# МІЖНАРОДНА ЕКОНОМІКА

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### ASIAN TIGERS' EXPERIENCE OF EXPORT-ORIENTED INDUSTRIALIZATION: IS IT RELEVANT FOR MODERN UKRAINE?<sup>1</sup>

## ДОСВІД ЕКСПОРТНО-ОРІЄНТОВАНОЇ ІНДУСТРІАЛІЗАЦІЇ АЗІЙСЬКИХ ТИГРІВ: ЧИ АКТУАЛЬНИЙ ВІН ДЛЯ СУЧАСНОЇ УКРАЇНИ?

The article looks into the problems of using economic policies, mechanisms and tools that enabled rapid economic growth of Asian tigers in the last third of previous century and led them to high living standards at the present stage. The author questions functionality of this experience in modern world and aims to assess the viability of implementing the policy of export-oriented industrialization in Ukraine. The restrictive nature of modern multilateral trading system in the sphere of tariff protection for "infant industries" is analyzed. Other WTO obligations restraining government support of investment and technologies transfer are outlined. Radical changes in the structure of modern international economic relations that undermine the effectiveness of strategy of export-oriented industrialization are revealed. The crucial role of regional leader in giving the initial impetus for structural changes of developing economies is argued.

**Keywords:** export-oriented industrialization, Asian tigers, tariff protectionism, "infant industries", WTO, regional trade agreements, technology transfer.

У статті розглядаються проблеми використання економічної політики, механізмів та інструментів, які забезпечили випереджаюче економічне зростання азійських тигрів в останній третині минулого століття та привели іх до високого рівня життя на сучасному етапі. Автор ставить під сумнів функціональність цього досвіду в сучасному світі та має на меті оцінити доцільність реалізації політики експортно-орієнтованої індустріалізації в Україні. Проаналізовано обмежувальний характер сучасної багатосторонньої торгової системи у сфері тарифного захисту галузей-початківців. Обґрунтовано безперспективність спроб кардинального перегляду Україною ставок увізних мит для тимчасового захисту внутрішнього ринку. Окреслено інші зобов'язання в рамках СОТ, що обмежують державну підтримку трансферу інвестицій і технологій. Узагальнено положення міжнародного торгового права, що суттєво обмежують можливість експортного субсидування й використання інших нетарифних заходів для урядової підтримки виробництва на експорт. Виявлено радикальні зміни у структурі міжнародних економічних відносин, які суттєво знижують ефективність стратегії експортно-орієнтованої індустріалізації на сучасному етапі. Зокрема, встановлено, що уповільнення темпів зростання попиту з боку ключових глобальних споживачів за всеосяжної експансії пропозиції з боку Китаю ставить інші країни, націлені на експортно-орієнтоване зростання за азійським зразком, у настільки жорсткі конкурентні умови, у яких змагання за рахунок низької вартості робочої сили, субсидій та податкових пільг сягає крайньої межі доцільності використання цих чинників з огляду на збереження взаємозв'язку між економічним зростанням та підвищенням добробуту і рівня життя населення. Наголошено на вирішальному значенні регіонального лідера у наданні початкового поштовху до структурних зрушень у країнах, що розвиваються. На прикладі Південної Кореї та Тайваню розкрито, як Японія відіграла вирішальну роль у запуску випереджаючих темпів розвитку їхніх економік. У підсумку доведено, що послідовне копіювання Україною стратегії експортноорієнтованої індустріалізації азійських тигрів не відповідає економічним реаліям та викликам сьогодення, натомість доцільним убачається використання окремих практик із відповідного досвіду.

**Ключові слова:** експортно-орієнтована індустріалізація, азійські тигри, тарифний захист, галузі-початківці, СОТ, регіональні інтеграційні угруповання, трансфер технологій.

**Introduction.** Permanent problems of economic development and low efficiency of economic policy necessitate a fundamental revision of the principles and approaches to regulation of industrial, export and import activities in Ukraine. The key guidelines for such reforms can be learned from the experience of countries that have succeeded in rapid economic development purposefully diversifying their production and foreign trade. However, the possibility and expediency of applying policies that have proven their effectiveness in the past should be passed

<sup>&</sup>lt;sup>1</sup>This article continues investigation started in author's previous publication: Ivanov E. Economic Growth through Export Diversification: Data from the Four Asian Tigers and Central & Eastern European Countries. *Odesa National University Herald*. 2021. Vol. 26. Issue 5(90). P. 8–18.

through the prism of modern realities of world economy and Ukraine's place in it. Current multilateral trade rules, Ukraine's commitments under WTO, recent development of global economy and its key players are very different from those that existed, for instance, at the time of the Asian tigers' economic breakthrough. All this affects both the tools available to the government for the transformation of economic policy and the potential effects of regulatory measures.

**Recent literature review.** Prominent economic development of Asian tigers in past decades attracts attention of many researches who look for best economic policies to build diversified and competitive economies in developing countries. In Ukraine, L. Kistersky [1], A. Osaul [2], O. Karpishchenko [3], H. Kis [4], I. Fedulova [5] and many other scholars dedicated their investigation to this issue. However, their publications pay few (if any) attention to adaptation of international experience to modern realities and usually overlook whether this experience still remain appropriate in principle. This necessitates further research on this issue.

The purpose of the article is to assess the viability of implementing the policy of export-oriented industrialization in modern global economy.

The main results of the research. Challenges on the way to implementing a comprehensive policy of diversification of production and foreign trade, which make it virtually impossible for Ukraine to fully copy the past experience of Asian tigers' export-oriented industrialization, are:

– limited tools of foreign trade and industrial policy due to the development of the multilateral trading system within the WTO and the conclusion of bilateral free trade agreements, especially the deep and comprehensive free trade area agreement with the EU;

 declining growth rates of developed economies demand for goods and services from developing countries, which is accompanied by rapid increase in China's supply. This concentrates in China overwhelming potential for growth through exports;

– lack of a regional leader ready for pragmatic reasons to give an initial impetus to the development of the production base and provide guaranteed markets for "infant industries".

Tariff regulation in Ukraine is extremely liberalized, the bound rates of its duties are among the lowest in the world, depriving the government of ability to provide tariff protection for "infant industries" and, thus, to implement policy of export-oriented industrialization. Those wishing to change these conditions appeal to the Article XXVIII "Modification of Schedules" of the GATT 1994 that gives WTO members an opportunity to review their tariff commitments once every three years. But they do not take into consideration that the review procedure involves negotiating and reaching an arrangement with other WTO members with a "substantial interest". These members include countries with initial negotiating rights (those who reserved the participation in further negotiations on modification of Ukraine's tariff schedules when it negotiated its accession to WTO) and countries that have a principal supplying interest (those who dominate Ukraine's import of goods that are subject to tariff revision). Article XXVIII, paragraph 2, of the GATT 1994 states that agreement may include a compensatory adjustment by the initiator to other interested parties and all participants should strive to maintain a reciprocal and mutually advantageous concessions not less favorable to trade than that provided prior to such negotiations [6].

Therefore, in order to increase bound and applied rates fora tariff line, Ukraine must be ready to reduce them for another line in such a way that the overall level of tariff protection remains constant and the interests of other countries are preserved. If Ukraine with draws its obligations without reaching an agreement with countries that have a substantial interest, they get right to withdraw their tariff obligations to Ukraine on an equal footing restricting access for Ukrainian goods to their domestic markets.

Moreover, Ukraine's failed attempt to revise tariff commitments in 2012 showed that in international practice the provisions of Article XVIII of the GATT are usually used by participants of multilateral trading system for minor adjustments to their tariff schedules. Ukraine submitted to the WTO a notification on the revision of import duties for 371 tariff lines, which included meat and edible by-products, fruits, vegetables and flowers, agricultural machinery, motor vehicles (including cars), household electrical appliances, chemical products, etc. In 2012, these 371 tariff lines corresponded to 3.4 per cent of all tariff lines and covered about 5% of Ukrainian imports of goods. The official notification to revise import duties for so many tariff lines four and a half years after accession to the WTO was unprecedented in the history of organization, caused concernsamong120 members (including the US, Japan, the EU, Turkey) and prompted them to call on Ukraine to abandon this intention [7].

The problem was the amount of potential damage that could be done to trading partners. It is based on the coverage of industries and trading partners, as restrictions targeted at a specific product group or country are characterized as less detrimental to the interests of other members than those with wider coverage. Given the number of tariff lines on which import duties were subject to revision, Ukraine ranked first in terms of the potential scale of protectionism escalation in the world. Being alone with the tough stance of the world's leading countries and deteriorating its image as a predictable and stable partner, Ukraine first reduced the list of tariff lines from 371 to 30, and later withdrew the notification to revise tariff rates. Left alone with the tough stance of the world's leading countries and deteriorated international image, Ukraine reduced the list of tariff lines from 371 to 30 and later withdrew its notification of the duty rates revision.

According to a report by the WTO Secretariat in 2020, since the founding of the organization (in 1995), there have been 48 negotiations initiated by 29 members on the revision of tariff commitments under Article XXVIII of the GATT. Only half of them have reached an agreement to change the bound and applied rates of import duties, five more negotiations are in final stages and preliminary modifications in tariff schedules have already been introduced. Ten negotiations are currently underway, some of them have reached a stalemate, as they have been going on for 15-24 years. In eight cases, countries withdrew their notifications, and in another case, the WTO Council for Trade in Goods refused to accept the notification. In successful cases of modification of tariff schedules, negotiations covered a small number of tariff lines (from 1 to 44) and mainly on agricultural products. One case was an exception: under the pretext of transforming the structure of the customs tariff, Canada revised duty rates for 418 tariff lines in 1998. It should be noted that Canada has negotiated compensatory adjustment with four interested parties only, while a similar interest in negotiations with Ukraine has been officially declared by 30 WTO members [8].

Thus, the rules and conditions of the negotiations set out in Article XXVIII of the GATT and the established international practice on the application of its provisions clearly indicate the futility of resorting to this mechanism to increase tariff protection on a scale sufficient to implement the policy of export-oriented industrialization, as in newly industrialized Asian countries. Modern multilateral trading system elaborated and implemented an effective mechanism of tariff liberalization at the global level. Moreover, this mechanism is strengthened by an extensive network of regional and bilateral regional trade agreements (RTA). RTA are also strictly regulated by WTO, in particular by Article XXIV of the GATT and Article V of the GATS. These articles require "substantial changes" in order to further liberalize trade flows between RTA members compared to the level of liberalization already achieved as a result of WTO accession. In the field of tariff regulation, this means the establishment of zero tariff rates for import of almost all goods with minor exceptions. Failure to comply with this principle when creating or revising RTAs entails non-recognition of such an agreement by the WTO and, as a result, its members cannot be granted exemption from the most-favored-nation treatment in their bilateral trade. Hence, RTA swhere "insufficient number" of tariffs is abolished or some tariffs are imposed at rates higher than those in the WTO schedules violate the fundamental principle of international trade, and their participants may face sanctions.

It should be noted that transition to market economy in Ukraine began in the era of avalanche-like spread of RTAs around the world (figure 1).

As of 1992, the GATT Secretariat's register contained 27 RTAs around the world, by 2020 there were 306 such agreements, which means the conclusion of an average of ten new active and internationally recognized regional trade agreement annually. Ukraine has not escaped this trend either, as it is currently a party to 18 free trade agreements covering 45 countries, including the EU and the European Free Trade Association (EFTA). These countries account for more than half of Ukraine's imports of goods, for which the average duty rates are close to zero. For comparison: during the period of export-oriented industrialization, South Korea became a member of the Bangkok Agreement only, which in 1976 liberalized Koreas trade with a number of then underdeveloped countries in the Asian region – India, Laos, Bangladesh and Sri Lanka. Korea signed its next free trade agreement with Singapore in 2005 and joined ASEAN in 2006.Today, Korea is a member of 16 RTAs and is still negotiating a free trade agreement with Japan. Taiwan signed free trade agreements with six countries (Singapore, Guatemala, New Zealand, Nicaragua, El Salvador and Panama) during 2003–2013. It is noteworthy that the active participation of both countries in the RTAs began after they reached a high level of competitiveness in the world market.

At the same time, the modern multilateral trading system limits the possibilities of pursue an active economic policy not only in the field of tariff regulation. The WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) restricts its members from using reverse engineering and other forms of copying innovations, which played a key role in development of production and technological capacity in the early stages of industrialization in East Asia. In the 1980s, Korean manufacturers of audio and video equipment received 80% of technology from abroad, mainly from the United States and Japan [10, p. 240]. Starting technology trans-

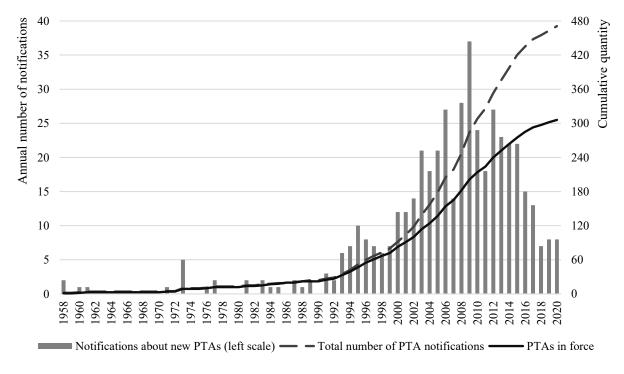


Figure 1. The spread of regional trade agreements in the world during 1958-2020

Source: [9]

fer through import of capital goods and patent licensing, Korean companies gradually learned to replace foreign components with their own, and later, with large-scale support from state research institutes, began to produce their own innovative solutions. By the time, when leading MNC faced growing competition from Korean companies and began to prevent them from further acquiring foreign technology, Chaebols and the Korean government have developed sufficient capacity to further ensure innovative development through the national R&D system [11, p. 260]. As the TRIPS Agreement has become an integral part of the global trade regime since 1995, it has become extremely difficult to replicate such experience for bridging the technological gap.

The WTO Agreement on Trade-Related Investment Measures (TRIMS) restricts governments in their means of using FDI to ensure structural changes in the national economy. TRIMS explicitly prohibits the application of the following mechanisms:

 local content requirements that oblige foreign investors to use in production processes local intermediates in certain quantities or in a certain proportion to the cost of the final product;

- requirements to involve local labor in production;

- technology transfer requirements;

 trade balancing requirements that restrict the use of imported goods by foreign enterprises in an amount related to the physical or value volumes of their exports;

- currency restrictions, which link the volume of permitted imports to the volume of enterprise's foreign exchange earnings from export operations [12, p. 334].

These mechanisms have previously been widely used by developing countries to benefit more from FDI in the context of diversification of production and exports, as they facilitated links between foreign investors and local suppliers and provided criteria for foreign companies, such as export targeting. For example, during the 1970–1980s, Taiwanese government applied local content requirements, requirements to involve local labor, technology transfer requirements, as well as export targeting to most foreign investors in the spheres of production of machinery and electrical equipment, where the share of FDI exceeded 50 and 25%, respectively. It is these tools that made it possible to establish production and technological links between foreign investors and Taiwanese manufacturers. Eventually, many local employees of foreign companies used their obtained experience and know-how to open their own semiconductors and computer equipment businesses and became the leaders in the world market nowadays. In contrast, Taiwan failed to impose local content and technology transfer requirements on key foreign investors in the automotive industry ("Toyota" and "Ford") in the 1980s. As a consequence, competitive Taiwanese enterprises did not emerge in this industry and the domestic automobile market by the end of the decade was entirely filled with foreign vehicles [13, p. 323-329].

The WTO Agreement on Subsidies and Countervailing Measures explicitly prohibits governments from supporting domestic producers by providing export subsidies and subsidies that give preference to domestic goods over imported ones. Annex I of this agreement contains the illustrative list of export subsidies, covering:

 direct subsidies by government to firms or industries contingent upon their export performance;  – currency retention schemes or any similar practices which involve a bonus on exports;

internal transport and freight charges on export shipments, provided by government, on terms more favorable than for domestic shipments;

 provision by the government of goods or services for use in the production of exported good son terms or conditions more favorable than those commercially available on domestic or world markets;

- full or partial exemption remission, or deferral specifically related to exports, of direct taxes or social welfare charges paid by industrial or commercial enterprises;

- special deductions directly related to exports or export performance in the calculation of the base on which direct taxes are charged;

- exemption or remission, in respect of the production and distribution of exported products, of indirect taxes in excess of those levied in respect of the production and distribution of like products when sold for domestic consumption;

- exemption, remission or deferral of prior-stage cumulative indirect taxes on goods or services used in the production of exported products;

- remission or drawback of import charges in excess of those levied on imported inputs that are consumed in the production of the exported product [14].

The practice of resolving trade disputes arising from subsidies and the relevant interpretations of the WTO Appellate Body show that the increase in exports due to the above subsidies does not in itself provide sufficient grounds to consider them export subsidies and impose compensatory measures. However, if subsidies lead to a faster growth of export supplies than domestic sales, they are considered export subsidies and must be abolished. In determining whether a subsidy is an export subsidy, the official reasons and subjective motives of the government that grants the subsidy are not taken into account, only the objective structure of the subsidy in question matters [15].

The prohibition of subsidies aiming to give preference to domestic goods over imported ones is determined by the principle of national treatment. In other words, WTO members agreed not to use subsidies as an incentive for businesses to use raw materials, parts and other intermediate goods from domestic suppliers. This applies regardless of sale destination of thus subsidized manufactured products, be it domestic or foreign market.

Most other types of subsidies are not explicitly prohibited, but they can also be challenged if they are specific and have led or may have led to adverse effect or "significant harm" to other WTO members. Subsidy is specific when access it is legally or de facto limited to certain enterprises by industry, geography or other characteristics. Objective criteria and conditions that determine the right to receive a subsidy or its amount do not determine subsidy as specific. The provisions of WTO Agreement on Subsidies and Countervailing Measures on adverse effects and "significant harm" are mostly vague and general, which is partly the case with the provisions on specific subsidies. This enables broad interpretation and possibility of removing any subsidy, which could lead to visible changes in a country's position in the international market. It should be emphasized that the agreement under consideration has no exceptions. The possibility to provide specific subsidies to support environmental protection, R&D and regional development, as provided for in Articles 8 and 9 of the agreement, was valid only for the first five years from the date of its entry into force in 1995.Thus, the notion of "green box" covering "permitted" subsidies has been retained only to agricultural subsidies, while all types of subsidies for industrial sector distributed among "red" (strictly prohibited) and "amber"(can be challenged) boxes.

The outlined rules of multilateral trading system significantly limit governments in the mechanisms of production and export potential development. Duty drawback, establishing "export discipline", tax incentives for export-oriented firms in industrial parks, local content requirements and a number of other tools underlying the successful cases of economic breakthrough in the past nowadays are either banned directly, or can be challenged at any time.

In addition, a qualitatively new type of RTAs is becoming more common - deep and comprehensive free trade agreements (DCFTA). The aim of such agreements is to supplement tariff liberalization (also known as "WTOplus") with trade liberalization in the spheres of non-tariff regulation, public procurement, environmental protection, competition rules, capital transfer, protection of intellectual property rights, etc.(also known as "WTO-extra"). Ukraine has made such additional commitments by signing an association agreement with the EU. In particular, in the area of technical regulation, this agreement stipulates that Ukraine is to take steps to comply with EU technical regulations in order to remove technical barriers to trade and reduce transaction costs. As this commitment is fulfilled, producers from the EU will gain easier market access to the Ukrainian market, while Ukrainian firms will face big challenges rebuilding their production processes to meet sophisticated EU quality and environmental standards. The EU-UA association agreement also limits the space of industrial policy in Ukraine introducing free capital flows between its members and a common market in financial services, which prohibits a selective approach to attracting FDI, portfolio investment and loans, as well as any restrictions on establishing EU legal entities in Ukraine. Instead, the unimpeded repatriation of investment and any profits is guaranteed [16].

It is obvious that the modern multilateral trading system, which dates back to the establishment of the WTO in 1995, aims at comprehensive liberalization of trade and economic relations at the global level. Of course, the participants in this system do not always consistently adhere to its key principles and sometimes deviate from their obligations resorting to protectionism, especially in times of crisis. The independent monitoring of policies that affect world commerce "Global Trade Alert" recorded more than 19.5 thousand new regulatory measures restricting the international movement of goods, services, capital and labor, and only 7.8 thousand measures aimed at liberalizing international economic relations in 2009–2020 [17]. However, most of these measures are targeted. Even during 2017–2019, when the largest increase in new protectionist measures was recorded, the share of world trade affected by the current restrictions remained roughly the same as in previous years [18, p. 18–21]. Therefore, even taking into account the difference between declared goals of trade liberalization and existing practice of trade regulation around the globe, copying the experience of export-oriented industrialization of Korea and Taiwan, which consists in large-scale protectionism at the national level, will be regarded a demarche against the dominant trading system. Given Ukraine's large integration into the world economy and its high dependence on it, the consequences of such a demarche will be catastrophic and incomparable with the possible benefits of taking protectionist measures to support national production and export potential.

The dramatic changes that the global economy has undergone as China has become a leading world producer and exporter also prevent Ukraine from replicating successful experience of Asian tigers. Obviously, the potential to resort to the policy of export-oriented industrialization has its limits: as more protected economies compete for export expansion to fewer open markets, the effects of this development model inevitably weaken. When one of the participants in the export expansion is also a major player in the world market, the position of its existing and potential competitors deteriorates because this player enjoys greater economies of scale and lower prices. In the case of China, it is also necessary to take into account availability of a huge labor supply, which will further keep labor cost relatively low, and active development of national innovation capacity that foretells China's further expansion in medium and high technologies.

Combining these benefits with a purposeful policy, that includes elements of export-oriented industrialization and integration into global value chains under quasi-market economy, has provided China with unprecedented growth in global market manufactured of products since the 1990s (figure 2).

During 1995-2020, China's exports of manufactured goods increased 19.5 times from 124.4 to 2421.1 billion USD and its share in the world market of these goods increased from 3.3 to 19.6%. It's noteworthy that this share grew even after reorientation of a significant part of Chinese industrial production to the domestic market, when the ratio of total exports of goods and services to GDP, after reaching a peak of 36.0% in 2006, gradually fell to 18.5% in 2020 [20]. In the late 1980s, leading scholars were skeptical of the danger of depleting the potential of export-oriented industrialization, arguing that extending this model to a wide range of developing countries would in practice deepen their intra-industry specialization and generate more trade in intermediate goods between developing and developed countries and among developing countries as well [21]. However, China's experience has shown that a major player in the world market can reap most of the benefits of such specialization, displace other developing countries from many markets and impose unfavorable terms of trade on them in the form of exchange of raw materials for finished products.

For example, during 2009–2015, China increased its exports of ferrous metals from 23.0mln to 110.0 mln tons, and its share of the world iron and steel market from 6.9 to 23.7%. Although this rapid expansion has led to the closure of iron and steel markets by a number of leading consumers (US, the EU, Turkey) and a further decline in Chinese exports of these products to 62.0 mln tons in 2019, China has managed to significantly expand its niches in metal markets of Africa, Asia and the Persian Gulf. As a result, Ukraine has largely lost its markets in Algeria, Nigeria, the UAE, India, and Indonesia. During 2007–2019, the total import of ferrous metals to these countries increased from 24.4 mln to 32.7 mln tons, but imports from Ukraine

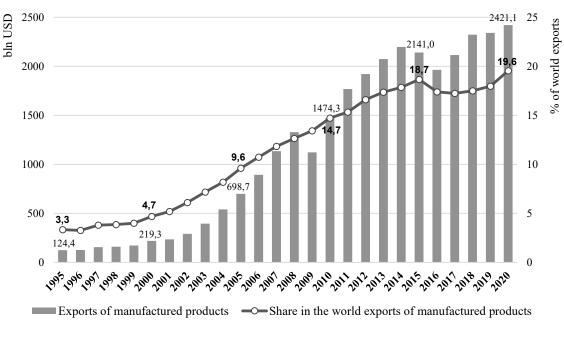


Figure 2. Dynamics of Chinese exports of manufacturing products and its share in world exports of these products in 1995–2020

Note: manufactured products cover codes 5 to 8 of the UNCTAD Standard Classification of International Trade (SITC Rev. 4). *Source:* [19]

decreased almost twice – from 1.58 mln to 0.82 mln tons (market share decreased from 6.5 to 2.5%), while imports from China increased from 4.6 to 8.4 mln tons and China's market share – from 18.8 to 25.7% [22]. Since 2006, export of ferrous metals from Ukraine to China has almost discontinued. If during 1995–2005 this export ranged from 310.5mln to 946.5 mln USD, after ward sit didn't exceed 34.2 mln USD (with the exception in 2009 when it reached 619.4 mln USD). Instead, Ukraine started exporting to China iron concentrates and ores. This export reached 27.3 mln tons providing 35.2% of export earnings from all goods exported to Chinain 2020.

China's export expansion is taking place in many other industries. The increase of Chinese exports of apparel has already led to stagnation of Turkey's textile and apparel sector and collapse of the textile industry in Sri Lanka. Tough competition from China in the world market of electrical appliances has thwarted Malaysia's plans to develop its own export-oriented production in this industry and deprived Mexico of the benefits of participating in the North American Free Trade Area (NAFTA), asit is now more profitable for US consumers to import Chinese appliances than those produced in Mexico, despite that Mexican production facilities are located in border areas near the United States. China also actively diversifies imports of mineral resources and agricultural raw materials, actively investing in infrastructure and logistics in Africa and East Europe [23, p. 287].

While China has significantly restricted export-oriented policies in other countries on the supply side, the development of the world market after the global financial and economic crisis has outlined the limits of these policies on the demand side. The Asian Tigers emerged during the transition of developed countries to the post-industrial stage of development, accompanied by the expansion of services, the active involvement of women in the labor force (mainly in services) and the explosive growth of the financial sector. At the same time, leading MNCs relocated production to developing countries to save labor costs. These factors of extensive and intensive growth provided a significant increase in GDP of developed countries (in the 1970s the average annual GDP growth of developed countries was 3.6%, in the 1980s - 3.1%) and increased their demand for goods and services from all over the world. At the global level, international trade, which served both this increasing demand and the offshoring of industrial production, grew faster than GDP. During 1970-2008, the ratio of world exports to global GDP increased from 13.6 to 30.7% [20].

Nowadays, above mentioned opportunities for extensive development are largely exhausted in leading economies: there is barely any reserve left to replenish the labor force at the expense of women; population ageing and low birth rate lead to steady decline in economically active population in relative and absolute terms. Devastating effects of the 2009 global financial crisis have highlighted the destructiveness of over-liberalization of the financial sector, growth of this sector is now limited by regulation of high-risk transactions.

As a result of the shrinking share of industry in favor of services, developed countries have also narrowed opportunities for intensive growth, as the potential to increase productivity in the production of material goods is higher than in most services due to wider opportunities for mechanization and automation of production processes. All this affected growth rates in developed countries (in the 1990s the average annual growth rate of their GDP was 2.7%, and since the beginning of the new millennium it fell to 1.8%) and trade dynamics. During 2009–2019, the growth of world exports-to-GDP ratio, which was characteristic of several previous decades, was interrupted, and its level froze at 26.5–30.5% [20], testifying to the limit of world economy openness.

Slowing demand from key global consumers accompanied with expanding supply from China place other developing countries (aiming for export-oriented Asian-like growth) in such a fierce competitive environment where gaining advantages at the expense of lower labor costs, subsidies and tax breaks leave little ability to maintain positive link between economic growth and rising living standards of population.

Finally, we note the importance of individual trading partners, which have played the role of launching pads for the export expansion of Asian countries on the path of rapid economic development. The example of South Korea clearly shows that in the initial stages of industrialization, its export-oriented production developed not so much through government support that stimulated supply, but due to growing foreign demand (that was out of government control), primarily from Japan as a regional leader that purposefully involved Korea into the net of its foreign trade relations. This is evident, in particular, from the discrepancy between the actual and planned export targets set by the Korean government for national producers under the second five-year plan (1967-1971). Plan provided that by 1971 Korean exports of wearing apparel will reach 84 mln USD, while the actual exports amounted to 304 mln. Target for wig export was 10mln USD (actual exports amounted to 70mln), for shoes - 6 mln (actual - 37 mln), for plywood - 40 mln (actual - 115 mln USD). Following the five-year plan, Korean government expected to reach manufactures exports of 342 million USD, which will be 62% of total merchandize exports. In fact, exports of manufactured goods amounted to 877 mln USD and 82% of total merchandize exports [24, p. 191]. USA and Japan accounted for 74.4% of Korean exports of goods in 1971. They accounted for more than half of Korean exports throughout the 1970s, when government actively supported chemical and heavy industries.

Korean exports exceeded all government expectations because in the second half of the 1960sJapan implemented strategy of offshoring its labor-intensive industries (textile and apparel, household appliances, metallurgy, etc.), which produced goods for export to the US, in order to specialize domestic production in more high-tech and capital-intensive sectors. Japan has relocated simple production technologies in Korea and Taiwan, retaining control over value chains as the sole supplier of equipment and the only channel of export to foreign markets through Japanese trade enterprises. Between 1972 and 1976, Japanese companies accounted for 85% of South Korea's implemented investment projects. Korean firms then lacked the production capacity to fulfill large foreign orders, lacked entrepreneurial and marketing skills to compete effectively in foreign markets (especially in highly competitive US market). Fulfilling Japanese orders, Korean firms acquired these crucial skills and enjoyed guaranteed export markets in developed countries in the early stages of developing their own production and export potential. The use of Japanese trade companies as intermediaries in foreign trade has long been considered by Korean and Taiwanese firms as the main way to organize export deliveries [25, p. 199]. In Korea, the practice of local companies to organize foreign economic activity by their own efforts spread only with Chaebols establishment in the mid-1970s (officially founded in 1975). During 1977–1982, the share of Chaebols in the country's exports gradually increased from 26 to 48% [26].

Japan's economic policies in relation to South Korea and Taiwan have enabled them to take the first steps toward diversifying production and foreign trade, gain a foothold in the highly competitive markets of the West and Japan itself, and achieve the necessary economies of scale to gain a competitive advantage in the global market. Instead, in addition to addressing economic restructuring, Japan has gained additional fast-growing markets for capital-intensive goods and ability to circumvent restrictions on access to third-country markets by supplying its products as those originated from neighboring countries. Though the targeted state support provided by the governments of Korea and Taiwan has been an important factor in the economic development of these countries, it's is hard to overestimate the importance of the initial impetus for this development, which Japan has given them for very pragmatic reasons. It can be argued that the implementation of export-oriented industrialization strategy in Korea and Taiwan has given visible positive results due to the successful coincidence of a number of historical circumstances, which, however, doesn't diminish the role of authorities and businesses that have successfully used them.

**Conclusions.** Historical conditions and circumstances under which the economic rise of the "Asian Tigers" took place are radically different from those in which Ukraine finds itself in the XXI century. Nowadays, global trade develops under the auspices of the WTO and numerous RTAs, which makes it virtually impossible to resort to tariff protectionism and apply most non-tariff measures (export subsidies, local content and technology transfer requirements, reverse engineering, trade balancing requirements, etc.) in order to support "infant industries" China's export expansion and slowing growth rates in highly developed countries have outlined natural limits for the use of export-oriented development models. Competition with China over the markets of key global importers has intensified so much that the price of gaining an advantage in it becomes unaffordable for most developing countries in most industries. On the other hand, the leading countries as the largest global consumers have entered the stage of maturity, and therefore are no longer able to dynamically increase demand for products from the rest of the world, as during the last third of the twentieth century.

A closer look at the experience of Korea and Taiwan also revealed Japan's crucial role as a driver of industrialization and export expansion in the early stages of restructuring and rapid development. Japan's use of its neighbors as platforms for offshoring its less productive export industries has enabled Korean and Taiwanese businesses to acquire critical entrepreneurial skills and provided them with guaranteed markets in the United States and Japan itself. Active state support in Korea and Taiwan soon has given incentives for already established trade and economic relations and competencies of local business in international trade.

This calls into question the expediency of copying the Asian strategies of export-oriented industrialization in the modern world.

#### **References:**

1. Kistersky L., Marmazov V., Piliaiev I. (2021). Modernization of South Korea: Origins, Achievements, and the Experience for Ukraine. *Economy of Ukraine*, no. 9, pp. 41–60.

2. Osaul A.A. (2015). The role of export-biased policy in the development of automotive industry in the Republic of Korea. *Bulletin of Zaporizhzhia National University: Economic Sciences*, no. 2, pp. 131–137.

3. Karpishchenko O.I., Karpishchenko O.O., Vashchenko T.V. (2017). Reverse engineering as a key for industry modernization per import substitution. *Marketing and Management of Innovations*, no. 2, pp. 248–258.

4. Kis H., Haliuk I. (2020). Directions of Improvement of State Anti-Crisis Regulation System in Ukraine. Infrastructure of market, vol. 49, pp. 41–45.

5. Fedulova L.I., Sovershenna I.O. (2020). Peculiarities of Korean National Innovative System Development: Experience for Ukraine During Transformation of Innovative Processes. *Innovative Economy*, no. 1–2, pp. 9–14.

6. WTO (2021). General Agreement on Tariffs and Trade (GATT). Available at: https://www.wto.org/english/docs\_e/legal\_e/gatt47.pdf

7. WTO (2016). Trade Policy Review: Ukraine. Report by the Secretariat of WTO. Available at: https://www.wto.org/english/tratop e/tpr e/s334 e.pdf

8. WTO (2018). Analytical Index: GATT 1994 – Article XXVIII. Available at: https://www.wto.org/english/res\_e/publications\_e/ai17 e/gatt1994 art28 oth.pdf

9. WTO (2021). Regional Trade Agreements (RTAs) Database. Available at: http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx 10. Kim K. (1998). Technology transfer: the case of the Korean electronics industry. *Proceedings of the Thirty-First Hawaii International Conference on System Sciences*. Kohala Coast: Institute of Electrical and Electronics Engineers, vol. 6, pp. 233–241.

11. Choi H. (2007). On Linsu Kim's Imitation to Innovation: The Dynamics of Korea's Technological Learning. East Asian Science, Technology and Society: An International Journal, no. 1, pp. 259–261.

12. WTO (2019). Chapter 9: Trade-Related Investment Measures. *Report on Compliance by Major Trading Partners with Trade Agreements – WTO, EPA/FTA and IIA.* Available at: https://www.meti.go.jp/english/report/data/2019WTO/pdf/02\_09.pdf

13. U.S. Congress (1991). The New Competitors: Industrial Strategies of Korea and Taiwan. *Competing Economies: America, Europe, and the Pacific Rim.* Washington: U.S. Government Printing Office, pp. 295–337.

14. WTO (2021). Agreement on Subsidies and Countervailing Measures. Available at: https://www.wto.org/english/docs\_e/legal e/24-scm.pdf

15. WTO (2019). Chapter 7: Subsidies and Countervailing Measures. Report on Compliance by Major Trading Partners with Trade Agreements – WTO, EPA/FTA and IIA. Available at: https://www.meti.go.jp/english/report/data/2019WTO/pdf/02 07.pdf

16. WTO (2014). Deep and Comprehensive Free Trade Area Concluded as a Part of the Association Agreement between the European Union and Ukraine (Goods and Services). Available at: https://docs.wto.org/dol2fe/Pages/FE\_Search/FE\_S\_S009-DP.aspx? language=E&CatalogueIdList=237511

17. GTA (2021). Total Number of Implemented Interventions Since November 2008. Available at: https://www.globaltradealert. org/global dynamics/area all

18. Evenett S.J., Fritz J. (2019). Going It Alone? Trade Policy After Three Years of Populism: The 25th Global Trade Alert Report. London, CEPR Press.

19. UNCTAD (2021). Merchandise trade matrix – exports and imports of individual economies in thousands of United States dollars, annual. Available at: https://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx

20. World bank (2021). Exports of goods and services (% of GDP). Available at: https://data.worldbank.org/indicator/NE.EXP. GNFS.ZS

Balassa B. (1989). The Adding Up Problem. *New Directions in the World Economy*. London: Palgrave Macmillan, pp. 99–123.
World Steel Association (2020). Steel Statistical Yearbook 2020 (concise version) Available at: https://www.worldsteel.org/steel-by-topic/statistics/steel-statistical-yearbook.html

Jaroszewska B. (2013). The Dominant Position of China in the Global Economy. *Polish Political Science*, vol. XLII, pp. 279–296.
Castley R.J. (1997). Korea's Export Growth: An Alternative View. *Canadian Journal of Development Studies*, vol. 18(2), pp. 187–212.

25. Hofheinz R., Calder K. (1982). The East Asia Edge. New York: Basic Books.

26. Korea International Trade Association (2021).K-Statistics by Commodity: All Commodities. Available at: http://www.kita.org/kStat/byCom\_AllCom.do