes between scholars in the field of research. Literature review consists of papers from period covering recent years and earlier decades.

Development of industrial policy concept

There was a time especially after the Great Depression when economists believe that market cannot develop itself without strong and clear governmental intervene in the economy. Some decades later economists had found that governmental policy was always full of mistakes and aims, which officials claimed, were not achieved. And it is better to base economic policy on liberalization and absence of regulation. Only monetary policy remained effective as many believed in it. In that time Chicago school of economics was at its peak of popularity. The time was called as the famous Washington Consensus on development. But after 2001 recession and 2007-2009 crisis general opinion tended to approach of state regulation [12].

Long time trade theory follow the principle of comparative advantage oriented on specialization of economy within defined niches. Every country has its odds and it must take advantage of them in specialization. Like Ethiopia that uses its cheap workforce in creation of textile industry today. Australia having abundant land resources develops agriculture and exports meat and other agricultural product all around the world. According to this approach, countries must concentrate their efforts in specific directions and products produced in cheaper and more effective way. But in 2003 that principle had become doubtful. New research presented result which somehow opposed the principle (figure 1): as developing economy is becoming wealthier so its internal production within industries is getting less concentrated and more diversified [13].



Figure 1 - Sectoral diversification in 1969-1997 s. Source: [13, p.43]

Figure 1 also demonstrates that the curve reaching a level of income (GDP per capita) in the range of 8800-9800 starts to rise which signifies concentration increase of sectoral distribution or beginning of specialization. In other words, not all states must focus on specialization but only those who achieved defined level of income, therefore, the curve has U-shaped pattern. Developing states with low level of income should diversify activities in different industries. It explains to a certain extent why so many attempts of different governments failed in promotion of industrial initiatives.

There are different comprehension of industrial policy use. Rodrik defines industrial policy as an economic restructuring in order to highlight more dynamic nature of it and avoiding relationship to specific industry or manufacturing cluster [14]. Cimoli, Dosi, and Stiglitz consider it in a more extended way. It consists of support of various infant industries by policies in trade, science and technology, state tenders, foreign direct investments, intellectual property rights, and financial resources dispose. These policies should accompany by institutional engineering that lies on the basis of economic actors behavior, market rules, system, and restrictions, going to the inclusive parameters [15].

Economic scholars distinguish three types of industrial policies: functional, horizontal, and vertical [16]. First two of them are opposite one another in their essence. And last of them takes medium position.

Functional interventions are too general and focus on special factor market. Educational program of specialty change to redirect workforce from one sector of economy to another is a part of functional interventions. Establishment of the same land tax rate for industrial objects without distinction them by sector of economy is also considered as the functional intervention. Standard import tariff policy government introduces for all industrial equipment means functional approach.

Horizontal intervention is implemented in different sectors and for companies of various sectors. It can be infrastructural projects, educational programs for biochemistry, engineering, and medicine, interest rate of central bank, minimizing tariffs for small business. At some extent we may include cluster policy to this type of intervention despite of view of several economists that cluster policy is something far distinctive from industrial policy. Manufacturing cluster is a complex of leading and small organizations from different industries working together as a suppliers and customers, partners in research projects with associated institutes or in another way.

Vertical intervention or selective approach means targeting of especial activities like investing in technological development of national champions. South Korea followed this policy for decades and supported its leading corporations in promotion of export. Kazakhstan's two programs of industrial and innovative development for five years each were vertical intervention in their essence when a new or existing producer in an industry was financed partially by government on gratuitous basis (20% of total investment) and on repayable basis [17, 18].

It should be mentioned here that industrial targeting means providing policy in certain industries and not all. It is pointless without enough amount of financing as Big Push theory claims [7, 8].

Industrial policy relates to the theory of industrial organization and includes also aspects of industry regulation to avoid monopolization and high prices and to establish constraints over oligopoly. There are different research on it. One of early studies was represented by Chamberlin [19]. But we know another works done before. The great interest to the problem arised especially when Standard Oil established control over oil industry at the end of the 19th century. It was followed by series of antitrust acts and subsequent regulation of another industries in the US. The interest to the issue was also demonstrated by Mason in the late of 1930ss [20]. In 1977 Dixit and Stiglitz published results of their theoretical study where they declare increasing return from monopolization and effectiveness from competition [21].

The great work on industrial organization was conducted by Scherer in 1970 and 1980, Scherer and Ross in 1990 [22]. The main issues they study are competition and monopoly, concentration within an industry, economies of scale and mergers, oligopoly and behaviour within it, restrictions and antitrust regulation of prices, empirical evaluation, price discrimination and consumer's power, product diversity and market structure, innovations protection and resource distribution. The work contains myriad empirical research results on the topic and different approach to every issue. It structured previous work of researchers and identified existing discussions and compromise between economists of the field. It somehow opened new directions of study and highlighted undiscovered holes of previous research. Audretsch argues the central aim of Scherer's first book was finding relationship between company size and its productivity [23]. And analysing that relation the study must concern the aspects of monopoly when the size is huge, oligopoly when the size is relatively big, and competitive market with too many companies and high performance in any activity.

Industrial policy and firm competitiveness

As it was mentioned before industrial policy can be implemented in different ways. But the central goal is usually strengthening competitive advantage of local producers. It is especially important when international trade brings the most powerful companies to the developing market and competition becomes fierce. Moreover. Europe 2020 Strategy implies industrial policy that promotes industrial competitiveness with the growth of small and medium enterprises (SMEs), improvement of raw materials supply chain management, and high salaries [24]. It contains three main directions: 1. Development by use of innovations and knowledge, 2. Resources-efficient, greener and more productive economy, and 3. High-employment economy with high integration of territories and community.

Industrial policy can be introduced by free trade policy to encourage innovation activity of domestic enterprises and to transfer new technologies to local producers. This kind of policy also implies that government attracts multinational enterprises and motivates them to invest in creation of plants and factories. Increase of employment, economic growth, and additional tax accumulation are a positive effects of such policy. But in developing state effect from liberalization of trade for technology transfer is weak, at best [25]. Some researchers argue about absence of horizontal spillovers from foreign direct investment in developing countries [26]. Economists explain such phenomena by huge gap in technological development between big multinational firms and local producers of developing country. Therefor, last of them cannot absorb effectively production techniques [27]. In contrast to developing countries, Western countries enjoy positive effect of technological shifts from foreign direct investment and their producers get significant effect of increasing of competitive advantages [28].

Despite all efforts of governments to establish healthier environment, mergers changes industrial structure and sometimes leads to high concentration. It decreases level of competition and likelihood of innovations. Therefore, Hoven and Rubinfeld state that industrial policy must provide existence of as many as possible firms in an industry. If number of firms rises the diversity of research and development projects will also grow [29]. Federico, Langus, and Valletti find reduction of innovative activity after merger. It is related to competition that forces firms to innovate in order to hold customers from competitors before merger. In the case of outsiders, they intensify their efforts in innovation [30]. And policy focusing at strengthening of domestic producers must consist of measures decreasing level of concentration within one industry. It stimulates expenditures on research and development and rises survivorship of local producers.

Important role in establishing of healthy environment is played by antitrust agencies. Industrial policy in this sense should be managed by Competition Authorities designed in optimal structure which implies all regulation responsibilities and functions without any division between different ministries and agencies like in China and maximizes social welfare and not costs for earning of higher reputation of such Authorities. In addition, individual motivation of "enforcement success" taken in account is an important element of the optimal structure [31].

There must be mechanism in the work of Competition Authorities preventing any corporate interest promotion like launch of investigation of competitors or permission of mergers despite of high concentration. Herfindahl-Hirschman index is a part of antitrust policy in many countries in assessment of concentration rate and establishment of standards using the index is possible taking in account the volume of an economy. Another measure can be the absence of affiliation between Competition Authorities and interest parties in a personal sense. And budget of the agency is an important instrument of influence that should be formed independently from corporate interests like share of total budget without any possibility of change.

Another issue in this stream is which of domestic producers must be supported by government? Easterly, Reshef, and Schwenkenberg find important correlation between quantity of exporting products and their volume when they study data of 151 states with 3000 exporting goods. If the volume increases concentration rate also rises. It means there are limited number of products, a few "big hits", dominating in export to particular markets [32]. This conclusion can lead to policy of picking winners, which so-called national champions like Rakhat company with its chocolate "Kazakhstan". But the possibility to support such company is minimizing while the popularity is growing. And developing countries too sensitive to consumer preferences rather than developed economies due to more constrains to get new technologies. Picking such winners can give nothing [32]. Nevertheless, industrial policy can include assistance to exporters not only in financial sense, but in legal support, search of partners in new markets, information about niches that are empty and have potential to grow.

Further research in this direction gives unexpected results. Empirical literature find significant relationship between heterogeneity of firms and trade. According to the data of 2000, the top 1% of American companies are responsible for 90% of export-import operations. Their productivity is striking because they employ only 15% of all workers. The same concentration is found in other countries [33]. About 40% of US exporting companies sold only one product to one country in 2000. And 12% of exporting companies from the United States having at least 5 products and 5 final exporting destinations share 92% of total export value [34]. There must be hits of export (Table 1).

	Share	of expo	rters		
Number of countries (importers)					
1	2	3	4	5 and more	All firms
40,4	1,2	0,3	0,1	0,2	42,2
10,4	4,7	0,8	0,3	0,4	16,6
4,7	2,3	1,3	0,4	0,5	9,2
2,5	1,3	1,0	0,6	0,7	6,1
6,0	3,0	2,7	2,3	11,9	25,9
	Share o	f export	value		
Number of countries (importers)					
1	2	3	4	5 and more	All firms
0,2	0,1	0,0	0,0	0,1	0,4
0,2	0,1	0,0	0,0	0,1	0,4
0,2	0,1	0,0	0,0	0,2	0,5
0,1	0,1	0,1	0,0	0,3	0,6
2,6	1,2	1,0	0,9	92,2	97,9
	40,4 10,4 4,7 2,5 6,0 1 0,2 0,2 0,2 0,1	1 2 40,4 1,2 10,4 4,7 4,7 2,3 2,5 1,3 6,0 3,0 Share of 1 2 0,2 0,1 0,2 0,1 0,1 0,1	Num 1 2 3 40,4 1,2 0,3 10,4 4,7 0,8 4,7 2,3 1,3 2,5 1,3 1,0 6,0 3,0 2,7 Share of export 1 2 3 0,2 0,1 0,0 0,2 0,1 0,0 0,2 0,1 0,0 0,1 0,1 0,1	1 2 3 4 40,4 1,2 0,3 0,1 10,4 4,7 0,8 0,3 4,7 2,3 1,3 0,4 2,5 1,3 1,0 0,6 6,0 3,0 2,7 2,3 Share of export value Number of co 1 2 3 4 0,2 0,1 0,0 0,0 0,2 0,1 0,0 0,0 0,2 0,1 0,0 0,0 0,1 0,1 0,1 0,0	Number of countries (importers) 1 2 3 4 5 and more 40,4 1,2 0,3 0,1 0,2 10,4 4,7 0,8 0,3 0,4 4,7 2,3 1,3 0,4 0,5 2,5 1,3 1,0 0,6 0,7 6,0 3,0 2,7 2,3 11,9 Share of export value Number of countries (importers) 1 2 3 4 5 and more 0,2 0,1 0,0 0,0 0,1 0,2 0,1 0,0 0,0 0,1 0,2 0,1 0,0 0,0 0,2 0,1 0,1 0,1 0,0 0,3

Table 1 - Distribution of US exporting firms and export value by number of products and export destina-
tions in 2000, %

It is obvious that if government start policy of widespread support of export, the targeting should be on those companies that try to export and have higher productivity rate than others. Not all can pretend the support. Companies working in local market for a few years usually do not have enough financial resources, production capacity, and experience to work in a foreign market and spending of public resources on support of such companies is at high risk. Industrial policy must be selective to recipients of any direct support and existence of special standards is mandatory.

Fiscal policy sometimes is a part of industrial policy as it regulates import and export tariffs and internal taxes for products of manufacturing and others. And it is more likely expected that if import tariffs are decreased, internal taxes will be increased. Government stimulating external trade must reduce constrains for entering products. The reason is industrial policy for support of infant industries or creation of new producers that highly dependent on importing details and local content is too low. This aspect of local content statistics will be discussed below more widely. Pelzman and Shoham analysing twenty year period of Israeli economy experience (1984-2005) find simultaneous reduction of border tariffs and domestic taxes and the last did not become substitute for the first. They explain it by reduction of fiscal budget and by stimulation of stable growth when the volume of economy and correspondingly tax base are increasing and public spending is the same so tax burden is declining. They also highlight negative correlation between levy tax on fuel and total burden of taxes, which means that while government rises tax rate on fuel, the total tax burden falls. Hence, they suggest redistribution of tax burden to alcohol, cars, cigarette, fuel taxes, and others that have negative externalities [35]. This logic leads to wide range of taxes

This logic leads to wide range of taxes having too weak relationship with manufacturing. Redistribution of tax burden to such levies has positive impact on all manufacturing. Progressive approach on civil property taxes including the land, individual income, estate and inheritance taxes and others can play significant role in redistribution of tax burden from manufacturing. It is also related to the content of levy fuel. On the one hand, consumption of diesel has dominant link with trucks and industrial machinery. On the other hand, petroleum is used by civilians. Redistribution of tax burden and other related costs from diesel to petroleum not used in manufacturing and trade is able to stimulate production of manufacturing. Such policy can spread to raw materials production sectors that are not interrelated with domestic manufacturing.

Governments usually base their decisions by using official statistics without paying attention on the essence of data. And official statistics have great misleading power [36]. Producing goods involve numerous plants from different regions of the world. One part of products go through several borders and experience significant change to become final detail for assembly process in final destination that takes the title of producing country. For example, the volume of domestic content in Chinese manufacturing export was half before 2002 and in 2007 the index achieved 60% thanks to entering the World Trade Organization. It is observed surprising distribution over industries of China. In technology sectors the share of local content is usually too low and industries with low-skilled labor are more likely to have high share of local content as foreign or joint ventures demonstrates in China [37].

Statistics using in right way can give clue in which direction industrial policy should be organized. Coefficients like those describing structural shifts in industries can form the basis of relevant methodology. In 1969 Soviet economist Kazinets proposed the approach to evaluate such structural shifts. Many researchers of former Soviet Union space have been using this methodology until now [38]. It is becoming crucial for Russia which demonstrates increasing share of mining industries [39] and for Kazakhstan with substantial role of oil and gas industries in total economy. Glazyev highlights the absence of structural policy in Russia since 1990. As a result Russia experiences increasing backwardness in technological sectors and merely structural change based on new technological approach can lead to high economic growth and development [39]. The similar view is represented by Gazaliyev who states that development of electric power industry, heavy engineering and electrical engineering, oil refining can change structural disproportion of Kazakhstan economy towards manufacturing [40].

Creation of new producers can be in accordance to existing demand from also domestic firms and their need in another products or details that are not represented in the market. Certainly, the demand must be relatively enough for the work of new entity and its profitability. Realization of industrial policy focuses on organizing conditions such as spread of information on the producers volume of need and potential prices, tax holidays for the new producers, promotion of online market of local manufacturing goods and row materials trade.

Represented information gives hint in which sectors maintenance of government is needed and lessens public spending for realization of industrial policy. Today Chinese products dominate in the globe. But it is result of different parts assembling from relatively remote locations as data say [37]. Kazakhstan can also participate in such process of intermediate tasks having low prices of transportation and manufacturing companies with high productivity and innovative potential. Growing such firms is a central aim of industrial policy. Assistance of government in accumulation of information about potential niches all around the world or at least in a close regions is also required for strengthening competitive power of domestic manufacturing entities. Different production tasks are organized by partnership with foreign producers having advanced technologies and resources to expand production lines as South-East Asian countries did. The partnership gives way for transferring of technologies, creation of research centers, and further innovative activities.

In that case the important role is played by skilled workers as well. Some economists state that if labor market is oriented to attract skilled staff, it rises spending for innovation and provides benefits for consumers. And if labor market is opened for unskilled workers used for production, the expectation for innovation coming and benefits for consumers creation are absent [41].

Recent statistics shows higher innovative performance in developing countries than in developed. For the period from 2010 to 2013 China had become the most innovative nation. The number of patent applications in China increased dramatically by 141% from 293066 (2010) to 704936 (2013). Great progress was also demonstrated by Brazil (17%; 4959 in 2013), India (21%; 10669 in 2013), Poland (32%; 4237 in 2013), Turkey (38%; 4392 in 2013), and South Korea (21%; 159978 in 2013). Except the USA (19%; 287831 in 2013), other developed countries exhibited about the same rate of activity [41]. The data highlights the importance of skilled employees formation for development. It can be reached by high spending for education, research activities of a state and private organizations, and also right migration policy, which has high impact on industrial development. Only innovative companies representing separate industries can compete and grow.

As defined by Porter and Stern innovation defines competitiveness at the international level and local environment defines direction of innovation. Local environment includes three elements: the common innovation infrastructure (human and financial resources attracted to scientific and technological advances, protection of intellectual property, tax-based incentives for innovation, antitrust policy encouraging competition based on innovation, openness to trade and investment), the cluster-specific environment for innovations, and quality of linkages between two elements [42].

Technological and innovative initiatives of government are distinguished as the main parameters for stable development [43]. Based on local capacity of manufacturing that generates innovations in high extent, and developing it, industrial policy have potential to create more exporters participating in value chains of international manufacturing [44].

Overall, the sign of industrial policy effectiveness is appearance of national champions with their hits in the international trade. If realizing industrial programs such dynamics are not observed, industrial plans must be checked and altered.

Conclusion

The development of industrial policy concept is mainly related to the beginning of twentieth century when global economy experienced unprecedented collapse in 1930s. But during the century interest to the problem fluctuated achieving high resistance in 1990s before 2001 recession. Economists suggest different view on industrial policy and can even opposite one another. But they share the opinion that industrial policy consists of different instruments using for economic growth stimulation. They are fiscal and trade policies, realization of projects or creation of conditions for organizing them, antitrust regulation of industries and others.

Finding similarities of different studies is one of tasks of this paper. Analysing different literature on industrial policy and its influence on competitiveness of companies it were found that the central purpose of every such policy is strengthening of competitive power of local producers. Any governmental efforts to grow manufacturing should be resulted in widening or creation of new advantages of domestic firms as literature says.

As every literature review must contain results like finding main direction within mainstream literature, the paper highlights three ways of industrial policy implementation, which economic papers distinguish: functional, horizontal, and vertical. If one group of researchers supports horizontal approach, the other group argues that vertical or functional approach is more beneficial. Their difference is based on essence of each. If vertical approach is focused on selected industries, horizontal approach is designed like clustering companies from different sectors but interdependent by production, supply, or any other chain. And functional approach is a policy of factor market change and development.

Some authors emphasize the important role of fiscal policy in manufacturing. Redistribution of tax burden and other costs from manufacturing by using different approach mentioned above has big potential to stimulate production of manufacturing industries.

It should be mentioned another finding, that researchers discuss on how industrial policy must be organized in more effective way. And here is the issue whether industrial policy can benefit? Many examples of empirical literature signify absence of effect from realization of the policy and great deal of them demonstrates the impact. Different studies aimed to clarify such results.

The study highlights another result of review. There is the discussion on statistical data essence and their effect on research in the field of industrial policy impact on competitiveness of firms. Various results of the work can give significant effect on increasing of a firm competitive power. High concentration of products in export and appearance of hits, distribution of exporting companies among others, distribution of local content in manufacturing goods within distinctive industries, role of government in the spread of information on existing producers demand in importing products and details, special conditions for innovation activities and attraction of high skilled workers are all aspects of competitive odds for producers.

Overall, the result of industrial policy can be evaluated by appearance of new hits in export. And the last definitely signifies that domestic producers having innovative nature and high productivity are competitive at the international level.

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