**Ivane Javakhishvili Tbilisi State University**

# INTERNATIONAL MICROECONOMICS:

# Questions & Answers

**Edited by Yuriy Kozak, Temur Shengelia**

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ISBN

**International Microeconomics: Questions and Answers.**
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The textbook deals with the major international economic problems in the system of contemporary economic theory (Microeconomics, Macroeconomics, International Economics). The basic theories of international trade and trade policy, international mobility of factors of production are explored by means of microeconomic analysis. The examination of the problems of international microeconomics regulation is the logical conclusion of the course content.

For students and academics.

**ISBN**

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# PREFACE

Modern economic theory, as it is known, includes the following components: Micro-economics, Macroeconomics, and International Economics. "International Economics" is the youngest and fastest-growing component of modern economic theory. Its existence as an independent discipline (and not as individual sections of Micro- and Macroeconomics) is connected with the development and functioning of world economic relations as a special, integral and organic system. The formation of this system is rather thoroughly analyzed and presented in the foreign textbooks on International Economics, which have a clear structure (International Microeconomics and International Macroeconomics). However, the dynamics of world economic relations stipulates the fluidity of the content of International Economics as the science and training course. International economics is not the part of the theory, that is adapted for all times and countries. Many components of its content are the subject of scientific debate to this day. In addition, the foreign training manuals on International Economics can not take into account the realities of the countries with transition economies. That is why the purpose of this manual is not only bringing the content to the requirements of international standards in the answers to the major issues on functioning and development of economic relations, not only taking into account the experience gained over decades of teaching the course "International Economics" in the universities of United States and Western Europe, but also taking into account the specifics of countries with transition economies.

That is why the task of the training manual is to consider such main problems of international economics as an independent part of modern economic theory using the tools of microeconomic analysis:

- theory of international trade and trade policy;
- interstate movement of capital, labor and technology;
- international economic integration, because integration provides free international movement of both goods and factors of production;
- consideration of contemporary issues of international microeconomics regulation.

**International Microeconomics** examines the international flows of goods and factors of their production. Some countries in International Microeconomics are considered as primary units, like households or firms in traditional microeconomics, and international monetary and financial system - as the means of serving the movement of goods and factors of production.

The set goals and objectives are subordinated to the main goal - to form the way of thinking and economic behavior adequate to the realities of the modern

world and thereby provide training specialist-economists in the countries with transition economies who would know what to do to succeed in the global economic space.

The authors and editors express their sincere gratitude to Academician of NAS of Ukraine Amosha O.I., Doctor of Economics, professor Lukyanenko D.G., for cooperation, useful and impartial remarks and the help provided during the work on this book. Our huge thanks to professors: Pradetto A. (Germany), Gregory P. (USA), Fortesk`yu S. (Australia), whose researches and advices contributed to the preparation of this manual.

# PART I. INTERNATIONAL TRADE IN GOODS AND SERVICES

## Chapter 1. General characteristics of international trade

### 1.1. The notion of international trade, structure and specific features

International trade is one of the main driving forces of economic development. International trade is the sphere of the international economic relations and is formed from the foreign trade in goods, services, products of intellectual labor of all world countries. Today it is 80% of all international relations.

The participation in international trade takes the form of foreign trade for individual country, i.e. it's the trade of one country with other countries, which consists of two oncoming flows of goods and services: paid export (export) and import (import).

International trade is the trade between residents of different countries. Individuals and legal persons, firms, transnational corporations (TNC), non-profit organizations etc, can be residents. International trade involves the voluntary exchange of goods, services, products of intellectual labor between the parties of a trade agreement. Since this exchange is voluntary, then both parties of the agreement must be confident that they will get benefit from this exchange, otherwise, the agreement will not be concluded.

International trade is a characteristic feature of the existence of global market, which is the sphere of commodity-monetary relations between countries. These relations are based on international division of labor and other factors of production. Commodity, that is on global market in the phase of exchange, performs the information function, because informs about average values of aggregate demand and supply. Therefore countries are able to evaluate and adapt the parameters of their products and production (that is, what, how much and for whom to produce) to the requirements of global market.

International trade in goods was the historically first and to a certain time the main sphere of international economic relations. Only at the end of the 20th century different forms of financial transactions began to play the main role in international economic system. But international trade is still very important, which is proved by the growth of international trade volumes. But the significance of international trade is very considerable now, that is proved by the growth of international trade volumes. The WTO's forecast of 3.6% trade growth for 2017 is based on consensus estimates of real GDP at market exchange rates from economic forecasters (Tab. 1.1). According to these estimates, world GDP should grow 2.7% in 2017.

Such rapid development of international trade is associated primarily with increased liberalization process of international relations and increased demand for manufactured goods, which share in total world exports is 70%.

Table 1.1.

**Merchandise trade volume and real GDP, 2012-2017 (annual % change)**

| | 2012 | 2013 | 2014 | 2015 | 2016P | 2017P |
|---|---|---|---|---|---|---|
| **Volume of world merchandise trade** | 2.2 | 2.4 | 2.8 | 2.8 | 2.8 | 3.6 |
| **Exports** | | | | | | |
| Developed economies | 1.1 | 1.7 | 2.4 | 2.6 | 2.9 | 3.8 |
| Developing and emerging economies | 3.8 | 3.8 | 3.1 | 3.3 | 2.8 | 3.3 |
| North America | 4.5 | 2.8 | 4.1 | 0.8 | 3.1 | 4.0 |
| South and Central America | 0.9 | 1.2 | -1.8 | 1.3 | 1.9 | 1.9 |
| Europe | 0.8 | 1.7 | 2.0 | 3.7 | 3.1 | 4.1 |
| Asia | 2.7 | 5.0 | 4.8 | 3.1 | 3.4 | 4.0 |
| Other regions [b] | 3.9 | 0.7 | 0.0 | 3.9 | 0.4 | 0.4 |
| **Imports** | | | | | | |
| Developed economies | -0.1 | -0.2 | 3.5 | 4.5 | 3.3 | 4.1 |
| Developing and emerging economies | 4.9 | 5.0 | 2.1 | 0.2 | 1.8 | 3.1 |
| North America | 3.2 | 1.2 | 4.7 | 6.5 | 4.1 | 5.3 |
| South and Central America | 0.7 | 3.6 | -2.2 | -5.8 | -4.5 | 5.1 |
| Europe | -1.8 | -0.3 | 3.2 | 4.3 | 3.2 | 3.7 |
| Asia | 3.7 | 4.8 | 3.3 | 1.8 | 3.2 | 3.3 |
| Other regions [b] | 9.9 | 3.7 | -0.5 | -3.7 | -1.0 | 1.0 |
| **Real GDP at market exchange rates (2005)** | 2.2 | 2.2 | 2.5 | 2.4 | 2.4 | 2.7 |
| Developed economies | 1.1 | 1.0 | 1.7 | 1.9 | 1.8 | 2.0 |
| Developing and emerging economies | 4.7 | 4.5 | 4.2 | 3.4 | 3.5 | 4.2 |
| North America | 2.3 | 1.5 | 2.4 | 2.3 | 2.3 | 2.5 |
| South and Central America | 2.8 | 3.3 | 1.0 | -1.0 | -1.7 | 1.1 |
| Europe | -0.2 | 0.4 | 1.5 | 1.9 | 1.8 | 2.0 |
| Asia | 4.4 | 4.4 | 4.0 | 4.0 | 4.0 | 3.9 |
| Other regions [b] | 3.8 | 2.6 | 2.5 | 0.9 | 1.7 | 2.9 |

Source: [21]

International trade today, as earlier, remains the important incentive for the growth of the international economy. International trade flows significantly pass ahead the growth of the world output. (Fig.1.1)


Fig.1.1. Growth in volume of world merchandise trade and real GDP, 2007-16P (Annual % change)[1]

Source: [20]

[1] Figures for 2015 and 2016 are projections. Trade refers to the average of exports and imports.

This happens due to the deepening of the international labor division, formation and development of the new types of labor division, which form the basis of international economic integration and intra-firm exchange. In this connection, it is sufficient to note that in the EU, the most integrated international economic grouping, the trade passes ahead the production in 3 times.

The ratio of merchandise trade to GDP fell sharply in 2009 following the economic crisis but bounced back quickly in 2010-2011. In 2012-2014 it declined gradually, before falling significantly in 2015.

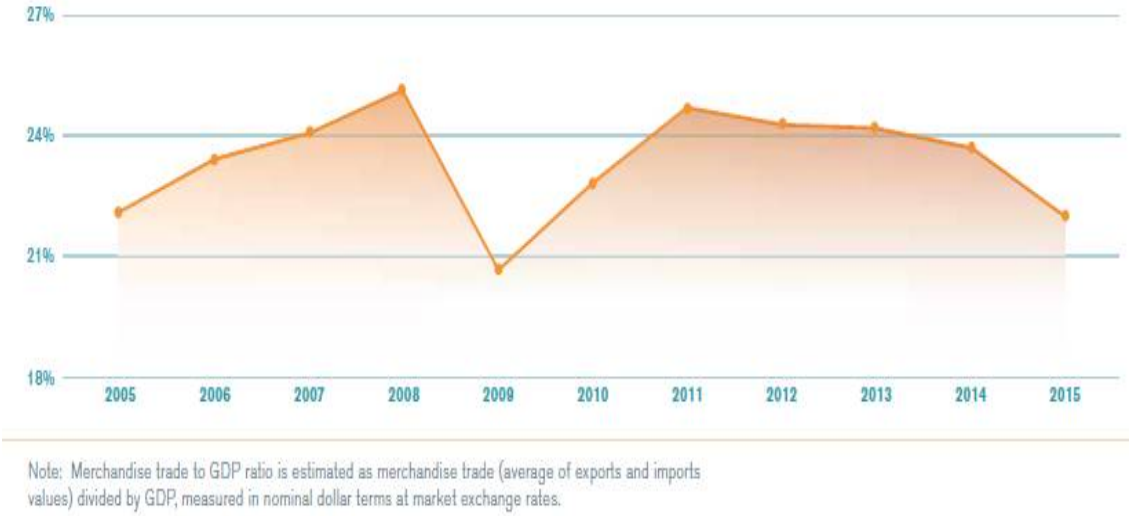



Fig. 1.2. Ratio of world merchandise trade to GDP, 2005-2015
Source: [22]

Rapid growth of international trade positively affects the economies of the developing countries by stimulating their exports (Fig. 1.3).

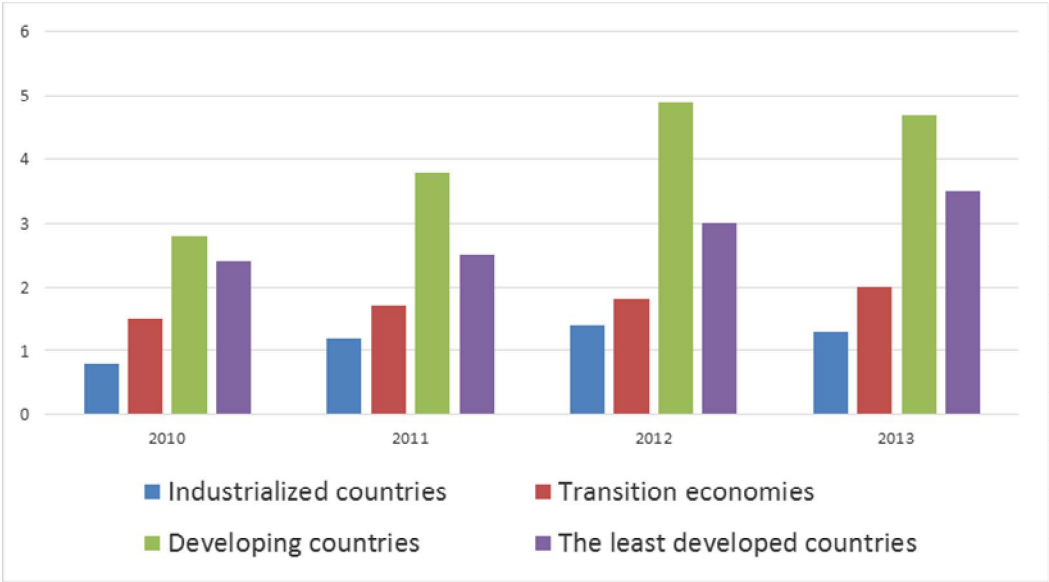



Fig. 1.3. Economic growth in the developing countries compared to the industrialized countries in 2010-2013, %
Source: [6]

Countries of informal group BRIC (Brazil, Russia, India and China) belong to the countries that develop most rapidly. GDP of the BRIC countries already exceeds GDP of the EU, they also pass ahead the industrialized countries of the Group of 7 at the total volume of gold reserves. It is expected that they will produce 44% of world GDP by 2050 and will be ahead of industrialized countries by the main economic indicators (Russia will be able to overtake Western European countries by 2030, India will surpass Japan by 2035, China overtake USA by 2040) [5]. The BRIC countries conventionally will be perceived as "the second echelon" after Triad countries (USA, Japan, the EU) in the next decades. The growth rates of leading companies of these states are not less than 15% per year and their earnings ranged from $100 million to $ 2 billion per year. China's economic growth has the most positive impact on private businesses around the world, second place is divided between Russia and India, and Brazil is on the third place.

Other countries are grouped around the BRIC: Iraq, Kazakhstan, and Venezuela. Thus, in the future, strong union might be formed, with which the Group of 7 and OPEC will have to reckon.

### 1.1.1. What are the geographical and commodity structures of international trade?

An important feature of international trade is its geographic and commodity structure, namely the structure in terms of a geographical distribution and commodity content.

Geographical structure of international trade is the distribution of the trade flows between countries and their groups, which are created on the territorial or organizational basis.

Territorial geographical structure generalizes data concerning the scales of international trade of countries, which belong to the same part of the world or big group of countries (developed countries, developing countries, countries with economies in transition).

Organizational geographical structure generalizes data concerning the international trade between countries, which belong to integrated trade and political associations or concerning the trade between the countries that are grouped according to a selected criterion (oil-exporting countries, countries that cannot repay their debts, etc).

Geographical structure of international trade was formed under the influence of world economic division of labor, i.e. of the deep international division of labor and the development of scientific and technological revolution (Tab. 1.2).

Table 1.2

**World merchandise trade by region and selected economies, 2015 ($ billion and %)**

| | Exports | | | | | Imports | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Value | Annual % change | | | | Value | Annual % change | | | |
| | 2015 | 2010-2015 | 2013 | 2014 | 2015 | 2015 | 2010-2015 | 2013 | 2014 | 2015 |
| World | 15985 | 5.5 | 2.3 | 0.3 | -13.5 | 16340 | 1.5 | 1.3 | 0.7 | -12.4 |
| North America | 2294 | 6.1 | 1.9 | 3.1 | -8.0 | 3151 | 3.3 | 0.1 | 3.4 | -4.7 |
| United States | 1505 | 6.1 | 2.2 | 2.6 | -7.1 | 2308 | 3.2 | -0.3 | 3.6 | -4.3 |
| Canada a | 408 | 5.2 | 0.6 | 3.6 | -14.0 | 436 | 1.6 | -0.1 | 0.9 | -9.1 |
| Mexico | 381 | 7.4 | 2.5 | 4.5 | -4.1 | 405 | 5.5 | 2.8 | 5.3 | -1.5 |
| South and Central America b | 540 | 3.7 | -2.6 | -6.5 | -21.2 | 622 | 1.2 | 3.2 | -4.0 | -15.9 |
| Brazil | 191 | 2.8 | -0.2 | -7.0 | -15.1 | 179 | -1.4 | 7.4 | -4.6 | -25.2 |
| Other South and Central America b | 349 | 4.2 | -3.8 | -6.2 | -24.2 | 443 | 2.4 | 1.3 | -3.7 | -11.4 |
| Europe | 5958 | 4.8 | 4.8 | 0.4 | -12.4 | 5899 | 0.0 | 1.5 | 1.2 | -13.2 |
| European Union (28) | 5387 | 4.4 | 4.6 | 1.3 | -12.5 | 5316 | -0.4 | 0.9 | 2.2 | -13.4 |
| Germany | 1329 | 4.4 | 3.1 | 3.4 | -11.0 | 1050 | -0.1 | 2.3 | 2.2 | -13.0 |
| United Kingdom | 460 | 5.0 | 14.3 | -6.6 | -8.9 | 626 | 1.1 | -5.1 | 4.6 | -9.4 |
| France | 506 | 2.6 | 2.2 | -0.1 | -12.8 | 573 | -1.3 | 1.0 | -0.7 | -15.4 |
| Netherlands | 567 | 4.0 | 2.5 | 0.2 | -15.7 | 506 | -0.4 | 0.5 | 0.0 | -14.2 |
| Italy | 459 | 4.3 | 3.4 | 2.2 | -13.4 | 409 | -3.4 | -1.9 | -1.1 | -13.8 |
| Commonwealth of Independent States (CIS) | 500 | 5.7 | -2.4 | -5.7 | -32.0 | 345 | -3.7 | -0.1 | -11.4 | -31.9 |
| Russian Federation a | 340 | 5.6 | -1.1 | -4.9 | -31.6 | 194 | -4.8 | 1.8 | -9.8 | -37.0 |
| Africa | 388 | 1.4 | -6.1 | -8.2 | -29.6 | 559 | 3.1 | 3.2 | 2.1 | -13.8 |
| South Africa | 82 | -0.1 | -3.7 | -5.1 | -10.3 | 105 | 1.6 | -0.6 | -3.5 | -14.2 |
| Africa less South Africa | 307 | 1.7 | -6.6 | -8.8 | -33.4 | 454 | 3.5 | 4.2 | 3.5 | -13.7 |
| Oil exporters c | 157 | -0.6 | -11.4 | -13.7 | -44.2 | 167 | 2.3 | 9.9 | 1.4 | -17.7 |
| Non oil exporters | 150 | 5.9 | 3.8 | 0.1 | -16.5 | 288 | 4.3 | 0.9 | 4.8 | -11.2 |
| Middle East | 841 | 9.1 | -0.1 | -4.4 | -34.7 | 747 | 5.1 | 4.4 | 1.7 | -4.5 |
| Asia | 5464 | 6.0 | 2.3 | 2.6 | -7.9 | 5018 | 2.1 | 1.1 | 0.1 | -14.6 |
| China | 2275 | 10.4 | 7.8 | 6.0 | -2.9 | 1682 | 3.8 | 7.2 | 0.5 | -14.2 |
| Japan | 625 | -2.7 | -10.5 | -3.5 | -9.5 | 648 | -1.3 | -5.9 | -2.5 | -20.2 |
| India | 267 | 9.3 | 6.1 | 2.5 | -17.2 | 392 | 2.3 | -5.0 | -0.5 | -15.3 |
| Newly industrialized economies (4) d | 1176 | 4.4 | 1.3 | 1.3 | -10.8 | 1105 | 0.1 | -0.3 | 1.1 | -16.5 |
| Memorandum | | | | | | | | | | |
| MERCOSUR e | 301 | 2.6 | -2.4 | -9.0 | -22.3 | 291 | -1.0 | 5.8 | -6.6 | -21.5 |
| ASEAN f | 1163 | 5.4 | 1.5 | 1.8 | -10.2 | 1091 | 2.7 | 1.8 | -0.8 | -11.7 |
| EU (28) extra-trade | 1985 | 6.0 | 6.6 | -1.9 | -12.2 | 1914 | -1.2 | -3.0 | 0.3 | -14.7 |
| Least developed countries (LDCs) | 154 | 6.1 | 3.7 | -3.3 | -25.0 | 242 | 7.4 | 8.6 | 6.5 | -9.2 |

Source: [21]

Commodity structure of international trade is formed under the influence of the competitive advantages of the national economy. A country has the competitive advantages only if prices on export commodities (or internal prices) are lower than the world prices. Differences in the prices are caused by different production costs, which depend on two groups of factors.

**The first group** of factors is formed by natural competitive advantages. They include natural and geographical factors that are given from the outside: climate, availability of mineral fossils, soil fertility etc.

**The second group** of factors (socio-economic) is formed by the gained competitive advantages. These factors characterize scientific, technical and economic level of the development of the country, its production apparatus, scale and seriality of production, industrial and social infrastructure, scales of research projects. They determine the competitive advantages that have been achieved in the process of the development of national economy.

A typical trend in a trade in goods is a growth of the share of trade in products of manufacturing industry (about ¾ of the value of world exports) and reducing of a share of the raw materials and food (about ¼).

The commodity structure by regions of the world is characterized by data in the Tab. 1.3.

Table 1.3.

**The structure of the world exports of the main group of products by regions in 2013**

| Region | Agriculture | | Extractive industry | | Manufacturing industry | | Total | |
|---|---|---|---|---|---|---|---|---|
| | $ billion | % | $ billion | % | $ billion | % | $ billion | % |
| **Europe** | 656 | 9,5 | 901 | 13,0 | 5204 | 75,2 | 6913 | 100 |
| **Asia** | 451 | 7,7 | 818 | 13,9 | 4389 | 75,1 | 5845 | 100 |
| **North America** | 287 | 12,1 | 511 | 21,6 | 1547 | 65,6 | 2357 | 100 |
| **Latin America** | 241 | 31,7 | 322 | 42,5 | 199 | 26,2 | 758 | 100 |
| **CIS** | 64 | 7,6 | 512 | 60,8 | 238 | 28,3 | 841 | 100 |
| **Africa** | 55 | 9,3 | 395 | 67,1 | 121 | 20,5 | 588 | 100 |
| **Middle East** | 38 | 2,8 | 824 | 61,7 | 327 | 24,4 | 1335 | 100 |
| **World** | 1792 | 9,6 | 4283 | 23 | 12025 | 64,5 | 18637 | 100 |

Source: [4]

The data in the Tab. 1.3 show the interconnections between the level of economic development of countries and the structure of their foreign trade turnover. The commodities of manufacturing industry are dominated in the export structure of the countries, which belong to the industrialized and newly industrialized countries and in which the gained competitive advantages dominate (countries of Western Europe, North America and Asia). There is the high proportion of extractive industry in the countries, which have rich natural resources (Middle East and Africa). The CIS countries intensively use their natural competitive advantages, therefore their commodity structure**,** which differs from the average global indicators, has a big share of production of extractive industries (deviation from the average indicator is 37.8 percentage points) and a

relatively low share of products of manufacturing industry (deviation from the average is 36.2 percentage points).

### 1.1.2. What are the main types of markets and products?

Markets can be classified according to the various criteria. The generally recognized classification is listed in the Tab. 1.4

Table 1.4

**The classification of markets**

| **Indicator of classification** | **Types of markets** |
|---|---|
| 1 | 2 |
| 1. Industry affiliation of a product as an object of exchange | Commodity markets. They cover the market of a concrete product or group of products, which are interconnected by certain characteristics of an industrial nature or by those that serve for the satisfaction of the same needs (e.g. the shoe market, the ferrous metals market, the car market, the raw materials market) |
| 2. The object of exchange and the limits of its coverage | Commodity markets of countries and regional commodity markets. At the core of the subdivision is a belonging to the countries or a regional sectoral affiliation of the objects of exchange. These markets include the market of the specific product, the market of the group of products or products of a certain industry of one country or region (such as shoe market in Turkey, Ukraine consumer electronics market, and the EU's car market). |
| 3. Sphere of international commodity exchange and industry affiliation of the objects of exchange | Global commodity markets are the totality of national markets. The basis of economic relations between their members is the international division of labor (for example, world grain market, and world market of mechanical rubber products). The objects of the world commodity markets are specific products or groups of products.<br>The main features of the world market are following:<br>• it is a category of commodity production, that went beyond the national borders in search of sale of its products;<br>• it manifests itself in the international movement of goods, which are influenced not only by internal, but also by external supply and demand;<br>• it optimizes the use of factors of production and prompts the manufacturer in which sectors and regions these factors can be used most effectively.<br>• it performs the reorganization role and removes from the international exchange the products and often even their manufacturers, who are not able to provide an international standard of quality at competitive prices.<br>Distinctive features of the world market are following:<br>• state borders and foreign economic policies of individual countries affect the world market<br>• the system of world prices operates in the global market;<br>• the world commodity market is complemented by the market of services;<br>• the structure and direction of the trade in certain countries in the global market are determined by changes in the competitiveness of their |

| | |
|---|---|
| | products and services;<br>• the world trade has an uneven growth of both the trade of individual countries and the trade of the entire world;<br>• the development of the interstate forms of regulation of the world market: international trade organizations (including the WTO) and regional integration economic organizations (Benelux, the EU, EFTA, Latin American Integration Association, the Association of South-East Asia, etc.). |
| 4. The relationship to the national borders of the sphere of exchange | The internal (local) and external (foreign) market. The internal market is a form of commercial communication, where the manufacturer by himself sells all commodities, that are intended for the sale inside the country. Foreign market covers the whole sphere of commodity circulation that goes beyond the national borders of the certain country. The international market, markets of countries, world commodity markets are considered external (foreign) only for one particular country. Economic relations between the participants of commodity exchange envisage that the participants have different nationality and the object of exchange crosses the national customs borders of the certain countries. |
| 5. The nature of the object of commodity exchange | Market of goods, market of services, markets of technologies, capital markets, labor markets, securities markets. |
| 6. The nature and level of demand and supply on the market | Market of a seller, where demand exceeds supply. A market of a buyer, where supply exceeds demand.<br>The seller's market is characterized by the limitation of the product range and quantitative supply of goods. Also it is characterized by an existence of a shortage that prompts the buyer to acquire exactly what the seller offers without having specific requirements for quality, technical and economic characteristics of the goods.<br>The market of the buyer is characterized by a diverse range of goods produced by different manufacturers. It creates the competition between the sellers of products, which meet the same or similar customer needs. |
| 7. The nature of the relationship between seller and buyer | Free, closed and regulated markets.<br>In the free markets there is no limit for the conclusion of commercial agreements between contractors. In the trade of various goods the share of free markets is different (for example, on the world oil market - 70%, on the sugar market - 30%). The closed markets usually mean the inter-corporate delivery of TNCs, which account for a total of about 40% of international trade.<br>Regulated markets include markets covered by international trade agreements aimed at their stabilization. |

The foundation of the classification of goods is formed by different signs: international mobility, purpose, terms of use, level of demand and price, consumption pattern and degree of processing, method of manufacturing.

**International mobility.** To recognize the trade as international, the sale of goods as export and the buying as import, it is necessary for the goods to cross a border of a state and this fact must be registered in the relevant documentation. And it does not matter whether a commodity changes an owner or not. So, if TV is sold (transferred) by Japanese company to its affiliate in Ukraine, then it is considered as

exports of Japan and imports of Ukraine, despite the fact that the Japanese company is still the owner of the commodity.

In the international economics the commodity is not seen as a product of manufacturing, but as an object of demand and supply.

There are conditions for commodity (service), which give the opportunity to be this object:

- when it is needed by someone;
- when it is targeted by the two main forces of the market economy, by supply and demand;
- when at least one of these forces (demand and supply) acts from abroad.

The ability to produce the product for inside market does not mean that it will be recognized as a commodity on world market, that is it will be bought abroad. Products may not be sold abroad for the following reasons:

- due to their uncompetitiveness;
- due to the initial inability to put them on foreign markets;
- due to their fundamental inability to be sold.

Based on the international mobility the products are divided into “market goods”, that is, the ones that are traded (MG), and “non-market goods”, the ones that are not traded (NG).

“Market goods” are the products that can be moved between different countries.

“Non-market goods” are the goods, that are consumed in the same country, where they were produced, and they are not moved between countries.

The main differences between “market” and “non-market” goods are illustrated in Tab. 1.5.

Table 1.5.

**The differences between MG and NG by basic signs**

| Sign | "Market" goods | "Non-market" goods |
|---|---|---|
| Prices | They are determined by the ratio of supply and demand in the world market, they are under the influence of supply and demand for them both within the country and abroad | They are determined by the ratio of demand and supply in the national market. Fluctuations in the prices of these products in other countries are not important |
| Maintenance of internal balance of supply and demand | Maintenance of the balance is not especially significant since the lack of domestic demand can be offset by the increase of demand abroad, and the lack of domestic consumption can be offset by the increase of the supply of foreign goods | Maintenance of the balance is very important. Its possible violation could lead to the socio-economic disproportions |
| Domestic prices | Their dynamics and level depend on the dynamics and level of the prices in other countries | They may greatly differ from the prices in other countries and their change can not lead to a change in international prices on these products. |

“Market” goods usually include the following groups of goods: agriculture, hunting, forestry, and fishing, the products of mining and manufacturing industry; “non-market” goods include: utilities and construction, wholesale and retail trade, restaurants, hotels, defense, social services, health care, social work, etc.

The division of goods into the “market” and “non-market” goods largely depends on the transportation costs on their moving abroad and on the trade barriers that exist on this way. The reduction of transportation costs due to the technology development leads to the increase in the number of “market” goods, and the increase in a state protectionism leads respectively to their reduction.

“Market” goods are divided into exported and imported goods (Fig.1.4).

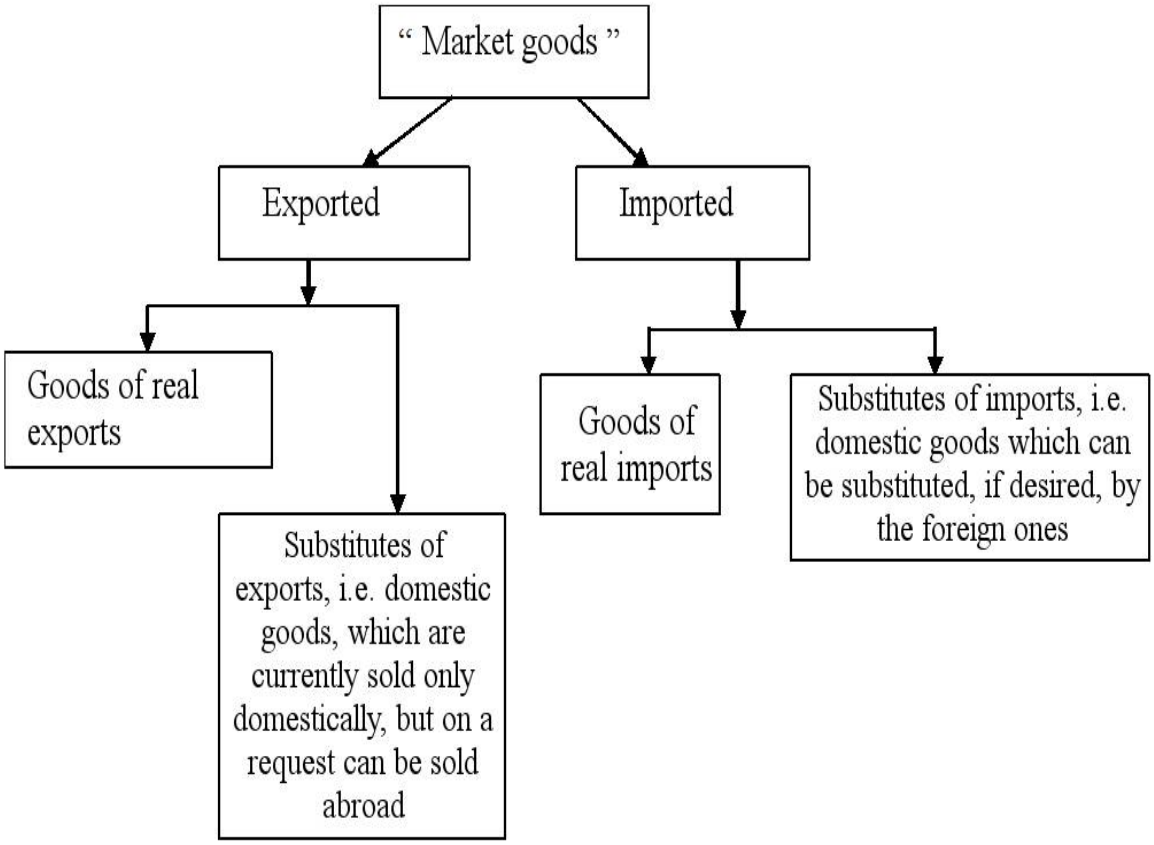



Fig.1.4. The classification of “market” goods

**Purpose.** On this basis the goods are divided into:

- consumer demand goods, that are intended for personal consumption, individual use and have a wide nomenclature and assortment (TVs, refrigerators, washing machines, VCRs, cars, etc.);

- goods of production purposes, that are used in the production of other goods and determine the specificity of particular industries (technological equipment) or have the general purpose (motors, cranes). They also include vehicles and devices that are used in the manufacturing process.

**Term of use.** Products are divided into products of a short-term and a long-term use.

**Level of demand and price**. On this basis products are classified into:

• fast-moving consumer goods (FMCG), that are purchased regularly, and are focused on the certain quality characteristics;

• selective demand goods that are purchased after the comparison with similar pro ducts depending on the degree of satisfaction of needs, level of quality, price, etc;

• prestigious products with unique properties that are determined by fashion, high comfort;

• luxury products, that meet the individual needs of wealthy people and greatly exceed their daily needs.

**Consumption pattern and degree of processing**. These are the raw materials, semi-finished products, finished products, components, parts.

**Method of manufacturing**. Production is divided into standard (available for an unknown end user) and unique (is based on previous customer orders and is made on the basis of previously agreed technical and economic parameters between the supplier and buyer).

### 1.1.3. What are the specific features of international trade?

International trade as a special sphere of international economics has a number of specific features that distinguish it from intra-national trade: government regulation of international trade; independent national economic policy; social and cultural differences between countries; financial and commercial risks.

**Government regulation of international trade.** Every country operates in its own legal environment. Its government is actively intervenes and puts under a strict control the international trade relations and monetary and financial relations, which are connected with trading operations. This intervention and control differ significantly from the degree and nature of those applicable to domestic trade. The government of each sovereign country creates its own system of export and import licensing, import and export quotas, duties, embargoes, export subsidies, its own tax laws, etc. with its trade and fiscal policy. A major obstacle to international trade can be governmental resolutions on currency regulations (the system of currency regulation of the inflow and outflow of a foreign currency into and out of the country governs international movement of goods, services and capital) and the resolutions concerning the standards of quality, safety, health safety, hygiene, patents, trademarks, packaging of products and the amount of information that is provided on the packaging.

The firm should take into account not only the laws of its country, but also the laws of the partner country during the conduct of international trade operations. Methods of implementation of these operations depend on mentioned laws. The laws of each country determine the choice of markets, prices for goods, which the company can offer, the cost of resources (labor force, raw materials, technologies) etc.

Government regulations and laws may affect the competitiveness of domestic companies on the international market due to the increase in their costs. Government may oblige its industrial companies to pay their workers a package of various cash benefits. It will affect the cost of production and reduce the possibilities of the company in the field of price competition on foreign markets.

**Independent national economic policy.** National economic policy may allows free flow of goods and services between countries, regulate or ban it (for example, the restriction of trade can take the form of "voluntary" export restrictions, boycotts of products of the country, rejections of preferential tariffs and issuance of new credits, restrictions on access to high-tech products). All of this significantly affects the international trade.

To maintain the balance of international payments the country must link its economy with the global economy, that is to conduct the policy that would ensure competitiveness of prices and costs compared to the other countries and would not allow the existence of the differences between domestic law and international regulation. These differences could lead to the conflict situations in foreign trade.

If the internal economic policy of the country harms its external stability, then all trading countries feel the negative consequences of this fact. For the international trade functioning in the atmosphere of freedom the governments have to agree the domestic and international policies with their trading partners. These policies must not harm the interests of any party. If the national economic policies in international trade are based solely on domestic national interest without the consent or without consultation with its trading partners, it leads to political tensions between the partners (taxation of certain goods, import quotas, etc.). Thus, international trade is often influenced by independent national economic policies of individual states.

**Socio-cultural differences between countries.** The countries involved in international trade differ from each other in customs, language, priorities, and culture. Although these differences do not affect significantly the international trade, but they complicate the relations between the governments and introduce many new elements to the activities of the international companies. Insufficient knowledge of the customs and laws of the exporting or the importing country leads to uncertainty and distrust between the seller and buyer.

**Financial and commercial risks.** The main financial risks include currency and credit risks.

International trade takes place between the countries with different currency systems that determine the exchange of one currency for another. The instability of exchange rates leads to an appearance of a currency risk. Currency risk is a risk of the foreign exchange losses due to a change of exchange rate of the currency of price relative to the currency of payment in the period between the signing of foreign trade contract and making the payments under this agreement.

One of the problems of the importer is the necessity of obtaining of foreign currency in order to make the payment. Currency risk arises for the importer if the exchange rate of the currency of price is increased relative to the currency of payment.

Exporter may have the problem of foreign currency exchange which is received by his country. He suffers losses by the falling of the exchange rate of the currency of price relative to the currency of payment, because he gains a smaller real value compared to the cost of the contract.

It is important to have time for transportation of goods in international trade. That is why the exporter is exposed to credit risk and suffers from inconveniences associated with the distance and time, which is required for the transporting the goods abroad and receiving a payment. The gap in time between the request to foreign supplier and receipt of goods is usually associated with the duration of transportation and necessity to prepare appropriate documentation for transportation.

Exporters may require additional funds which he can get in bank to finance the preparation and delivery of goods abroad. At the same time the credit is needed for longer time than it should have needed, if he sold goods in the domestic market of the country. Exporter must fulfill its obligations under the terms and conditions of the loan agreement. However, there is risk of a failure to return the debt.

Credit risk can also arise when the government gets a loan from a foreign lender or provides the guarantee for a loan to a third party in its country, but then either government or third party refuses to repay the loan and declares immunity from prosecution. Exporter will be powerless to collect the debt because it will be forbidden to conduct the claims through the court.

*Commercial risks* related with the possibility not to get profit or have losses in the process of trade, can appear in the following cases:

- insolvency of the buyer at the time of payment of the goods;
- refusal of the customer to pay for the product;
- change in product prices after the conclusion of the contract;
- reduced demand for products;
- inability to transfer funds to the country of the exporter in connection with currency restrictions in the country of the buyer (importer) or lack of currency, or because of the refusal of the government of the importing country to give this currency of any other reason.

## 1.2. What are the main stages of international trade development?

The retrospective of international trade is often considered by such criteria as major world events. There are five main stages of the evolution of international trade [6]:

Stage I – the initial commercial period (1500-1850 years);

Stage II - the period of the formation of international turnover (1850-1914 years);

Stage III - the period between the two world wars (1914-1945 years);

Stage IV - the post-war period (1945 - first half of 70s);

Stage V – the period of globalization of the world economy (late 70s - to the present time).

*The first stage* began from the time of the great geographical discoveries, which caused an active export of the goods on newly discovered lands. Exported goods were the finished products that were made from local raw materials. The trade in colonial goods facilitated the establishment of capitalism in Europe and determined the development of international trade over three hundred years. The colonial travels were accompanied by high risk, but the achievement of the fast and significant profits acted as a strong incentive to attract new participants to the trade.

Manufacturing production dominated from the XVI century to the middle of the XVIII century, it was based on the division of labor and created conditions for large-scale production. Gradually the narrow manufacturing base stopped responding to the market needs. Industrial revolutions replaced the manufacturing base with factory machine industry.

This period is marked by the innovations in the field of transport. Steam machine, internal combustion engines, ships on steam engines, electricity, etc, it all radically changed the means of national and international communication. Highways, canals, railways began to spread rapidly.

Domestic local markets became tight and began to expand to regional, international scales in such circumstances. Local centers of international trade developed into single global market.

International trade developed very fast. Its influence on the economies of certain countries became crucial, that was evidenced by the accelerated growth rates of international turnover compared to growth rates of industrial production.

Europe became the center of international trade.

The distinctive features of the first phase:

- growth of state influence on the relations of countries and international trade;
- strengthening the government support of domestic producers. Protectionism prevails in most countries;
- the birth of the free trade policy.

*The second phase* is characterized by the final consolidation of colonial empires on the background of rapid industrial development of the European countries and the USA. Trade grows faster than production. Economies of different countries become more open because of this fact.

The commodity structure of international trade changes. For example, spice trade, which thrived in the previous centuries, is replaced by the exchange of raw materials (about 60% of the total trade) and by the transition to the exchange of the industrial products.

The main factors of the growth of international trade include: further evolution of techniques and technologies in production; innovations in the transport sector; different rates of development of European countries; differences in the reserves of the mineral resources; rise in investment activity; expansion of sales markets; use of favorable conditions of local laws; level of education.

The period 1850-1875 years is still considered as relatively free exchange phase. However, the next years are characterized by the increased protectionism,

due to the growing influence of monopolies on the foreign policies of their countries. Previously characterized as a defensive, protectionism becomes offensive and protects from a foreign competition not the weak sectors of the national economy, but the most advanced and highly monopolized ones.

*The third phase* is characterized by such most important events:

1. The First World War, which destroyed the economy of European countries.
2. The great economic crisis of 1929-1933, which raised the question of the effectiveness of internal trade quite strictly.
3. The World War II that destroyed the global economic system and dramatically shook the confidence of the developing countries in a trade as a driving force of economic growth.
4. Further redistribution of world markets.
5. Transition to a new, more efficient Bretton Woods monetary system in 1944.
6. Formation of two world economic systems.

The growth of international trade was at a very low level and was significantly lower than the rate of development of production because of violation of international trade connections and economic crises.

The raw materials, food, fuel (60% of world exports) become the main export commodities.

The First World War and the economic crisis caused the disintegration of international trade and strengthening of the customs protectionism. Countries began unreasonable apply the tariff and quantitative methods of trade regulation in the effort to protect their own economy. This only deepened the economic crisis.

The issues of the trade liberalization were the focus of governments around the globe after the World War II.

*The fourth phase* of the development of international trade is characterized by the following key events:

1. The collapse of the world colonial system and the rapid development of the former colonial countries, which become the new players on the world markets.
2. Increased development of the world economic systems: capitalist and socialist.
3. The export of capital beyond the national borders, that ensured an increase in export of goods, capture of lucrative sales markets, sources of raw materials.
4. Spreading of integration and transnationalization.
5. Creation of the global international organizations.

This stage is the “gold” period of world economic growth and international trade. Average annual growth rates in industrial production constitute 6%, and it exceeds 10% in Japan. The volume of world trade during the period from 1953 to 1963 increased annually by 6.1%, and total world income – by 4.1% per year. Effectiveness was higher and the rate of growth of the world trade was 8.9% per year, while the growth in total world income was 5.1% annually in 1963-1973 years.

For commodity export structure the increase in the share of machinery and technical products (machinery, equipment, vehicles) and the decrease in agricultural production are typical.

The influence of the state extends to the development of foreign trade. There is a transition from rigid protectionism to the liberalization policy.

The scales, directions and instruments of the trade policy reflect the rapid growth of international trade, the complexity of its structure (commodity and geographic), weaving with the new forms of global connections. It caused an appropriate modernizing of the mechanism of regulation of foreign trade, which was directed at facilitating the mutual exchange between the developed countries and spreading of their access to the markets in developing countries, and which was directed at the change of the foreign trade policy of industrialized countries towards developing countries.

The fact that the formation of the structure of international economic relations occurred in the conditions of sharp change in the balance of forces in favor of the US promoted liberalization of foreign trade in this period. The US substantiated the necessity of liberalization by the close interdependence between free trade and the achievement of full and sustainable use of resources and also by the general necessity in spreading of the international division of labor.

The policy of liberalization has made the main progress in the area of customs-tariff measures. The General Agreement on Tariffs and Trade (GATT) was developed at international conference in Geneva in 1947.

Within the integrated groups the application of preferential customs-tariff measures is observed.

*The fifth stage* is characterized by the following main events:

1. The global financial crises in 1971 and 1973, which led to the collapse of the Bretton Woods monetary system. The enactment of the Jamaican currency system in 1978;

2. The first and second oil crises in 1974 and 1979, which was caused by a significant increase in the price of oil by the Organization of Petroleum Exporting Countries (OPEC);

3. The banking crisis in the US in 1979, which led to a general increase in the interest rates and put many developing countries (recipients of private bank loans) on the brink of bankruptcy;

4. The global debt crisis in 1982, which was connected with the problems of debt servicing by developing countries;

5. Strengthening of existing and the emergence of new integration groups (in 1989 – APEC, in 1992 - the EU, in 1994 – NAFTA, COMESA, in 1995 - Mercosur, etc.);

6. Change of political systems in the Eastern European communist countries (1989 - 1992) and the transition from the centrally planned economy to the market economies. Some countries in Asia and Latin America also begin to move in direction towards the democracy and the market reforms. The attractiveness of these countries as export markets increased significantly due to such changes;

7. The creation of the World Trade Organization, which began operations in 1995

8. Financial crises in Mexico (1994 - 1995), which significantly affected both the conjuncture of the currency and stock markets, and the global economic conjuncture: the business activity was slowed, world prices for fuel and raw materials decreased.

9. The introduction of a common currency (the euro) and providing the common monetary policy by the EU in 1999. The euro currency zone appeared with the introduction of the euro.

10. The international competition is greatly enhanced since the early 90s, its new forms appear. They are based on the growing number of the subjects of the global relations; they do not have a particular nationality. As a result, the process of globalization of international trade continues, when the economies of certain countries operate under a single, interconnected global economic system.

11. Technological changes in communications, information processing, transport, which transform the globalization of markets and production in material reality.

12. The global financial crisis of 2008-2009, which caused a fall in global demand, because of which there was a decrease in production in Europe, China, Japan and India. This led to a sharp narrowing of the global market for goods and services, lower prices for raw and growth in unemployment.

13. Signing of Bali Package agreement by the WTO members on 07.12.2013. This contract created the basis for the completion of the Doha Round of the WTO negotiations. The conclusion of this agreement will help to increase the turnover of world trade to $ 1 trillion.

All of the abovementioned events, which occurred and still occur, affect the change in the trade processes.

Further development of the multinational international trade is observed. The number of non-US TNCs, especially in the developing countries, and the number of mini-TNCs increase. The share of the inter-corporate supplies increases inside the TNCs. In the trade between industrialized countries the inter-corporate supplies account for 30% of bilateral trade [2].

The share of machinery and technical products (78% of world commodity) grows and at the same time the share of raw materials and foodstuffs decreases in the commodity structure of international trade; world trade in services and intellectual work products develops dynamically.

The development of intra-industry trade contributes to strengthening of international exchanges, i.e. when the two partner countries exchange (export or import) the goods, that belong to the same industry or product category. This type of trade indicates the international specialization in its thinner form than, for example, exports of machine tools to import of food.

The geographical structure of trade changes due to the economic and political events in the world. Group of “newly industrialized countries” (NICs) plays an important role in the world trade. There are some features of them: the share of industrial products in the world exports grows; high rates of

industrialization and the increase in the domestic production; policy that encourage exports directed to foreign markets. The most dynamic global commodity trade flows are typical for the Triad countries in the modern period: the US – the EU countries - Japan, which are the members of various trade blocks and have an enhancing competition between them.

The regulation of international trade is characterized by a further harmonization of the trade rules in the WTO. A mechanism for strengthening of the interaction of the WTO, IMF and the World Bank are created.

A return to the protectionism, called "neo-protectionism", is observed. Protectionist moods began to spread, since the customs tariff measures have become more liberal and do not provide the necessary level of protection of the domestic market. Many countries have found the ways to get around the requirements of the GATT and to apply non-tariff trade barriers.

### 1.3. What system of indicators of monitoring the impact of international trade exists?

Participation in the international division of labor allows to achieve certain economic goals at a lower cost of inputs. The international exchange of goods, services, technology will be beneficial to all participants of trade under the conditions of the rational structure of exports and imports, the development and implementation of effective foreign policy. The initial stage of this process is to determine the country's place in the global economy, to analyze its foreign trade, structural changes, and intensity of the foreign trade and the efficiency of operations with external partners. This is done with the help of various parameters that can be divided into 5 groups [10].

**Group I. Absolute indices.** Most of them are basic, but they can also be derivative. Absolute indicators usually have costs value, but natural units of measurement can be used for their expression, if it is necessary. International trade in metals, citruses, dairy products and meat is measured in tones, coffee trade – in sacks, eggs trade - in pieces, live animals - in heads, etc.

Two counter flows of goods and services: export and import create international trade.

**1.1. As defined by the United Nations Statistical Commission the export is:**

- the removal of goods from the country, which are produced, grown or extracted in the country, as well as goods previously imported from abroad and processed in the customs territory;
- the removal of goods previously imported, the processing of which occurred under the customs control;
- the removal of goods abroad, which were imported earlier and which were not processed in any way in the exporting country. Such export is called re-export. The goods that were sold at international auctions and commodity exchanges are often the subjects of the re-export. The removal (export) of goods from the territory of free zones and bonded warehouses is also re-export.

**1.2. The import is:**

- the importation into the country of goods of foreign origin directly from the country of manufacture or intermediary country for the personal consumption, for industrial, construction, agricultural and other enterprises or for the processing with the purpose of consumption within the country or for the export from it;
- the importation of the goods from free zones or bonded warehouses;
- the importation from abroad previously exported domestic products that were not subjected to the processing there. Such import is called re-importation. Re-importation includes the products, which were not sold at the auction, were returned from the consignment stock, were rejected by the buyer, etc.;
- the importation of goods for processing under customs control. These products are imported into the country for processing with the purpose of export of finished products, which includes this product in processed or in modified form (e.g. the import of the olive oil for the manufacturing of canned sardines for export). Importer is usually exempted from customs duties.

All the products supplied by the parent companies of TNCs to their subsidiaries that are located in other countries are also included into the value of exports and imports. This way the intra-corporate exchange is taken into account, which is carried out within TNCs and is included in the international trade.

**1.3. Trade balance (S)** is determined as the difference value of exports (E) and imports (I) of the country for a certain period:

$$S=E-I \qquad (1.1)$$

Active trade balance is the excess of exports of goods and services over imports. It shows that the foreign trade is positive for the country.

Passive trade balance is the excess of volume of imports over exports of the country.

**1.4. Foreign trade turnover (FTT)** is the sum of value of exports and imports for a certain period:

$$FTT=E+I \qquad (1.2)$$

**1.5. General (total) trade (GT),** which is the sum of value of exports, imports and transit goods (T) transported through the country, that is foreign trade ”load” on the country:

$$GT = E + I + T \qquad (1.3)$$

**Group II. Relative indices.** They are mostly derivative and expressed in the form of coefficients, shares, percents and other dimensionless quantities.

**2.1. Indices of exports and imports dynamic.** For the analysis of the development of the export and import activities the following indicators are used: the growth rates (individual, aggregate, medium) and growth rates of volumes respectively of export, import or foreign trade volume.

Individual index applies to physical changes in exports, imports and foreign trade volume. Dynamics of physical volume and physical volume growth compared to the base year can be defined by it. But it only considers changes in the physical volume.

Aggregate physical volume index of foreign trade, taking into account the price of the current year ($I_{ph.v.}$) allows us to estimate the export or import of commodities within constant prices of one period to obtain information on the movement of the mass of commodities without affecting price volatility i.e. takes into account the price factor. It is calculated by the formula:

$$Iph\ .v. = \frac{\sum_{i=1}^{n} V_{i1} \times P_{i1}}{\sum_{i=1}^{n} V_{i0} \times P_{i1}} \qquad (1.4)$$

where $V_{i1}$ – volume of turnover of i–commodity in the current year in natural dimension (m³, pcs., tons, etc.);

$V_{i0}$ - the volume of turnover of i-commodity in the base year in natural dimension;

$P_{i1}$ - price of i-commodity in the current year in monetary units.

**2.2 Import-export ratio (an index of the state of balance)** ($I_{i/e}$) is determined by the ratio of exports of goods and services (E) to the volume of imports (I):

$$I_{i/e.} = \frac{E}{I} \qquad (1.5)$$

The trade balance is positive if this ratio is greater than one, and has a negative balance if it is less than one.

**2.3. Index of "terms of trade".** This is the ratio of export and import prices. The gains from the international trade depend on the changes in export and import prices. There are commodity, revenue and factor terms of trade.

Commodity terms of trade can be expressed by the ratio of export and import prices for certain goods or by the ratio of the index of export prices and index of import prices as a whole, if the foreign trade in all goods is investigated. The following formula is used in the last case:

$$T = \frac{P_x}{P_{im}}, \qquad (1.6)$$

where $P_x$ - index of export prices;

$P_x = \sum x_i p_i$ - ($x_i$ – the share of each commodity "i" in the total value of exports in the base year);

$p_i$ – the ratio of the current price for the commodity "i' to its price in the base year;

$P_{im}$ – index of import prices;

$P_{im} = \sum im_i p_i$ ($im_i$ – the share of each commodity "i" in the total value of imports in the base year).

If index of terms of trade T = 1, it means that the prices of exports and imports are equal and trading terms remain unchanged. If T> 1, it means that for every unit of exported goods more imported goods can be purchased. Since the larger volume of imports becomes possible instead of the previous export quantity, the welfare of the country will increase. Thus the terms of trade improved compared to the base period.

If index of terms of trade T <1, it means that for every unit of exported goods less imported goods can be purchased. Since the smaller volume of imports becomes possible instead of the previous export quantity, the welfare of the country reduces. Thus the terms of trade deteriorated.

Revenue conditions of trade are defined as an index that indicates a potential ability of the country to import goods through revenue, which is derived from the exports in general. It is calculated as the commodity conditions of trade multiplied by a quantitative index of export:

$$T_g = \frac{P_x}{P_{im}} \times Q, \qquad (1.7)$$

where Q – index of export volume.

The growth rate indicates that the import potential increases due to the increasing export revenues.

Factor conditions of trade are defined as an index, which links the import prices with productivity (efficiency) of one or more factors of production. It shows how many imports can be obtained per unit of productivity growth in the export sectors.

One-factor conditions of trade ($T_{of}$) are calculated by the formula:

$$Tof = \frac{P_x}{P_{im}} \times Z_x, \qquad (1.8)$$

where $Z_x$ - the index of productivity in the export sector of the country

Thus, the $T_{of}$ measures the amount of imports, which country receives per unit of a domestic factor of production invested in the exports.

Two-factor conditions of trade ($T_{tf}$) are calculated as the commodity conditions of trade multiplied by the share of index performance (efficiency) of the exporting industries in the country ($Z_x$) and an index of the productivity of the exporting industries in the country, from which the goods are imported, that is, the index of the productivity of imports ($Z_{im}$):

$$T_{tf} = \frac{P_x}{P_{im}} \times \frac{Z_x}{Z_{im}} \times 100 \quad (1.9)$$

The index of the two-factor conditions of trade shows how many units of the internal factors are contained in the exports of a country, which are exchanged for a unit of foreign factors, contained in imports.

In general, the conditions of trade depend on the fluctuations in the global and domestic markets, on the changes in the conditions of production, on the degree of monopolization of certain commodity markets.

**2.4. The index of export concentration ($I_{e.c.}$).** It is used to determine certain types of products export in total production of these products and has the form:

$$I_{e.c.} = \frac{E_i}{V_{prod.i}} \times 100\% \quad , \quad (1.10)$$

where $E_i$ - volume of export for i-type of product;

$V_{prod.\,i}$ - aggregate output for i-type of product.

The more this index is close to 100%, the greater the share of exports in total production. This indicates that the country is the world exporter of this type of product.

**2.5. The index of import dependence of the country** ($Z_{ij}$) is defined as the share of imports in total consumption:

$$Z_{ij} = \frac{I_{ij}}{P_{ij}} \times 100\ \%, \qquad (1.11)$$

where $I_{ij}$ – volume of import of the commodity "i' to the country "j";

$P_{ij}$ – the volume of consumption of the commodity "i' in the country "j";

$P_{ij} = V_{ij} + I_{ij} - E_{ij}$,

where $V_{ij}$ – volume of production of the commodity "i' in the country "j";

$E_{ij}$ – volume of export of the commodity "i" from the country "j".

This indicator shows the dependence of the country on the external market in various goods, i.e. the level of satisfaction of demand for this type of product from its own capacities and imports. If it is equal to 100%, then this would indicate that the need of the country in this product is completely satisfied by import.

**2.6. Index of net trade ($I_{nt}$)** shows the excess of exports over imports level by each type of product (with the positive value of indicator) or the excess of imports over exports (with its negative value):

$$Int = \frac{E_i - I_i}{E_i + I_i}, \qquad (1.12)$$

where $E_i$ - export of the commodity “i’;
$I_i$ - import of the commodity “i’.

The index can range from -1 to + 1. If the index is closer to -1, it means that the commodity is imported only; it negatively characterizes the trade of the country. If it is closer to one, the commodity only is exported and it indicates the positive trade.

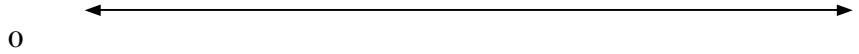
**2.7. The index of export concentration (Hirschman index)** shows the variety of goods, which country exports. It is calculated by the formula:

$$H_j = \frac{\sqrt{\sum_{i=1}^{239}\left(\frac{X_i}{X}\right)^2} - \sqrt{\frac{1}{239}}}{1 - \sqrt{\frac{1}{239}}}, \qquad (1.13)$$

where $H_j$ – index of concentration of exports j (j – index of the country)
239 – the number of products on the UN classification;
i –index of the product (1 to 239);
$x_i$ –value of export of i-commodities by country j;
x – the total value of exports of country j, which is calculated as follows:

$$X = \sum_{i=1}^{239} x_i$$

The value of the index $H_j$ is in the following limits:




A positive value, ie a country exports a wide range of products

The negative value, ie the country exports mainly limited group of products.

**Group III.** Indicators of structure. The structure of exports and imports gives the qualitative characteristics of international and foreign trade.

Commodity structure of exports (imports) is the proportion of separate groups of goods (services) in total exports (imports). It provides systematization of the totality of commodities, exported from the country, by the certain signs (groups of countries or all countries of the world), or imported into the country or group of countries.

Belonging to the group of goods is determined according to the applicable rules of classification of goods. Standard International Trade Classification, Harmonized Commodity Description and Coding System, Classification by Broad Economic Categories can be used for goods classification.

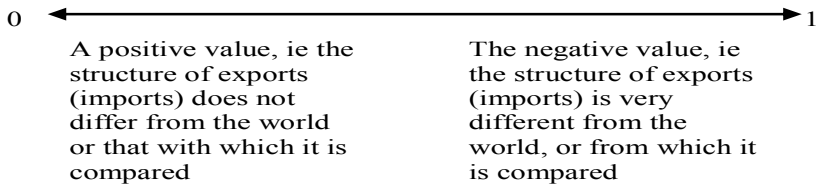
**3.1. Index of diversification of exports (imports)** shows the deviation of the export structure (import) from the structure of world exports (imports). It is used to determine differences in the structure of foreign trade of different countries, export or import of which are quite versatile. This index is calculated as the deviation of the share of exports of goods in the country from its share in world exports by the formula:

$$S_j = \frac{\sum_{i=1}^{n} \left| h_{ij} - h_j \right|}{n}, \qquad (1.14)$$

where $S_j$ - index of diversification of export (import) of the country j;
$h_{ij}$ - the share of i-goods in total world exports (imports) of the country j;
$h_j$ - the share of i-goods in total world exports (imports);
n - the number of studied groups.

Sometimes, the structure of export (import) of the geographical area of studied country is used as a basis for comparison, instead the global structure of export (imports).

The value of the index Sj is in the following limits:




**3.2. The share of high-tech products in exports of products of manufacturing industry.** This share should not exceed 15% according to the recommendations of the World Bank.

**3.3. The share of products of manufacturing industry in total exports.** It should not be less than 40% according to the recommendations of the World Bank.

Indicators 3.2 and 3.3 show the effectiveness of the structure of exports.

The geographic (regional) structure of exports and imports characterize the distribution of commodity flows (in both directions) at the place (countries,

regions) of destination or origin and are classified according to the structure of exports and imports of the country, the structure of exports and imports of goods (or commodity group), as well as internal and external structures. Thus, there are following geographic (regional) structures of exports (imports):

a) external geographical structure of exports (imports) of the country – is the distribution of exports (imports) by countries or regions of its destination (origin);

internal geographical structure of exports (imports) of the country - the distribution of exports (imports) by regions (administrative units) of origin (consumption) within the country;

b) external geographical structure of export of product - the distribution of export of a particular product by countries (regions) of consumption. External geographical structure of import of product – is the distribution of supplier countries of certain goods according to their share in the formation of total imports of the product;

internal geographical structure of export of goods – is the distribution of export of a particular product by regions (administrative units) of its formation inside the exporting country. Internal geographical structure of imports - is the share of regions within the country of the consumption of certain product;

c) geographical structure of exports (imports) of group of countries - is the distribution of total exports (imports) of this group by regions (countries) of destination (origin);

d) geographical structure of exports (imports) of product by a group of countries, that demonstrates the distribution of total exports (imports) of certain product between the countries (regions) of consumption (origin);

e) geographical structure of world exports (imports) shows the share of each country (region) in world exports (imports), defining the leading exporters (importers) in the world;

f) the geographical structure of world exports (imports) of product shows the share of each country (region) in the world exports (imports).

**3.4. Index of geographic concentration of exports (imports)** of good (Herfindel-Hirschman index). It describes the condition of the world market for a particular good by the following features: the number of exporters (importers) and the share of the main exporter (importer).

This index is the greater, the lower the total numbers of exporters (importers) and the higher the share of the main exporter (importer). We can calculate it by the formula:

$$S_k = \sqrt{\sum_{i=1}^{n} \left( \frac{X_i^k}{X^k} \right)^2}, \qquad (1.15)$$

where $S_c$ – index of geographic concentration of exports (imports) of commodity k;

$X^{к}_{i}$ – the volume of exports (imports) of goods for the country i;
$X^{к}$ – the volume of world exports (imports) of commodity k;
n – the number of countries-exporters (importers) of commodity k.

**IV group. Indicators of intensity.**

**4.1. The export quota (Qe) is calculated by the formula:**

$$Q_e = \frac{E}{GDP} \times 100\%, \qquad (1.16)$$

where E- volume of exports for the certain period;
GDP - gross domestic product for the same period.

**4.2. The import quota (Qi) is calculated by the formula:**

$$Q_i = \frac{I}{GDP} \times 100\ \%, \qquad (1.17)$$

where I – volume of imports for the certain period.

**4.3. Foreign trade quota (Qft), which is defined by the formula**:

$$Qft = \frac{0{,}5(E+I)}{GDP} \times 100\%, \qquad (1.18)$$

**4.4. The volume of export, imports, and foreign trade turnover per capita.** They are calculated by the formulas:

$$E_{pc} = \frac{E}{P}; \qquad (1.19)$$

$$I_{pc} = \frac{I}{P}; \qquad (1.20)$$

$$FTT_{pc} = \frac{FTT}{P}, \qquad (1.21)$$

where $E_{pc}$, $I_{pc}$, $FTT_{pc}$ – respectively exports, imports, foreign trade turnover per capita;
E and I – the value of national exports and imports for the year;
FTT - the country's foreign trade turnover for the year;
P - the population of the country for the year.

**4.5. The intensity of intra-industry trade between countries (Ui)** is calculated as follows:

$$U_i = \frac{(E_i + I_i) - |E_i - I_i|}{E_i + I_i} \times 100\%, \qquad (1.22)$$

where $E_i$, $I_i$ – export and import of industry i;
$|E_i - I_i|$ - the absolute value of the difference between exports and imports of products of this industry, which is equal to the volume of intra-industry trade of industry i;
$(E_i + I_i)$ – value of foreign trade turnover of industry i;

$(E_i + I_i) - |E_i - I_i|$ - the level of intra-industry trade.

The average level of intensity of intra-industry exchange among the industries of the country (group of countries) can be determined by:

$$\overline{U_i} = \sum_{i=1}^{n} \frac{(E_i + I_i) - |E_i - I_i|}{E_i + I_i} \times 100\,\%, \qquad (1.23)$$

where n – the number of industries or countries.

**V group. Indicators of economic efficiency (effect) of foreign trade.**

**5.1. Macroeconomic indicators.** Economic efficiency of foreign trade is the degree of saving of national labor, which is achieved due to the country's participation in the international division of labor.

**5.1.1. The effectiveness of foreign trade turnover ($E_{ft}$), is defined by the formula:**

$$E_{ft} = \frac{C_i}{C_e}, \qquad (1.24)$$

$C_i$ – the costs of domestic production of imported goods;

$C_e$ – national expenditure on export production;

Country saves the work of its employees, participating in international trade on special condition. This condition consists in the following: the domestic costs of exports will be less than the costs as a result of imports.

**5.1.2. Efficiency of export ($E_e$):**

$$E_e = \frac{F_e}{C_e}, \qquad (1.25)$$

where $F_e$ – foreign exchange receipts from export;

$C_e$ - the costs on production and sale of export products.

**5.1.3. Efficiency of import ($E_i$):**

$$E_i = \frac{C_i}{F_i}, \qquad (1.26)$$

$C_i$ – the costs of domestic production of imported goods

$F_i$ - foreign exchange costs of imported goods.

**5.1.4. Budget effectiveness of export ($E^b_e$):**

$$E^b_e = \frac{F_e}{\mathrm{Pr}_e}, \qquad (1.27)$$

where $Pr_e$ – selling price of industrial products for export

**5.1.5. Budget effectiveness of import ($E^b_i$):**

$$E^б_e = \frac{\mathrm{Pr}_i}{F_i}, \qquad (1.28)$$

where $Pr_i$ - delivery price of imported goods for the domestic market.

**5.1.6. The effect of the state budget from foreign trade exchange** ($E^b_{ft}$):

$$E^{b}_{ft} = (Pr_i - Pr_e) + K_c(F_e - F_i), \qquad (1.29)$$

where $K_c$ – currency coefficient for transferring of foreign currency into the national currency.

**5.2. Microeconomic indicators.** They are calculated before the conclusion of foreign trade agreements, in time of planning of foreign economic activity as well as to evaluate the efficiency of export-import operations in the previous period.

**5.2.1. Efficiency of production of goods for export**:

$$E_e^f = \frac{Pr_e}{C_e}, \qquad (1.30)$$

This parameter must be greater than one, and then the production and sale of this product will be effective on the international market.

**5.2.2. Efficiency of use of imported goods ($E_i^{use}$)** or its consumption:

$$E_i^{use} = \frac{C_i}{Pr_i}, \qquad (1.31)$$

If $E_i^{use} > 1$, it shows that the production of the imported goods by own forces is inefficient and it will be better to import it.

**5.2.3. The profitability of export ($R_e$):**

$$R_e = \frac{H_e}{CP_e} \times 100\ \%, \qquad (1.32)$$

where $H_e$ – export revenues in hryvnia, which are calculated by the transfer of foreign exchange receipts in hryvnia at the rate of NBU on the day of admission of foreign exchange receipts;

$CP_e$ – cost of production of the exported product.

**5.2.4. The economic effect from export ($EE_e$):**

$$EE_e = H_e + C_s - C_e, \qquad (1.33)$$

where $C_s$ – cash revenue from the compulsory sale of the part of currency to the country.

**5.2.5. The economic effect from import ($EE_i$):**

$$EE_i = P_r - P_{si}, \qquad (1.34)$$

where $P_r$ – selling price of imported goods in the domestic market;

$P_{si}$ – price of purchase of the imported goods, which includes all costs related to their acquisition (contract costs, customs fees, taxes, transportation, etc.).

**5.2.6. The integrated economic effect of the firm from export-import activities ($EE_{e/i}$):**

$$EE_{e/i} = EE_e + EE_i. \qquad (1.35)$$

This index is calculated if the firm is dealing with exports and imports at the same time.

### 1.4. Expediency of international trade exchange

#### 1.4.1. Which gain from international trade exists at the country and consumers levels?

The value of international trade in the international economy is caused by the fact that the important factors and feasibility of international exchange of goods and services are in its foundation.

There are factors, which cause the necessity of the international trade:

- the appearance of the global market;
- unevenness of development of individual branches in different countries. Production of the most developed areas, which cannot be fully realized in the domestic market, is exported abroad. In other words, there is a need to sell products in foreign markets and the need to obtain certain goods from outside;
- the tendency to unlimited expansion of the size of production. Since the capacity of the domestic market is limited by responsible demand, production outgrows the limits of the internal market. The entrepreneurs of each country are fighting for foreign markets;
- the desire to get higher profits due to the use of cheap labor and raw materials from developing countries.

No country in the world can manage without foreign trade now. All countries depend on international trade. They have different dependency on it. It is defined as the ratio of half of the cost volume of foreign trade turnover to GDP (the index of foreign quota). All countries can be divided into three groups for this indicator: with high dependence (45-93%), middle dependence (14-44%) and small dependence (2,7-13%).

The countries with high dependence are usually developing countries, or they have small territory. These facts lead to very high degree of openness of their economies: Brunei – 48,9%, United Arab Emirates – 51,2%, Macedonia - 71,3%; Belgium and Luxembourg - 48,4%, Panama - 30,3%, Singapore - 93,2% [6, p.54].

The countries with middle degree of dependence are mostly large developed countries (Germany, United Kingdom, and France).

The countries with low dependency are the countries, which are guided by their own economic potential. Also we can classify as low dependent the countries, which are economically underdeveloped. The countries cannot move to an open economy because of their low economic potential. Zaire - 2,7%, Liberia - 3,4%, Brazil and Japan - 8,6%, USA - 9,2%, Somalia - 11,2%, Belarus - 14,8% belong to this group [6 , p.54].

International trade is reasonable if it brings any benefit.

The countries receive some benefits from the participation in international trade, such as:

- the opportunity to export goods, in the production of which those resources are used that are in the plenty inside the country;

- the opportunity to import goods, for the produce of which it would be necessary to spend a lot of relatively limited resources in country;

- the effect of saving on larger scales of production, the specialization on a narrower set of products.

Export activity of the country activates certain aspects of the national economy: provides the orders to national suppliers, creating jobs for the workers of the state, allows paying of dividends to the shareholders of national companies.

At the same time, import of goods from other countries may force domestic manufacturers to reduce prices for products in order to improve their competitiveness. The inability of the company to respond to competition adequately can lead to bankruptcy of the enterprise, closing of it and dismissal of workers.

Consumers are interested in international trade to:

- import the consumption goods at a cheaper price compared to the national price or the products, which are better than national on certain parameters;

- import raw materials and export manufactured goods. This fact reduces domestic production costs, makes it possible to refuse release of products, production of which only depends on foreign suppliers;

- export domestic products, and to use received money for import.

Consequently, the consumers will benefit from the increase in the number and diversity of goods, lower prices. The level of consumer's welfare increases because of these factors.

### 1.4.2. Which benefits of export and import activities for domestic firms exist?

We can consider gains from international trade for the domestic international firms from the standpoint of export and import capabilities [10, p. 34].

There are factors that help businesses to benefit in *export activity:*

- the use of excess capacity, which companies sometimes have at their disposal, but this capacity is not appropriate for domestic demand. This capacity can include: explored reserves of natural resources, the specific capacities for the production of certain products that can not be used in the production of other goods. Often production technology may allow company to make production profitable only in serial production, in larger amounts than it is necessary to meet the demand in the country;

- obtaining of higher profits. The manufacturer can sell products more profitable on the foreign market due to differences in the competitive environment on the foreign market from domestic one. It is connected with the fact that product may be on another stage of the life cycle in the foreign market. For example the stage of maturity inside the country usually leads to lower domestic prices. Increase of sales and profits will be typical for maturity stage of products abroad.

Increased profitability can be achieved by differences of government measures for income taxation, price controls within the country and abroad;

- significant amounts of foreign sales make domestic producers less dependent on domestic economic conditions;

- reducing production costs, due to the coverage of conventionally fixed costs by issuing larger output, increase of efficiency through experience, which was acquired in the production of large quantities of products; massive purchases of materials and transportation of their large quantities. In general, companies can reduce their costs by 20-30% in the case of doubling the increase in output;

- risk sharing. The manufacturer can reduce the variation of demand, organizing sales in foreign markets because of business cycles in different phases and the same products at different stages of the life cycle;

- knowledge and experience, gained by firms in the process of working on foreign markets that promotes increase of the effectiveness of their activity during marketing operations on the domestic market

There are factors that help businesses to benefit in *import activity:*

- avoidance limitations of the domestic market, reducing the production costs or improving the quality of products (e.g., compensating for unexpected changes in access to domestic sources of raw materials by opposite changes in the import of raw materials);

- obtaining the cheap high-quality materials, components and technologies for their use in the manufacture. This company gets more resistance against competition from imported finished products or can compete in export markets more effectively by itself;

- the use of excessive capacities of trade and distribution network;

- the complement of available product lines, allowing the company to offer more products for sale;

- the possibility of distribution of operational risks because of the fact that company is less dependent on a single supplier dictates when expands the range of suppliers.

The impact of the international trade on domestic firms which are competitors in the import is ambiguous. The clash of interests of the company with import competition may lead to negative consequences in the form of labor dismissal or reduction of wages. The adverse effect of competition from import is particularly noticeable when competing industry operates in a specific field. However, the above losses caused by import competition, are temporary. Untapped resources will move into more productive industries in the developing economies, for example, in industries which produce products for export, and competing in import firms will adapt to accept new technologies the demand for new products and services and their production.

## Chapter 2. International trade and economic development

### 2.1. What are the determinants of promotion of economic development and international trade?

Acceleration of economic development, improvement of socio-economic and international trade, use of the benefits of the international trading system are the important tasks of countries of the world. The need to address these tasks requires to identify the main factors of economic development and of facilitate international trade.

We can consider economic development as a sustainable increase in national output of goods and services and measure by different parameters. For example, the growth rate of GDP or GDP per capita. The last index is called "wealth effect" or "effect of economic development".

Economic development and international trade are complex, interdependent processes that are the results of the interaction of different factors: economic, political, social.

Certain factors may play a role of the main engine of growth at various stages of the development of the country. The economic development and international trade are stimulated in most cases by such factors, as: innovation and technological advances that improve efficiency of activity, and also create new competitive advantages; level of economic freedom, which indicates the existence of a market economy; natural and geographical conditions that form the natural competitive advantages; quality of preparation of the labor force [1, p.91].

The driving force of long-term economic development is technological innovations (scientific and technical progress), because the most part of the increase in real per capita income occurs due to them in developed countries. This term covers both machines, equipment, various forms of technological solutions, which have physical expression, and a set of technical and management skills for organization of production and implementation of foreign trade operations.

The differences in the technologies, that the countries have, determine their different levels of economic development and form the basis of comparative advantages. Technological inequality forces the country to produce those goods for which there is better technology in this country. Technologically reliable comparative advantage arises in the case of technological changes in the different sectors and countries.

Technology development is closely linked to the factors of production (capital and labor). Thus, technological advances make the capital more productive and generate incentives for new investments. The technology could also materialize in new equipment, i.e. in some form of physical capital, and insufficient attention to human resources undermines the potential of the country to develop through the innovations and technological progress.

English economist John Hicks, who received the Nobel Prize in economics in 1972, described the different types of scientific and technical progress (STP) and showed how they are connected with the factors of production (capital and labor),

and what impact on economic development these types do [7, p.73]. He divides STP on neutral, labor-saving and capital-saving:

- neutral STP increases the productivity of labor and capital in the same proportion. The result is that a given amount of output can be produced at lower cost of labor and capital;

- labor-saving STP increases the productivity of capital in greater degree than productivity of labor. As a result, capital replaces labor in production, and the parity of capital to labor increases, i.e., more capital is used per unit of labor. This volume of output is produced with less capital and labor, but with the higher ratio of capital to labor;

-capital-saving STP increases the productivity of labor in greater measure than capital productivity. As a result, labor replaces capital in production, and the parity of labor to capital increases, i.e., more labor is used per unit of capital. This volume of output can be produced with less labor and capital, but with the higher ratio of labor to capital.

Thus, any STP regardless of its type reduces the amount of labor and capital which is necessary to produce any output, i.e. it increases the productivity of factors of production. The structure of exports is changed under the influence of the innovative changes, in particular, the research intensity increases, and it gives new impulses for dynamization of economic development.

Economic and political situation in the country about which the level of economic freedom testifies, influences on economic growth and openness to the international trade.

American analytic center Heritage Foundation created indicator, which helps to measure the level of economic freedom of countries around the world. This index is calculated on base of ten major objective economic criteria which make it possible to determine the overall rating of each country. There are:

- tax freedom;
- freedom of ownership;
- freedom of investment;
- freedom of labor relations
- freedom of entrepreneurship;
- financial freedom (the development of banking sector);
- freedom from corruption;
- freedom from government interference in the economy;
- free trade (trade policy);
- freedom of monetary relations (monetary policy) (Tab. 2.1).

About 50 independent economic parameters can be used for every of these 10 criteria. All the countries in rating are divided into five categories: “free” (80-100), “basically free” (70-79,9); ”with middle-freedom” (60-69,9), ”relatively free” (50-59,9), ”depressed” (0-49,9).

The index of economic freedom changes from 70,5% to 90,1% in developed countries, it averages 60% in transitive countries, and it makes 43,6% in the least developed countries [7, p. 74].

The world index is calculated and it is 60,6%, and indices for the regions of the world make: at American region - 62,3%, European region – 67,5%, Asia-Pacific – 59,1%, Middle Eastern and North African – 54,7%, South Africa - 60,6%.

There is a stable relationship between economic freedom and economic development. The countries with consistently high ratings of economic freedom also have higher rates of economic development effect. In 2013 Hong Kong (90,1), Singapore (89,4), Australia (82,0), Switzerland (81,6), New Zealand (81,2) belonged to the countries where there was the greatest degree of economic freedom. Their effect indicator of economic development is respectively 36,8 thousand dollars 51,7 thousand dollars, 67,0 thousand dollars, 79,0 and 32,0 thousand dollars (when average in the world is 10,2 thousand dollars). The countries with the lowest level of economic freedom also have a low standard of living. For example, in Zimbabwe, and Burma the level of economic freedom is respectively 35,8 and 40,1, and GDP per capita – 0,2 thousand dollars and 1,2 thousand dollars respectively.

Natural and geographical factors make an influence on the economic development and international trade. The countries with good natural conditions usually export raw materials and agricultural products. Unhealthy or harsh climate, poor soils, lack of waterways make bad influence on the development. The scientists at Harvard Institute for International Development established, that the countries, that are not landlocked, develop more slowly than the coastal state, and the total cut from the sea slows annual rate of about 0,7%; tropical countries develop by 1,3% slower than the countries located in the temperate zone [1, p. 94].

Improving the quality of human resources is the important factor in our time. Education, health care, professional training are the investments in human capital.

The relationship between economic growth and accumulation of the human capital is demonstrated through the index of the intellectual feedback of the production [6]:

$$\frac{\Delta Y}{Y} = \frac{\Delta Y}{I_r} \bullet \frac{I_r}{Y}$$

where Y - result of production (national income, GDP, etc.);

$\Delta Y$ - increase of production in the i-year;

$\frac{\Delta Y}{Y}$ - rate of economic growth;

$I_r$ - investments in human capital;

$\frac{\Delta Y}{I_r}$ - intellectual feedback of the production;

$\frac{I_r}{Y}$ - the share of social investments in national income (GNP).

The improvement of quality of the labor force, reducing unemployment and employment protection are important components of development for all countries.

There is the gap by the level of human capital between the developed and developing countries. Thus, in industrialized countries 80 scientists and technicians accounted for 1000 persons, and in developing countries - 9. In the developing countries there are over 900 million of illiterate, 1,5 billion people do not get medical care [6]. It is proved that Malaysia, Singapore, Indonesia have been able to overcome the negative impact of their tropical geographical environment and to develop much faster than tropical countries of Africa and Latin America, because they have directed many investments in human capital, especially in education [1, p. 94].

All the considered factors make the countries more inclined to transparency, they promote their economic growth, and it creates better conditions for the development of international trade.

Table 2.1

**The countries with the largest index of economic freedom in 2017 (%)**

| World Rank | Regional Rank | Country | Overall Score | Change from 2016 | Property Rights | Judicial Effectiveness | Government Integrity | Tax Burden | Government Spending | Fiscal Health | Business Freedom | Labor Freedom | Monetary Freedom | Trade Freedom | Investment Freedom | Financial Freedom |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | Hong Kong | 89.8 | 1.2 | 93.7 | 84.0 | 80.3 | 93.0 | 90.0 | 100 | 94.6 | 89.1 | 83.2 | 90.0 | 90 | 90 |
| 2 | 2 | Singapore | 88.6 | 0.8 | 97.1 | 91.5 | 87.9 | 90.5 | 90.1 | 80.7 | 95.1 | 90.8 | 84.3 | 90.0 | 85 | 80 |
| 3 | 3 | New Zealand | 83.7 | 2.1 | 96.1 | 88.5 | 89.9 | 70.8 | 46.5 | 97.8 | 91.8 | 86.2 | 90.1 | 87.4 | 80 | 80 |
| 4 | 1 | Switzerland | 81.5 | 0.5 | 86.9 | 77.6 | 80.3 | 70.9 | 67.5 | 95.8 | 76.8 | 72.2 | 84.4 | 90.0 | 85 | 90 |
| 5 | 4 | Australia | 81.0 | 0.7 | 81.7 | 92.9 | 74.8 | 63.2 | 59.0 | 84.6 | 89.3 | 84.1 | 86.4 | 86.2 | 80 | 90 |
| 6 | 2 | Estonia | 79.1 | 1.9 | 82.6 | 82.8 | 69.9 | 81.2 | 55.8 | 99.8 | 77.0 | 56.9 | 85.7 | 87.0 | 90 | 80 |
| 7 | 1 | Canada | 78.5 | 0.5 | 88.3 | 80.8 | 81.6 | 77.4 | 52.3 | 80.3 | 81.9 | 73.1 | 77.8 | 88.4 | 80 | 80 |
| 8 | 1 | United Arab Emirates | 76.9 | 4.3 | 76.7 | 85.0 | 74.2 | 96.4 | 67.4 | 99.2 | 81.1 | 80.9 | 78.4 | 83.5 | 40 | 60 |
| 9 | 3 | Ireland | 76.7 | -0.6 | 85.8 | 78.3 | 78.3 | 72.7 | 57.1 | 60.3 | 80.3 | 73.6 | 87.6 | 87.0 | 90 | 70 |
| 10 | 2 | Chile | 76.5 | -1.2 | 68.2 | 63.7 | 70.5 | 77.6 | 82.2 | 96.1 | 72.3 | 64.3 | 82.2 | 86.4 | 85 | 70 |
| 11 | 5 | Taiwan | 76.5 | 1.8 | 86.5 | 67.7 | 70.5 | 75.3 | 89.5 | 83.7 | 93.4 | 55.0 | 85.2 | 86.2 | 65 | 60 |
| 12 | 4 | United Kingdom | 76.4 | 0.0 | 93.8 | 93.0 | 78.3 | 65.1 | 41.9 | 40.4 | 89.9 | 72.8 | 85.0 | 87.0 | 90 | 80 |
| 13 | 5 | Georgia | 76.0 | 3.4 | 55.1 | 66.5 | 65.0 | 87.3 | 74.4 | 93.5 | 87.2 | 75.9 | 78.2 | 88.6 | 80 | 60 |
| 14 | 6 | Luxembourg | 75.9 | 2.0 | 85.8 | 77.0 | 78.3 | 64.5 | 46.0 | 99.0 | 68.6 | 43.8 | 86.2 | 87.0 | 95 | 80 |
| 15 | 7 | Netherlands | 75.8 | 1.2 | 87.4 | 69.9 | 85.7 | 53.2 | 37.0 | 83.0 | 80.2 | 70.5 | 85.8 | 87.0 | 90 | 80 |
| 16 | 8 | Lithuania | 75.8 | 0.6 | 73.0 | 62.4 | 69.7 | 86.9 | 64.1 | 93.6 | 79.1 | 63.6 | 90.0 | 87.0 | 70 | 70 |
| 17 | 3 | United States | 75.1 | -0.3 | 81.3 | 75.1 | 78.1 | 65.3 | 55.9 | 53.3 | 84.4 | 91.0 | 80.1 | 87.1 | 80 | 70 |
| 18 | 9 | Denmark | 75.1 | -0.2 | 86.7 | 68.5 | 84.9 | 37.2 | 5.7 | 95.4 | 93.9 | 85.8 | 85.5 | 87.0 | 90 | 80 |
| 19 | 10 | Sweden | 74.9 | 2.9 | 88.6 | 82.2 | 87.4 | 44.4 | 21.7 | 93.4 | 90.8 | 53.2 | 85.3 | 87.0 | 85 | 80 |
| 20 | 11 | Latvia | 74.8 | 4.4 | 72.6 | 59.7 | 67.3 | 84.7 | 57.4 | 95.0 | 79.8 | 72.0 | 86.5 | 87.0 | 75 | 60 |
| 21 | 1 | Mauritius | 74.7 | 0.0 | 64.4 | 72.6 | 44.3 | 92.0 | 81.5 | 74.9 | 78.2 | 68.8 | 81.1 | 88.7 | 80 | 70 |
| 22 | 12 | Iceland | 74.4 | 1.1 | 85.0 | 71.5 | 71.5 | 70.9 | 41.1 | 90.6 | 90.2 | 62.6 | 81.2 | 88.0 | 80 | 60 |
| 23 | 6 | South Korea | 74.3 | 2.6 | 77.8 | 59.9 | 67.3 | 73.7 | 68.9 | 97.4 | 90.6 | 57.0 | 84.0 | 79.5 | 65 | 70 |
| 24 | 13 | Finland | 74.0 | 1.4 | 90.6 | 82.7 | 90.0 | 66.6 | 0.0 | 77.3 | 90.2 | 53.4 | 85.1 | 87.0 | 85 | 80 |
| 25 | 14 | Norway | 74.0 | 3.2 | 86.7 | 83.3 | 88.3 | 55.6 | 38.5 | 98.4 | 89.5 | 48.8 | 75.8 | 87.7 | 75 | 60 |
| 26 | 15 | Germany | 73.8 | -0.6 | 82.9 | 79.5 | 77.7 | 61.9 | 41.4 | 89.9 | 86.6 | 42.8 | 85.9 | 87.0 | 80 | 70 |
| 27 | 7 | Malaysia | 73.8 | 2.3 | 85.3 | 67.3 | 51.8 | 85.3 | 78.7 | 76.5 | 90.8 | 73.1 | 85.3 | 81.2 | 60 | 50 |
| 28 | 16 | Czech Republic | 73.3 | 0.1 | 70.3 | 55.9 | 55.9 | 82.9 | 45.3 | 92.0 | 67.2 | 77.7 | 85.8 | 87.0 | 80 | 80 |
| 29 | 2 | Qatar | 73.1 | 2.4 | 74.8 | 63.0 | 59.0 | 99.6 | 71.2 | 97.4 | 68.1 | 65.4 | 80.6 | 83.1 | 55 | 60 |
| 30 | 17 | Austria | 72.3 | 0.6 | 86.0 | 81.8 | 75.2 | 50.3 | 19.3 | 79.7 | 76.9 | 67.6 | 83.4 | 87.0 | 90 | 70 |

Source: [23]

## 2.2. Role of international trade in economic growth

### 2.2.1. What types of economic growth are known?

International trade can be considered from two sides: as an engine of economic growth and a derivative of economic growth. Empirical researches of famous economists M. Michalopoulos, K. Jay, M. Mikaeli, A. Kruger, B. Balass indicate the role of international trade in economic development. The results of their works show the several facts:

- the growth rate of GNP and export growth rate are highly correlated with each other;
- there is a very strong correlation (0,38) between the change in the share of exports in GNP and rates of change of GNP. This relationship is particularly strong in countries with more developed industrial potential, but wasn't noticed in the least developed countries, indicating that the growth under the influence of export can be in case when the country achieves the minimal initial level of development;
- the increase in the growth rate of export revenues by 1% each year is connected with increase in the rate of growth of GNP by 0,1% [6].

International trade contributes to economic development of the countries, creating an opportunity to implement their significant comparative advantages and to develop the new ones. It stimulates faster and more efficient use of internal resources and enables to get the benefits and advantages of specialization and participation in the international division of labor. The countries have the opportunity to meet their demand for raw materials, capital goods and technology that are not manufactured or produced by local enterprises with high costs, to increase production based on demand of the world market on those products for which the countries have comparative advantages of specialization.

Additional demand due to the global market helps to overcome the small domestic market, to increase the effect of economies of scale due to access to the large and diverse markets. International trade not only directly affects the rate of reproduction. Multifaceted indirect effect is connected with the creation of numerous businesses that serve the external sector (adjoining and ancillary manufactures, suppliers, subcontractors) and help to overcome inertia; they are another one component of the economic growth).

Change in exports (supply of goods on export) and imports (demand for foreign goods) depends on changes in the terms of trade. This dependence is characterized by the concepts of "elasticity of exports" (relative supply of exports) and "elasticity of imports" (the relative demand for imports) [9].

The elasticity of imports ($E_{im}$) is the change in the demand for imports, resulting from the changes in the terms of trade. The elasticity of imports is measured as the ratio of percentage change in import volumes to the percentage change in the price of import, i.e.:

$$E_{im} = \frac{\Delta IM(\%)}{\Delta P(\%)} \qquad (2.2)$$

If the prices for imported goods fall, the volume of import increases, and if the prices rise, import reduces. Demand for import considered to be elastic if $E_{im}>1$. This means that the decline in prices for imported goods by 1% led to an increase in demand for more than 1%. Demand for import considered to be inelastic if $E_{im}<1$. This means that the decline in the price for imported goods by 1% led to increased demand for less than 1%.

The country will increase the costs of import when prices fall (because falling of the import prices means improving terms of trade), if import demand is elastic, as demand for imports increased to a greater extent than their price falls.

The country will reduce the costs of import if import demand is inelastic. But as the volume of imports is limited by abilities of exports (export earns money for import), in case of the elasticity of import and fall of its price, the export volume should be increased.

The elasticity of exports (Ex) is the change in the supply of goods for export, resulting from the changes in the terms of trade. The elasticity of exports is measured as the ratio of percentage change in export volumes to the percentage change in the price of import, i.e.

$$E_x = \frac{\Delta X(\%)}{\Delta P(\%)} \qquad (2.3)$$

If the prices for imported goods fall, export volumes increase, and if the prices rise, export volumes reduce.

Thus, the elasticity of import demand and elasticity of supply of goods for export are closely interrelated with each other. High elasticity shows the maturity of the market mechanism that allows manufacturers to quickly respond to changing prices. The low elasticity indicates insufficient development of mechanism of regulation of economic processes that creates serious economic problems for society.

International trade can be considered as a derivative of economic growth i.e. economic growth directly affects the development of international trade. It distributes domestic production opportunities of the country, contributing to the growth of cheap exports, entering new markets. But at the same time reducing export prices could lead to the fact that countries-importers of these products will get all the benefits of increased economic growth. The nature of the impact of economic growth on international trade depends on which factors of production increase - import substitution or export broadening [9].

From the perspective of influence on international trade economic growth could be export-led growth**,** import substitution or neutral.

If the output of the country of export goods increases in greater proportion than the production of goods that may be the subjects of imports, economic growth, which results in more than proportional distribution of trade, is called export-led growth**.**

Export-led growth is determined by increase in production of export goods in the country. The increase of their supply in the world market leads to the decrease of the relative prices, as the country is forced to sell more of its export

goods to export, the relative prices of which are falling, in order to buy the previous quantity of imported goods, the relative prices of which are growing. As a result, export-led growth leads to worsening of the terms of trade in the given country and to improvement in the countries - trade partners.

If the country's consumption of product, which is the subject of imports, increases in the greater proportion than the country's consumption of product which is intended for export, then the influence of economic growth on consumption will cause the spread of trade in even greater proportions and will be called import substitution.

Import substitution growth is determined by increase in production in the country of import substitution products. Extension of the domestic production leads to a fall in demand for imports, relative prices of import and increase in the relative price of exports. Thus, import substitution growth leads to improved terms of trade (reduced import demand causes a decrease in import prices) of the given country and to the deterioration of them in the countries-trading partners.

Import substitution type of domestic economic growth and export-led growth in the rest of the world are beneficial for a particular country, as the country's terms of trade with other countries are improving. Export-led type of domestic economic growth and import substitution growth in the rest of the world make worse the terms of trade for given country with the rest of the world.

The increasing volume of international trade without changing the terms of trade between countries is understood under the neutral growth of trade. This increase of trade is theoretically possible if the growth of all factors of production occurs with the same rate in all countries.

Economic growth, depending on the terms of trade and the effect of growth has different effects on the welfare of the country. The positive effect of growth indicates improving the welfare of the country. Otherwise, the welfare decreases or remains unchanged. If the effect of growth is positive and the country's terms of trade improve as a result of economic growth and trade, then the welfare of the country increases. If they are negative, then the welfare of the country reduces, and if they change in opposite directions, the welfare of countries may get worse, or become better or remain unchanged depending on the relative values of these indicators.

There is also immiserizing growth, which is defined as a situation in which the deterioration of terms of trade blocks the positive effects derived from the economic growth [8]. This is the extreme economic model of increase in supply, where hypertrophied export-led growth faces a sharp decrease in terms of trade.

There are 3 main conditions for the immiserizing growth:

- the growth should be directed in the direction of spreading supply of exports goods. The growth of export supply should be so essential to influence the world prices;

- foreign demand for export commodities of the country should be so inelastic with respect to prices that spreading of exports will lead to significant reduction in global price for given export commodity;

- the country is so heavily dependent on international trade, that significant deterioration in its terms of trade will reduce the national welfare.

However the model of immiserizing growth is very rare occurrence in real life.

### 2.2.2. Describe the competitive export as a component of the dynamization of growth

Increase in the competitiveness of domestic production plays an important role for economic development of the country. The competitiveness is "the level, which can be reached by country, in free and fair conditions, producing goods and services that meet the requirements of international markets and simultaneously maintaining and increasing real incomes for a long time" - as it is defined by the Organization for Economic Co-operation and Development [9].

The relationship between the environment of country and specific process of wealth creation and the impact of certain factors on this process are accounted in the analyzing the value and role of competitiveness in modern world. Twelve factors of competitiveness underlying the calculation of the Global Competitiveness Index (GCI) are determined in "Global Competitiveness Report" that is issued by World Economic Forum (WEF) in collaboration with the Center for International Development at Harvard University:

1) institutions;
2) appropriate infrastructure;
3) a stable macroeconomic framework;
4) good health and primary education;
5) higher education and training;
6) efficient goods markets;
7) efficient labor markets;
8) developed financial markets
9) the ability to harness the benefits of existing technologies;
10) market size, both domestic and international;
11) by producing new and different goods using the most sophisticated production processes;
12) innovation.

Global Competitiveness Index is a synthetic indicator. It consists of statistics (1/3) and expert assessments (2/3). Top managers of companies all over the world are interrogated for creating these expert assessments.

Global Competitiveness Index on average equals to 5,44 in developed countries, 4,27 - in transition countries, 3,43 - in the least developed countries.

Export competitiveness is one of the important indicators of a country's competitiveness. UNCTAD's experts identified the main characteristics of competitive export. These are:

- the share of country's exports in international markets;
- diversification of "export basket" of the country;
- the growth rate of export;

- modernization of technology and growth of skills of staff in the export sector;

- expansion of the number of firms-exporters that can compete internationally;

- the share of national added value in exports of the country;

- growth of real wages in the sphere of exporting;

- achievement of economies of scale [9].

The presence of all these features allows to assess the export as competitive.

Competitive export allows the countries to obtain more foreign currency. So, these countries have the opportunity to import goods, services and technologies that are needed for increasing productivity, living standards and internal capacity. Owing to it the enterprises begin to focus on higher standards; they have the opportunities for easy access to information, feel competitive pressure due to competitive export. This fact encourages the local firms to put generous efforts for mastering new skills and capabilities.

There are four criteria, which distinguish competitive export from usual export [9]:

- stability of export that is established and increasing volumes of export, the share on the relevant product and regional international markets, the integration with foreign markets;

- high level of efficiency of export operations, that is evidence of the price competitiveness and the realization of comparative advantages;

- the quality of export goods and services and their innovativeness, that ensure long-term presence on the global market and demand of consumers for the products of the company, according to the theory of R. Vernon's product life cycle;

- the conscientiousness of a competition, i.e. the export operations are carried out in a competitive environment without the use of protective measures that are prohibited by international agreements and instruments, that distort the market mechanism (Fig. 2.1).

Thus, export competitiveness of the country, of the firm shows the effectiveness of their integration into the world economy and adaptation to contemporary global economy.

Economic growth and the increasing of country's competitiveness require the adaptation to structural changes that occur in international trade. These changes characterize the structural changes in the production under the influence of innovations, changes in demand and the liberalization of trade regimes.

There are general structural changes, such as:

- falling share of raw products, products of primary processing of raw materials in international trade;

- the rapid increase of the share of knowledge-intensive goods in international trade;

- gradual increase of the share of intermediate goods, the growing importance of the trade in intermediate products, components, units.

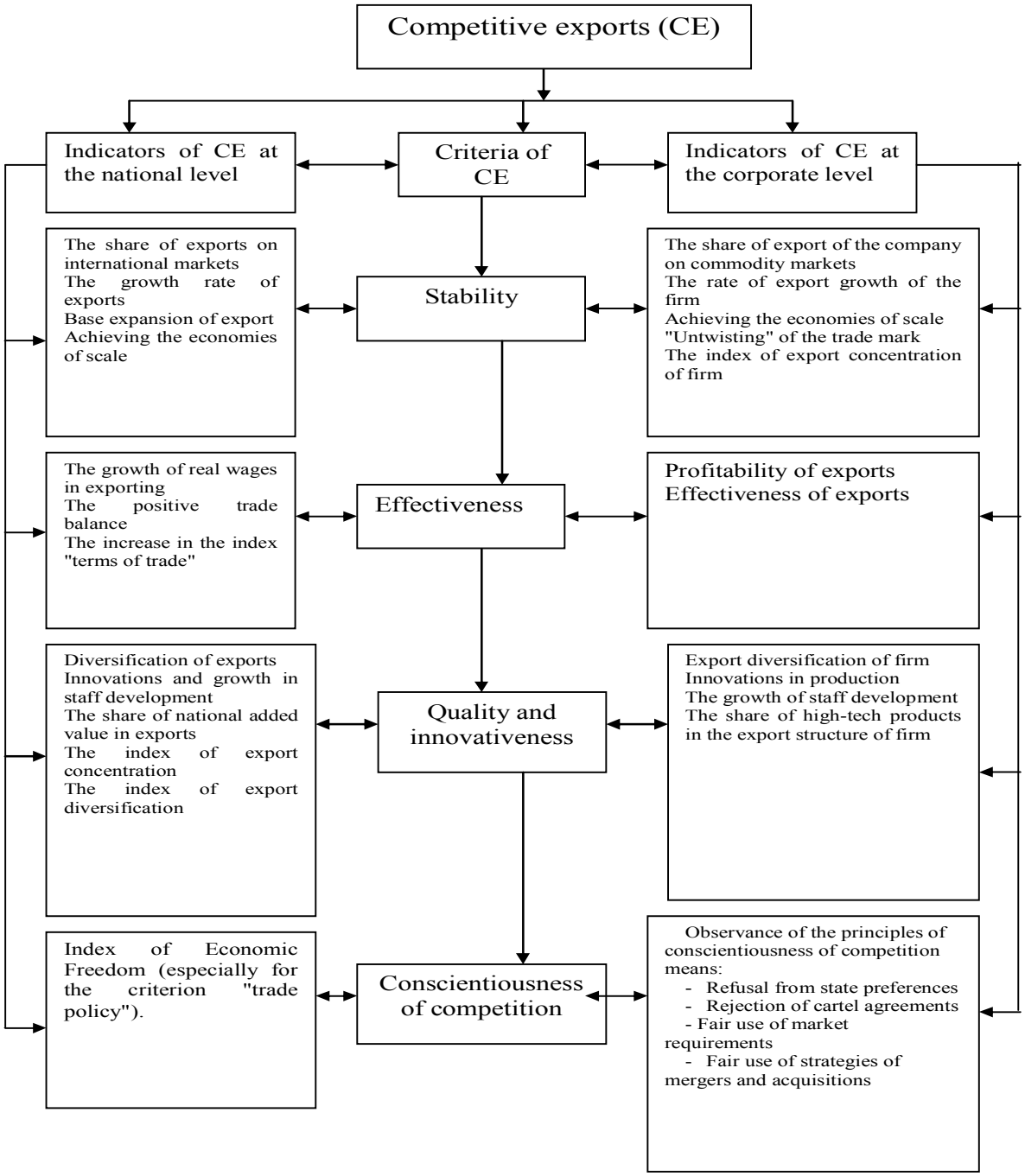



Fig. 2.1. The system of criteria and indicators of export competitiveness

# Chapter 3. International trade theories

## 3.1. Classical international trade theories

### 3.1.1. What are the essence, the significance and limitations of the mercantilism?

Mercantilism is the direction of economic thought that emphasizes the commodity character of production. It was developed by European scientists in XVII-XVIII centuries. It is the doctrine where the existing world is seen in static, but the wealth of nations is seen as a fixed phenomenon in every moment. Therefore, its adepts (T. Mun, A. Serra, A. Montchrestien) believed that growth of welfare of one country is possible by redistributing of existing wealth, that is through the pauperization of another country. Mercantilists associated the wealth with stocks of precious metals (gold and silver). ). In their opinion, the larger number of precious metals a country owns, the richer it is. Having more money in circulation stimulates the development of national production and the employment increase. A state, according to mercantilists, should:

- stimulate exports and to export more goods than import. This approach will provide the gold inflow;
- restrict the importation of goods, especially luxury goods that will provide positive balance of trade;
- forbid the production of the final products in its colonies;
- forbid the exportation of raw materials from the parent states to the colonies and allow free importation of raw materials, which are not obtained within the country;
- stimulate an export of mainly cheap raw commodities from the colonies;
- forbid any trade of its colonies with other countries, except the parent state, which can resell the colonial goods abroad only by itself.

Thus, the mercantilist policy of major countries was based on striving for maximum accumulation of money capital and maximum reduction of import, i.e. a state should sell as many goods as possible and should purchase as little as possible at the foreign market. Herewith, the country should accumulate gold. Mercantilists also considered that it is necessary to carry out the governmental control over all economic activities and justified the economic nationalism.

The role of mercantilism can be defined by following statements:

1. Mercantilism was the first attempt to create a theory of international trade, which directly linked trade relations with the domestic economic development of a country and with its economic growth
2. Mercantilists created one of possible models for the development of international trade on the basis of commodity character of production. They laid the foundations of categorical apparatus used in modern theories of international trade.
3. The balance of payments was firstly described [5].

However, mercantilists could not understand that the enrichment of one country could be carried out not only by means of pauperization of other ones it trades with, that the economic growth is possible not only as a result of redistribution of existing wealth, but also by means of its accumulation. In other words, they believed that a country could have benefit from trade only at the expense of another country that makes trade a zero-sum game.

Nowadays, the manifestations of neo-mercantilism are observed, when the countries with high rates of unemployment try to limit import in order to stimulate domestic production and employment.

Mercantilism school dominated in economy during 1,5 century. Huge number of possible restrictions operated in international trade at the beginning of the 18th Century. The rules of trade were contrary to the needs of production. There was a need for a transition to free trade.

The theory of international trade found its next development in the works of economists of the classical school.

### 3.1.2. What are the essence, the positive and negative features of the absolute advantage theory?

Development of international trade during the transition period of the developed countries to a large machine production led to the emergence of the absolute advantage theory, developed by A. Smith. He criticized mercantilism in his work "An Inquiry into the Nature and Causes of the Wealth of Nations" (1776). A. Smith believed that the wealth of nation depends not so much on the accumulated stock of precious metals, but on the possibility of economy to produce final goods and services. Therefore, the main task of the government is not the accumulation of gold and silver, but making arrangements to develop production on the basis of cooperation and division of labor. A. Smith was the first, who answered the question "Why is a country interested in international exchange?" He considered that two countries must benefit from the trade, when they trade with each other. When one of them does not win anything, it will refuse the trade. Not only selling, but also purchasing of goods at the foreign market can bring the benefits for the country. A. Smith tried to determine the types of products which are profitable to export and import, and also whence the benefits from trade arise.

The A. Smith's theory of international trade is based on the following preconditions:

- labor is the only factor of production. Only it affects the productivity and price of goods;
- full employment, i.e. all available labor forces are used in the production of goods;
- only two countries, which trade only by two products between each other are involved in international trade
- production costs are constant, and their reduction increases the demand of goods;

- the price of one product is expressed in amount of labor, which is spent on production of another product;
- transport costs for goods transportation from one country to another are not taken into account;
- foreign trade is carried out without any restrictions;
- international trade is balanced (import is paid by export);
- factors of production do not move between countries.

This theory became known as the absolute advantage theory, because it was based on the absolute advantage: the country exports the goods, which costs of production are lower than in the partner country, and imports the goods, produced abroad with lower costs. Both countries benefit from the specialization of each of them in the production of those goods, in which they have absolute advantage. This gives an opportunity to use the resources most effectively, resulting in the increasing of production of both goods. Increase of production of both goods represents the gain from specialization in production, which is divided between two countries in the process of international trade.

The main conclusion of the theory of absolute advantage is that every country benefits from international trade and this fact is decisive for forming the external sector of economy. International trade is not a zero-sum game, but a game with a positive result, i.e. division of labor is beneficial at both the national and international levels. However, nowadays only a small portion of international trade can be explained, by using the principle of absolute advantage (for example, some part of trade between the developed countries and developing ones). The overwhelming part of international trade, especially between the developed countries, is not explained by this theory, because it does not consider the situation when one of the trading countries has no absolute advantage in any commodity. This position was explained by D. Ricardo.

### 3.1.3. What are the essence, the importance and disadvantages of the comparative advantage theory?

A rule of international specialization, depending on absolute advantages, excluded countries without absolute advantage from international trade. The D. Ricardo developed the absolute advantage theory in his work “On the Principles of Political Economy and Taxation” (1817). He proved that the existence of absolute advantage in the national production of any commodity is not a necessary precondition for the development of international trade: the international exchange is possible and desirable in case of the presence of comparative advantages.

D. Ricardo's theory of international trade is based on the following preconditions:

- free trade;
- fixed costs of production;
- absence of international labor mobility;
- absence of transportation costs;
- lack of technical progress;

- full employment;
- there is only one factor of production (labor).

Comparative advantage theory states that if countries are specialized in the production of the commodities that have relatively lower costs in comparison with other countries, the trade will be mutually beneficial for both countries, regardless of whether the production in one of them is more effective than in the other one. In other words, exclusively a difference in relative costs of production of the commodities, regardless of the absolute amount of these costs, can be the basis for emergence and development of international trade.

Domestic prices are determined only by cost, i.e. by supply conditions in the D. Ricardo's model. But the world prices may also be determined by the world demand that was proved by the English economist John Stuart Mill. He showed at what price the exchange of goods between countries is carried out in his work "Principles of Political Economy".

In conditions of free trade the exchange of goods is carried out in such a proportion of prices that is set somewhere between the existing relative prices of goods within each of the trading countries. The final level of prices, i.e. the world prices, of mutual trade will depend on the level of world demand and supply for each of these products.

The price of imported goods is determined by the price of the goods, which should be exported, to pay for imports according to J.S. Mill's theory (the reciprocal demand theory). Therefore, the final proportion of prices in trade is determined by domestic demand for goods in each trading country. The world price is established based on supply and demand correlation. The level of the world price should be such, that the revenue from total exports can give the country the opportunity to pay import. However, analyzing the comparative advantages, not the market of separate product is studied, but the relationship between the markets of two products that are produced simultaneously in two countries. So it is important to consider not absolute, but relative amounts of supply and demand of goods.

Thus, this theory is the basis of determining the price of goods, taking into account the comparative advantages. But, its drawback is that it can be applied only to the countries of approximately the same size, when domestic demand in one of them can affect the price level in the other one. Countries can benefit from the trade (the economic effect) in the specialization of countries in trade of goods, in production of which they have comparative advantage. The country benefits from the trade, because it can get instead of its goods more necessary foreign goods from abroad than on the domestic market. Benefits from the trade are both the saving of labor costs and the growth of consumption.

The importance of the comparative advantage theory is the following facts:

- the balance of aggregate demand and aggregate supply was first described. The cost of goods is determined by the ratio of aggregate demand and supply for them, both domestically and from abroad;
- the theory is true regarding any quantity of goods and any number of countries, as well as for the analysis of trade between different entities. In this case,

country specialization in some goods depends on the ratio of wage levels in each country;

- the theory substantiated the existence of benefits from trade for all countries, taking part in it;
- the possibility to develop foreign economic policy on the scientific foundation appeared.

The limitation of the comparative advantage theory is in those presuppositions, on which it is based. It doesn't take into account the impact of foreign trade on income distribution within a country, fluctuations in prices and wages, international capital movements. Also, it does not explain the trade between almost identical countries, none of which has no a relative advantage over another, it takes into account only one factor of production – the labor.

### 3.1.4. What is the significance of the factor proportions theory and its testing by W. Leontief?

In the classical theories the trade between countries is explained by their different absolute and relative costs of labor to manufacture goods that is the comparative advantage arises only in the conditions of international difference in labor productivity. However, the reasons of the origin of comparative advantages of a country-trading partner are not explained in these theories.

The research of factors affecting the commodity nomenclature and volume of international trade, allowed the Swedish scientists E. Heckscher and B. Ohlin to clarify and supplement the key tenets of the comparative advantage theory and to formulate the concept of factors of production in 20-30 years of XX century.

In reality the development of the trade is based not only on differences in labor productivity, but also on differences in resources of the country (land, capital, and raw materials). E. Heckscher and B. Ohlin tried to prove that the different relative supply of production resources makes the difference in the relative prices of goods, which in turn, creates the preconditions for international trade.

The theory is based on the following preconditions:

- there are two countries, two commodities, one of which is labor-intensive and another one is capital-intensive, and two factors of production: labor and capital;
- each country is provided by the factors of production differently;
- technologies are the same in both countries;
- there is no international movement of factors of production;
- full specialization of countries in production of any product is not possible.

Heckscher and Ohlin formed the assumptions concerning the different factor-intensity of individual commodities (one commodity is labor-intensive, the other one is capital-intensive) and different factor-abundant of individual countries (one country has relatively more capital, the other one has relatively less capital). They did it in order to show the role of the structure of factors of production in determining the trends and consequences of international trade.

*Factor intensity* is an indicator that determines the relative costs of factors of production to create a certain product. For example, product B is relatively more capital-intensive than the product A, if the ratio of capital to labor in the production of goods is more than the ratio of the same cost of production of the product A.

*Factor abundance* of the country is an indicator that determines the relative factors endowment of the country.

For example, if you define factor abundance through the absolute sizes of the factors of production, the country where the ratio of total capital to total labor is greater than in other countries will be considered as capital-abundant or capital endowment country.

The essence of the Heckscher-Ohlin theorem is in the next point: each country will export that factor-abundant goods, for the production of which it uses relatively abundant and cheap factors of production, and will import the goods, which require relatively scarce and expensive resources.

The Heckscher-Ohlin theorem considers that trade is based on comparative advantages and shows that the difference in the factor-abundance of the countries is the reason of the comparative advantages. The reason of the differences between the relative prices of goods in different countries and the trade between them countries is the difference in factor-abundance of the countries.

The Heckscher-Ohlin theorem had further development in the factor-price equalization theorem (the Heckscher-Ohlin-Samuelson theorem). It answers the question: if the relative price of labor-intensive (capital-incentive) goods changes, how will the relative price of the labor (capital) change in a labor-abundant (capital-abundant) country?

The essence of the factor-price equalization theorem is in the next facts: international trade leads to the equalization of the prices for the goods, and this, in its turn leads to the equalization of the prices for the factors of production, by means of which these goods are produced.

The theorem has some limitations: it considers the world in static, determining the factors affecting the macroeconomic equilibrium at a certain time, and does not take into account the fact that the absolute amounts of factors of production are different in different countries, and therefore the absolute amounts of income for capital will be greater in the country, which is endowed with more capital. So, full equalization of the prices for the factors of production as a result of trade is impossible.

However, despite the disadvantages, the factor proportions theory is the important instrument for the analysis of international economy, showing the principle of general equilibrium which governs the economic development. This model of international trade is the most suitable for explaining the processes of trade between the parent states and colonies, when the first ones performed as the industrialized countries, and the second ones as agrarian and raw-material-producing appendages.

Nevertheless, in the analysis of the trade flows in the “triangle” of the United States – Western Europe – Japan, the Heckscher-Ohlin theorem faces difficulties and contradictions, which attracted the attention of many economists,

particularly, the American Nobel Laureate W. Leontief. He applied the Heckscher-Ohlin theorem to the analysis of foreign trade of the USA. He showed by means of several empirical tests that the terms of the theory do not keep in practice. Since the USA was a capital abundant country with relatively high wages, according to the theory, it should export capital-intensive goods, and import labor-intensive ones. However, they exported more labor-intensive goods in reality, and capital intensity of American imports exceeded exports by 30%. This fact meant that the USA was not capital abundant, but labor abundant country. The results of the Leontief's research were named "Leontief's paradox": the Heckscher-Ohlin theorem is not confirmed in practice, because labor abundant countries export capital-intensive products, and capital abundant countries - labor-intensive ones.

W. Leontief explains this paradox in next facts: the USA exported the goods, whose production was impossible or inefficient due to the lower labor skills in other countries. W. Leontief created the model of "labor skill", according to which, the production includes four factors instead of the three factors (capital, land, labor). These four factors are: skilled labor, unskilled labor, capital and land. The relative welfare of professional staff and skilled labor predetermine the export of goods, the production of which requires the use of skilled work. The surplus of unskilled labor contributes to the export of goods, the production of which does not need the high qualification.

Nobody can give the convincing answer to the question about the reason of Leontief's paradox. The main explanations are the following: 1947 year, analyzed by Leontief, was not representative; the two-factor model (capital and labor) was used; American tariffs, to a considerable extent, protected domestic labor-intensive industries; human capital was not taken into account. The testing of the Heckscher-Ohlin theorem, by means of the data of a large number of countries, confirmed the existence of Leontief's paradox in other countries.

### 3.2. What is the essence of the standard model of international trade?

Standard model is the main theoretical tool for analyzing international trade. Its basic concepts were established by Irish economist F. Edgeworth and Austrian economist G. Haberler in different years.

The standard model of international trade regards an aggregate demand and aggregate supply of goods. The offer in the market is characterized by the marginal rate of transformation. It means the number of items II, production of which country should refuse to produce each additional unit of goods I. The demand of the market is characterized by a marginal rate of substitution. It means such a number of items II, production of which country should refuse to produce one additional unit I and thus preserve the current level of consumption.

Increasing costs of substitution are basic for the standard model. It means that the country should abandon the issue of not constant but the growing number of other goods, for the production of each additional unit of a product. The factors of production are not homogeneous and are used in different proportions. These facts can lead to increasing costs of substitution. So, the country should use

resources that are becoming less effective or less suitable for the production of the product in process of increase of any good.

The full specialization of the countries is not carried out at increasing costs of substitution. The relative prices of goods become closer until they become equal in case of the specialization of each country. The extension of increase of their production of the goods, that create comparative advantage, is not profitable from that moment, because the equilibrium price is already reached. This is carried out up the moment of complete specialization of countries in the production. Further specialization does not make sense, because the increasing costs of substitution will be more expensive than importing goods.

Gain from trade consists of two components: the gain from exchange (these are the benefits that the country receives only because it was involved in trade relations with other countries) and gain from specialization (these are the benefits that the country receives due to the fact, that in the terms of trade the country concentrated its efforts on the production of goods in production of which it has a comparative advantage).

In standard model the original assumption of relative advantages is the difference in production capabilities and consumption levels. Its separate case is the trade, based on differences in tastes of the two countries and carried out in conditions of complete coincidence of production capabilities of countries-trading partners. At this model of trade the production structure becomes more identical as the countries depart from autarky.

Standard model was further elaborated in general equilibrium model in international trade. This general equilibrium model connects the supply and demand for goods in the country with supply and demand for them from abroad. General equilibrium is the simultaneous balancing of supply and demand for goods in domestic and international trade, i.e. on domestic and global market. It is based on the concept of mutual demand, which combines elements of supply and demand, and shows the number of imported goods, which are required for the country to encourage it to export a certain amount of its goods. The model also considers more accurate method of determining the relative prices of goods in terms of trade through the exchange curves that reflect the country's desire to export and import at different relative prices.

General equilibrium can be reached in the case when export of goods I of country A is equal to import of goods I in country B, and import of commodity II of country A is equal to export of commodity II of country B.

### 3.3. Alternative concepts of international trade

The use of classical theories is complicated by the lack of clarity in their empirical confirmation. Some assumptions, on which they are based, do not exist in real life. Therefore, they cannot be adapted to the most modern forms of international trade.

A number of theories with neo-technological approach appeared due to the rapid development of high technology and high-tech industries and increasing pace

of the growth of international trade in the second half of the twentieth century. They are called alternative theories because their authors try to explain the realities and perspectives of international trade by dynamic comparative advantages that occur or are created, used and then disappear; formulate causes and consequences of individual countries participation in international trade exchange from other positions than in the classical theories. Emphasis is placed on demand, imperfect competition, and economies of scale, qualified labor and technological advances as key elements of international specialization.

### 3.3.1. What is the essence of the technology gap theory?

American economist Michael Posner developed technological gap theory in 1961. The application of this concept in the analysis of international trade meant the rejection of the assumption of Heckscher-Ohlin theory, regarding the use of identical production technology of similar goods to all countries. M. Posner believed that the same technology is not always used simultaneously in different countries and its dissemination takes some time on an international scale. As a result, one country can use one or another new technology, while the other country has not received this innovation yet. In addition, the innovator firm is not interested in the rapid dissemination of its technology in the form of public domain [7].

M. Posner believes that most of the trade between developed countries is based on the introduction of new manufacturing processes and new products. The firm, which introduces a new product, may use its monopoly on exports until firm imitators will not appear with similar products on the market. Such temporary monopoly is often based on patents and licenses, the issuance of which stimulates the development of new inventions and technologies. Technological leadership of one company is really capable to add a new preference to the country of commodity's origin.

This theory states that the country may hold the position of leading exporter only on condition of the constant innovative activity in the global market. However, this model has some disadvantages because it does not explain the scales of the technological gap, features of their occurrence and elimination.

### 3.3.2. What is the significance of the product life cycle theory?

The basic positions of the product life-cycle theory were developed by Raymond Vernon in 1966. It was based on the concept of the product life-cycle, proposed by the specialists of Harvard Business School in the early 1960s, who declared that sales of the products and profits from them change over time. There are four main stages of goods life cycle:

1. The stage of appearance of a new product on the market shows the low sales. The costs of implementation of this product make the profits low too.

2. The stage of growth is characterized by growth of profits and sales growth.

3. The development of competition and market saturation stabilize the sales and profits in the stage of maturity.

4. The sales and profits fall off in the stage of decay.

R. Vernon proves that an important role is played by technologies and researches in building up of trade relations between countries. The industrialized countries have much more technological and scientific possibilities to develop a new product. Companies may have comparative advantages in science and technology, which will lead them to a competitive advantage in the new products development in countries such as the United States. These firms most probably will export the goods developed by them to stretch the stage of growth of their product life-cycle. On the other hand, American import will have a tendency of advantage of the goods, the production of which does not much depend on technology or scientific research.

### 3.3.3. What is the essence of the representative demand theory?

The representative demand theory was developed by a Swedish economist Stefan Linder in 1961. He tried to explain the trade structure of individual country there, and built his analysis of international trade exclusively on the problem of demand [6].

He takes as a basis the volume of exchange of similar goods between countries with a comparable level of development, without regard to the Heckscher-Ohlin theorem. A new approach was founded on the following principles:

- the conditions of production depend on the conditions of demand. Efficiency of production is as high as demand;
- the conditions of domestic production depend mainly on the domestic demand. It is the domestic representative demand that is the basis of production and is necessary, but not a sufficient condition to export the goods;
- the foreign market is just a continuation of the internal one, and the international exchange is only the continuation of the interregional one.

S. Linder made a conclusion, that international trade in manufactured goods will be more intensive between the countries with the similar income levels, in comparison with product turnover between the countries with different income levels, while the exchange is carried out by identical or similar goods. The convergence of countries according to the level of development requires alignment of the quality of goods.

However, the Linder's theory does not explain what manufactured goods a country will export and which of them it will import.

### 3.3.4. What is the essence of economies of scale theory?

The theory of economies of scale is not related to the theories of comparative advantages or to the ratio of the factors of production. It recognizes

the availability of different levels of market's monopolization and non-optimal using of factors of production.

As the factors of production growth, the cost-per-unit reduces as a result of different factors. These are increased specialization of production, the relatively slow growth in auxiliary departments than in the scale of the production, technological economy.

Economies of scale is the production development, at which the growth of unit production factors costs leads to increased production of more than one unit.

The theory of economies of scale explains the trade between the countries that are so close in factor endowments that even minor discrepancies in its endowment cannot explain the mutual trade, and also explains the trade between the countries by close to or technologically homogeneous products. According to this theory, production must be placed to ensure the growth of the economics of scale effect of production in countries with a large domestic market. The base of this concept is the assumption that the developed countries are endowed with factors of production in almost equal proportions, and therefore trade between them is suitable in the event that they specialize in the manufacture of goods of different industries due to what costs are reduced as a result of mass production. The number of firms and a variety of goods manufactured by them increase and the price of goods reduces because of the international trade development. This was reflected in the works of the American economist Paul Krugman [11].

### 3.3.5. What is the significance of intra-industry trade theory?

There are two flows, which create international trade in terms of monopolistic competition from the standpoint of differentiation of production nomenclature: inter-industry and intra-industry trade [8].

Inter-industry trade is the export and import of goods which belong to different product groups. Inter-industry exchange can be explained by the theory of Heckscher-Ohlin.

Intra-industry trade is the export and import of goods, which belong to the same product group.

Intra-industry exchange does not display the presence of competitive advantages. Its development is stimulated by means of economies of scale and production of differentiated products. The trade develops in the conditions of the same or similar provision with the factors of production and leads to higher incomes for all factors of production. It is normally carried out between the developed countries or countries of approximately the same size. Countries sell parts, components of products, differentiated products of branches that produce the industrial products.

Index of intra-industry trade (U) determines the volume of intra-industry trade between the countries. It is calculated as follows:

$$U = 1 - \frac{|X - IM|}{X + IM}, \qquad (3.1)$$

where X – volume of export of particular industry and commodity group;
IM – volume of imports of particular industry and commodity group.

How the industry or commodity group is defined, it is influences the value of this index. The larger the scale of the industry is, the higher the value of U is and the greater the probability that the country will export some types of differentiated goods and will import the other commodities is. The use of index U is very important in determining the differences in intra-industry trade of certain industries, as well as for an explanation of changes in intra-industry exchange within the same industry.

Inter-industry trade is carried out only by the products of different industries. Inter-industry trade and intra-industry trade occur in the cases of product differentiation. The greater the countries are similar in provision with the factors of production, technologies then the share of intra-industry trade between them is bigger.

# Chapter 4. International trade policy

## 4.1. Why is it important to know the main types of trade policy?

Regulation of international trade supposes purposeful influence of the state on trade relations with other countries. The main goals of foreign trade policy are:

- the volume change of exports and imports;
- changes in the structure of foreign trade;
- providing the country with the necessary resources;
- the change in the ratio of export and import prices.

There are three general approaches to the regulation of international trade:

- a system of unilateral measures. The instruments of state control are used by the government unilaterally and they are not coordinated with the trading partner in this system;
- the undertaking of bilateral agreements. Trade policy measures are coordinated between trading partners in such agreements;
- the undertaking of multilateral agreements. Trade policy is coordinated and regulated by the participating countries (the General Agreement on Tariffs and Trade, the General Agreement on Trade in Services which are included in the system of the WTO agreements, agreements on trade of the EU's member-states) [10, p.170].

The state can use each of approaches in any combination.

The main feature of government regulation of international trade is the possibility of application of two different types of foreign trade policy in combination: liberalization (free trade policy) and protectionism.

The minimum of state interference in foreign trade, which is developed on the basis of free market forces of supply and demand, is understood under the **free trade policy**. The state policy, which provides the protecting of the domestic market from foreign competition through the use of tariff and non-tariff trade policy instruments, is **called protectionism.**

These two types of trade policy characterize the measure of state intervention into international trade.

The basic regulator of foreign trade is a market in the conditions of policy of liberalization. The protectionism practically excludes the operation of free market forces. It is assumed that economic potential and competitiveness of separate countries are different at the world market. Therefore a free action of market forces can be unprofitable for the less developed countries. Unlimited competition from the side of more powerful states can lead to economic stagnation and the formation of inefficient economic structure in less-developed countries.

The protectionism policy contributes to the development of certain industries in the country; often it is a necessary condition for industrialization of agrarian countries; it causes the unemployment reduction. However, the removal of foreign competition reduces the interest of domestic producers in the

implementation of scientific and technological progress, improving the efficiency of production.

There are four forms of protectionism:

- selective protectionism, directed against some countries or some commodities;
- industrial protectionism, which protects some industries;
- collective protectionism: the countries, which belong to economic integration organizations, conduct this form to the countries, which do not belong to a union;
- hidden protectionism, which is carried out by methods of domestic economic policy.

In every country there are economic, social and political arguments, and the groups of pressure in favor of protectionist measures.

The main arguments for restrictions on foreign trade are:

- necessity of defense providing;
- increase of domestic employment;
- diversification for the sake of stability;
- protection of infant industries;
- protection from dumping;

*Necessity of defense providing.* In time of peace the protection of industries that are necessary to military production, must be provided with the purpose not to be dependent on foreign suppliers during the war. It sounds pretty convincing. However, the following facts clarified upon closer examination of this argument. Firstly, almost any industry can be defined as a category, necessary for military production. Secondly, such a policy can be effective if we assume that it will be no measures in response that is unlikely. Therefore, most economists believe that alternative methods (for example, the direct subsidies) of protection of strategic sectors are more effective both economic and socially.

*The increase of domestic employment*. A major reason for protection is unemployment. Unemployed persons form the most powerful pressure group in support of import restrictions as a condition of employment growth in the country.

In fact, the claim that free trade can lead to unemployment is reasonable. Import reduces the demand for certain goods of domestic production and leads to unemployment in areas where they are made. However, unused resources can not stay without using, because we live in a world with limited resources. The countries that produce goods for export require labor inflows, offsetting the loss of jobs in industries that compete with imports in the absence of restrictions in trade. Free trade is not so much affect the overall employment, as it changes the type of employment. It is believed that unemployment resulting from free trade is the short-term problem that can be solved by alternative methods, professional retraining, moving to a new place premium to money unemployment benefit.

Expenses related with a possible increase in prices and costs, which

resulted in unemployment, must be compared in the process of deciding on the import restrictions. It is necessary to take into account the social costs that affect people and amplified by the fact that potential candidates for dismissal are often those people, who are unable to find alternative employment.

*Diversification for the sake of stability*. The essence of this protectionist argument lies in the fact that trade barriers are necessary for industrial diversification, which is the basis of reducing dependence of country on socio-economic and political conjuncture, which is made on the world markets of certain products.

In fact, the diversification helps to protect the domestic economy from the effects of international political developments, the decline in production abroad from random fluctuations in supply and demand for one or two specific products and thus provides great internal stability. But it should be remembered that the economic costs of diversification can be very significant and very inefficient (especially in countries with monocultural economies). In addition, the argument for the sake of diversification stability can not practically be applied to the industrialized countries with the already diversified economic structure.

*Protection of infant industries*. The logic of the argument to protect infant industries lies in the fact that their production is competitive only after some time. Enterprises of this sector must achieve a competitive level of production costs due to economies of scale, training and experience of workers over time, etc., and the only protective measures may be taken off. For example, the production of automobiles in Brazil and South Korea has reached the high competitiveness due to national protection. But there are other examples where protectionist measures did not give the expected results. Thus, the production of automobiles remained weak even after many years of functioning in Argentina and Australia. High probability, that future benefits will exceed the initial costs and high quality products will be provided, is necessary that the policy of protecting infant industries was effective.

*Protection from dumping*. Dumping or the sale of goods lower than their costs can be applied generally to eliminate competitors, for capturing monopoly position and price increases in the future. In this sense, dumping - is “economic piracy”. It quite deserves anti-dumping duty. But dumping should not be used as an excuse for continuing trade barriers as a form of price discrimination. In addition, the result of the law of comparative advantages may be issued as dumping. But it undermines the very basis of international trade in the end.

Thus, the art of trade policy is in striving for a balance between the two tendencies: free trade and protectionism. Each policy has its positive qualities and disadvantages, which depend on the circumstances, time and place of use. (Tab.4.1.).

Table 4.1.

**Applying the principles of free trade and protectionism and their influence on economy**

| Free trade | | Protectionism | |
|---|---|---|---|
| **Advantages** | **Disadvantages** | **Advantages** | **Disadvantages** |
| Specialization of countries, that facilitates the development of competition | The danger of over-specialization and increasing economic dependence on other countries | Creation and development of new industries | The problem of industry choice:<br>- support for inefficient production;<br>- saving of production backwardness |
| The growth of economic development of countries, that are involved in the international division of labor | The absence of state regulation in foreign trade does not allow the country to fulfill its social functions | Protective measures for manufacturers. The growth of employment | Problems regarding:<br>- saving of the doomed sectors;<br>- spending of funds that are not reimbursed |
| Efficient use of resources (factors of production). Increased consumption and prosperity of the country | More developed countries will benefit more than the less developed countries. Less developed countries may not get benefit from specialization due to non-compliance of export and import prices | The development of industries that supply raw materials and supplies in ”protected” production. Liquidation of depending on the supply of raw materials | Human resources can be used more effectively in other areas. Crisis situations in liquidation of the doomed industries. Exhaustion and decrease of the national wealth |
| The elimination of the military-political dependence was permitted by the classics of free trade theory | | The creation of own defense industry:<br>- support of the volume of production;<br>- retaining qualified potential | Problems related to:<br>- elimination of unpromising industries;<br>- application of diversification programs |

The instruments of state regulation of international trade are:

- tariff methods that regulate mostly the imports and protect domestic producers from foreign competition, because they make foreign goods less competitive;
- nontariff methods, which regulate both imports and exports (they help to bring more domestic products on the world market, making them more competitive).

Two indicators are used for the oriented determination of the nature of trade policy:

- the average level of customs tariff. It is calculated as the average rate of import duties, according to the value of imported goods, to which the rate is

applied. This indicator is defined only for the goods the imports of which are imposed by duties;

- the average level of nontariff barriers. It is calculated as the value share of the imports or exports, which are subject to the restrictions [10, p. 173].

Regime of implemented restrictions for each of the indicators is considered as open one if the level of restrictions is less than 10%, the moderate - if less than 10-15%, the limited - over 25% and the restrictive - 40-100%.

### 4.2. Tariff methods of international trade regulation

Customs tariff is the main and the oldest instrument of foreign trade policy. This is a systematic set of customs rates, which are imposed on goods and other subjects which were imported to the customs territory of a country or exported from this territory.

A duty, charged by customs, is a tax on goods and other subjects that are moved across the customs border of the country.

There are three main functions of duties:

- fiscal function - in the cases, when duties are introduced to get money for the state. This function applies to both import and export duties;
- protectionist function - in the cases, when duties are used to reduce or remove the imports, thereby protecting domestic producers from foreign competition;
- balance function - in the cases, when they are introduced for preventing from unwanted exports of goods, the domestic prices of which are lower than the world prices.

#### 4.2.1. What are the types of duties?

There are the basic types of duties [6]:

**1. According to the way of levying:**

**- ad valorem (value) duties ($T_{AV}$),** that are imposed as a percentage to the customs value of the goods which are the subject to duty (for example, 30% of customs value);

$$T_{AV} = \frac{P_d - P_{im}}{P_{im}}, \qquad (4.1)$$

where $P_d$ – the price of commodity on the domestic market;

$P_{i\,m}$ – the import price of the commodity.

Generally these duties are applied for products that have different quality characteristics within the same product group. Ad valorem duties help to support the same level of protection of the domestic market, regardless of fluctuations of prices for goods that automatically adapt to inflation. Only the amount of revenue to the budget changes in this case. If the amount of the duty is equal to 30% of the price of good, that is equal to $ 150, then the budget income is $ 45. If the price of

good will be increased to $ 200, the amount of the budget income will be increased to $ 60. Revenue is $ 24 in case of the decrease in price to $ 80. Hence, ad valorem duty makes the price of imported goods increased at the installed rate.

**- specific duties,** that are imposed in the prescribed amount of money per unit of goods which are the subject to duty (for example, $15 per 1 ton);

$$T_S = \overline{P}_d - P_{im}\ , \qquad (4.2)$$

where $\overline{P}_d$ - the average internal price of good, which needs customs protection.

Specific duties are imposed, usually on standardized products. The degree of customs protection with specific duty is directly dependent on price fluctuations. Thus, the specific duty $ 100 per unit of imported ventilator restricts its imports more if the price is $ 600 (because the specific duty is 16,7% from ventilator's price) then if the price is $ 1000, because the specific duty is 10% of its price. That's why protection level for domestic producers decreases in case of higher import prices, and increases in the case of a decrease in import prices while using specific duties. However, the specific duty increases protection of the domestic market during the fall of import prices;

**- compound duties** that combine the two above-mentioned types of customs duties (for example, 30% of customs value, but no more than $15 per 1 ton).

**2. According to the object of levying:**

**- import duties,** that are imposed on the goods imported to the customs territory of a country. Import duty is differentiated. There are types of rates that can be used:

a) preferential rates suggest reduction of customs duty rates or exemption from customs duty. They are applied for goods that come from countries, which create a customs union or free trade area together with the state that charges a duty, or for goods coming from developing countries;

b) the preferential rate, which are applicable for goods entering from countries or economic unions which use MFN regime;

c) full (gross) rate, which are used to all other goods.

Import duties are the dominant form of duties, which are used by all countries to protect the domestic market from foreign competition;

**- export duties,** that are imposed on the goods exported from the customs territory of a country. The export tariff is usually ad valorem. This form of duties is used rarely, in cases of large differences between domestic and world prices for certain commodities. The purpose of these duties is to reduce exports and fill up the budget. The rate of export duty ($T_e$) is equal to a percentage exceeding of exports (world) price of the commodity $P_C$ over the domestic price:

$$T_e = \frac{P_C - P_d}{P_d}\ . \qquad (4.3)$$

**3. According to the nature:**

- **seasonal (import and export)** duties, imposed on the goods of the seasonal character for operational regulation of international trade. Its duration is not over few months per year (up to four months from the installing moment – in Ukraine);

- **special duties** applied by the state in the following cases:

a) as protective one, if goods are imported to the customs territory of a country in such quantities or under such conditions that cause or threaten to cause damage to domestic producers of the similar or competing products;

b) as a precautionary measure against the participants of foreign economic activity, which disserve the state interests in a particularly branch, as well as a measure to stop the unfair competition;

c) as a measure in response to discriminatory and (or) the unfriendly actions of foreign countries, as well as in response to the actions of different countries that restrict the legitimate rights of entities of foreign economic activities of a country.

Special duty rate is set in each case. This duty is paid by the importer of the goods, regardless of other taxes and duties (mandatory payments), including duties, customs fees, etc. Payment of special duty can be made in cash or in cashless form, or by introducing the amount of duty on deposit or through the registration of corresponding debt obligation. The paid amounts of special duty can be returned to the importer by the decision of special bodies;

**- anti-dumping duty** can be applied in the case of import of goods into the customs territory of the country at a significantly lower price than in the country of export at the time of export. If such imports cause or threaten to cause damage to domestic producers of similar or competing products, or hinder to organize or to expand production of such goods. The anti-dumping duty is charged on the goods that are the objects for application of antidumping measures and serves as a temporary gathering for compensation of losses from commodity dumping. This duty may be charged only after anti-dumping investigation and obtaining objective proofs of harm or threat of harm to the domestic economy.

The size of anti-dumping duty rate can be determined:

- in the percentages of the customs value of good, which is the object anti-dumping investigation;

- the difference between the minimum price and the customs value of the particular good (as the difference between the prices of good in the domestic and foreign markets). Minimum price is the price of the product which does not cause the damage to domestic producers.

The rate of anti-dumping duty should not exceed the difference between competitive wholesale price of dumping object in the country of export and declared price at its importation into the customs territory of the importing country. It also can't exceed the difference between the object of dumping in the importing country and the average price of similar or directly competitive products, which are exported by this country.

Anti-dumping duties can be established by the importing country to fight with dumping and for alignment of prices to the normal level. Normal price is the

equivalent of product price in the domestic market. It usually can be defined on the basis of prices, which are established in the process of ordinary trade transactions between independent buyers in the exporting country;

- **countervailing duties** applied to the imports of the goods on the customs territory, in the production or exports of which the subsidies were used directly or indirectly, if such imports cause or threaten to cause injury to domestic producers of similar or competing products, or impede organization or expansion of production of such goods.

Countervailing duty can be charged after the investigation and obtaining of objective evidences, which can show significant damage to the national economy.

The level of compensation duty rate can be defined:

- as a percentage of the customs value of the product that is the object of anti- subsidy investigation;

- as the difference between the minimum price and the customs value of the particular product.

The rate of compensation duty must not be more than established amount of subsidies.

The imposition of the compensation duties allows alignment of the terms of trade.

**4. According to the origin:**

**autonomous duties,** that are imposed on the basis of unilateral decisions of public authorities;

**- agreement duties,** that are imposed on the basis of bilateral or multilateral agreements;

- **preferential duties** with rates lower than the current tariff; they can be imposed on the basis of multilateral agreements on goods originating in developing countries, or countries, creating a customs union or free trade area or form the border trade together with this country.

**5. According to the types of rates:**

- **permanent rates** are the rates of customs tariffs, imposed by public authorities, which may not be changed depending on the circumstances;

- **variable rates** are the rates of customs tariffs, which may vary by state authorities in certain cases.

**6. According to the calculation method:**

- **nominal rates** are the customs rates, indicated in the customs tariff;

- **effective (actual) rates** are a real level of customs rates for the final goods, calculated on the basis of the level of duties, imposed on imported units and components of the products. This is the level of rate, which can protect the domestic market really and effectively or regulates an export and transit.

Sometimes country imports raw materials free of duty or introduces lower tariff rates on imports of productive resource than on imports of the final product, in manufacturing of which the mentioned productive resource was used. This

process is needed for encouragement of national producers in manufacturing and for the growth of employment rate. In this case effective tariff rate, which is calculated on the basis of domestic added value or the cost of processing within the country, will be more than nominal tariff rate, which is calculated on the basis of the cost of the final product. Inside added value equals to the price of the final product minus import costs of production resources that were used for producing the commodity.

The nominal tariff rate shows the extent of price growth for the final product due to tariff and that's why it is important for consumers.

The effective tariff rate shows the level of provision of protection for domestic industries that produce goods which compete with imports. Therefore the effective tariff rate is important for manufacturers.

Effective tariff rate ($T_e$) can be calculated by the formula:

$$T_e = \frac{T_n - K \cdot T_{im}}{1 - K}, \qquad (4.4)$$

where, $T_n$ – nominal tariff rate on the final product;

$T_{im}$ - nominal tariff rate on imported components;

K – the share of imported components in the cost of the final product.

The formula indicates the next facts:

- effective tariff rate on the final product is equal to the nominal tariff rate ($T_e=T_n$), if the nominal tariff rate on imported components is equal to the nominal tariff level on the final products or if imported components are not used in the manufacturing of final products (K = 0);
- effective tariff rate on the final product is more than nominal one ($T_e>T_n$), when the nominal tariff rate is more than tariff rate for imported components ($T_n>T_{im}$) and vice versa;
- effective tariff rate decreases if tariff rate on imported components increases and vice versa;
- effective tariff rate increases if the coefficient-K increases.

The nominal tariff rate can be only positive, effective one - both positive and negative, if the tariff on imported components is much higher than the rate for the final product [8].

Countries sometimes use **tariff quota**, which is a form of variables customs taxes. The rates of these taxes depend on import volume of product. Product within its specified number is taxed at basic intra-quota tariff rate in case of import, and in case of exceeding a certain volume of imports – at higher over-quota tariff rate. Use of this tool of trade policy allows overcoming the contradiction that arises between the interests of domestic producers and the introduction of import quotas.

This contradiction exists because of two facts:

- on the one hand, producers are interested in the tariff, which protects them from foreign competition;

- on the other hand, they, as consumers, are not interested in mentioned tariff because it deprives them of their opportunity to get cheaper imported goods.

**Tariff escalation** can be used for protection of domestic producers of finished products and for stimulating the importation of raw materials and semi-finished products. Tariff escalation is the raising of customs taxation level of goods with the growth of degree of their processing.

The higher interest rate of imported tariff is in the process of moving from raw materials to finished products, the higher the degree of protection of finished products manufacturers is from foreign competition.

### 4.2.2. What are the economic results of the imposition of duties?

Economic results of the imposition of a duty are varied: they affect production, consumption, commodity turnover and welfare of the country, which introduced the import tariff, and its trade partners [7].

Introduction of the import tariff to protect the domestic producers, who bear the losses due to glutting the markets by cheaper goods, affects the economy of both the small and big countries. A country is considered to be small, if its demand for imported goods does not alter world prices, and the big one, if a change in demand for imported goods causes a change in world prices.

The impact of the tariff on economy of small country is shown in Fig. 4.1.

Consumers can buy only Q1 of this product from domestic producers for the world price $P_c$. Unsatisfied demand is equal to $Q_1Q_2$ and can be covered by imports. Country introduces import duty on unit of the commodity in the amount of t, it leads to an increase in the price of imported goods from $P_c$ to $P_c$+t. This way internal price increases, and the world price is stored at the same level.

As a consequence, there are following processes in the country:

- the overall volume of demand reduces (from Q2 to Q4) that occurs at the expense of consumers, who are not able to buy the product at the high price;
- the volume of imports decreases that occurs as a result of increasing in domestic production and the demand reducing;
- domestic production of goods increases, because domestic producers of the goods, competing with the imported ones, are able to put more products on the market (no Q1, but Q3 of goods);
- its economic losses increase, because the domestic production must be protected by the tariff of supplementary quantities of goods at higher costs. The more the protection of the internal market grows by means of import duties, the more resources that are not specifically intended for the output of this product have to be used for the production. The country could not bear the losses, if it purchased the goods at lower prices from a foreign seller. There is a change of effective, in terms of costs, foreign goods by the less effective, in the production, domestic goods in the domestic market. The loss for the country as a whole is the sum which corresponds to areas of the triangles CJM and NHB (Fig. 4.1).

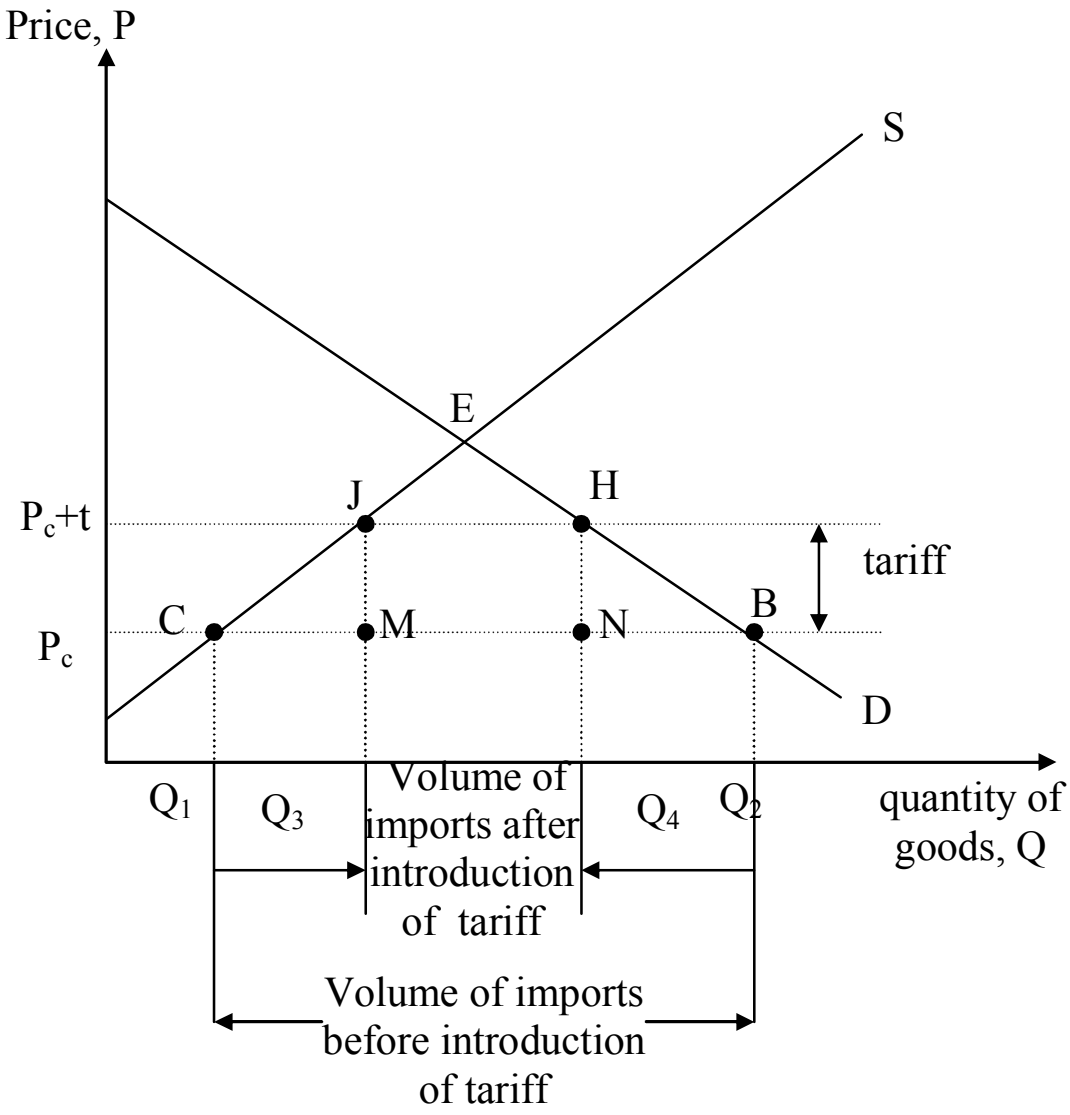



Fig. 4.1. The impact of introduction of tariff in small country

So, there are economic effects, which arise in case of introduction of import tariff:

- the effect of state income, i.e. the state receives additional income, which is equal to the product of tariff rate and import volume (MJHN);
- trade effect, i.e. the reduction of import (BN + CM);
- consumer effect, i.e. the reduction of domestic consumption (BN). Consumers' welfare decreases because the consumption of good is connected with the growth of its price in the domestic market;
- production effect, i.e. the expansion of domestic production (CM).

Therefore, world prices are not changed with the introduction of import tariff by small country, and its terms of trade are not so improved to offset the negative impact of tariff on the economy.

The effects of introducing an import tariff by a big country are almost the same as in a small country. However, it reduces the level of the world prices and falling costs of imports.

An import tariff, introduced by a big country, not only protects the market from foreign competition, but is also the means to improve the terms of trade with the surrounding world. The big country is a high volume importer of goods in the world market. So if it limits the imports by import tariffs, it reduces significantly the aggregate demand for the goods. As a result, sellers of the goods have to reduce the prices. At the constant prices of the exported goods and the decline in prices of the imported goods, the terms of trade of the country improve. The introduction of an import tariff will cause positive results only if they are not obscured by negative economic losses for the country because it has been imposed. In other words, the positive effect of the tariff is achieved if the effect of the terms of trade in value is greater than the sum of losses arising as a result of less efficiency of domestic production compared with the international one and reduction of domestic consumption of the goods.

### 4.2.3. What is the essence of optimal tariff?

The trade volume of the big country will be decreased if mentioned country introduces tariff, but the terms of trade will be better. But, on the one hand, the reduction of trade leads to lower welfare of the country and, on the other hand, improved trade conditions cause the well-being of the country. That's why the problem of optimal tariff rate raises.

Optimal tariff is such tariff rate, that gives the maximum benefit from improved trade conditions minus negative effect as a result of decline in trade volumes (Fig. 4.2) [10, p.184].

The customs tariff can be imposed in the wide range from 0 (under the terms of free trade) to prohibitive level (import of goods into the country stops). When T=0 the welfare of the country corresponds to E1. During the process of growing of tariff rate in the country, the well-being of mentioned country is growing too till the maximum level $E_2$ (optimal tariff). The well-being decreases when tariff rate is more than optimal. Economic expenses overlap obtained win more and more till the time, when tariff level is prohibitive and the country is in terms of autarky. Economic well-being will fall to the $E_3$ level because of lack of cheap imports.

Optimal tariff is calculated by the formula:

$$T_O^j = \frac{T_n^j - \sum a_{ij} T_n^i}{1 - \sum a_{ij}}, \qquad (4.5)$$

where $T_o^j$ - optimal tariff rate in "j" branch;

$T_n^j$ - nominal tariff rate in "j" branch;

$T_n^i$ - nominal tariff rate in "i" branch;

$a_{ij}$ – the share of the products of "i" branch in the volume of the production of "j" branch at the prices of free trade.

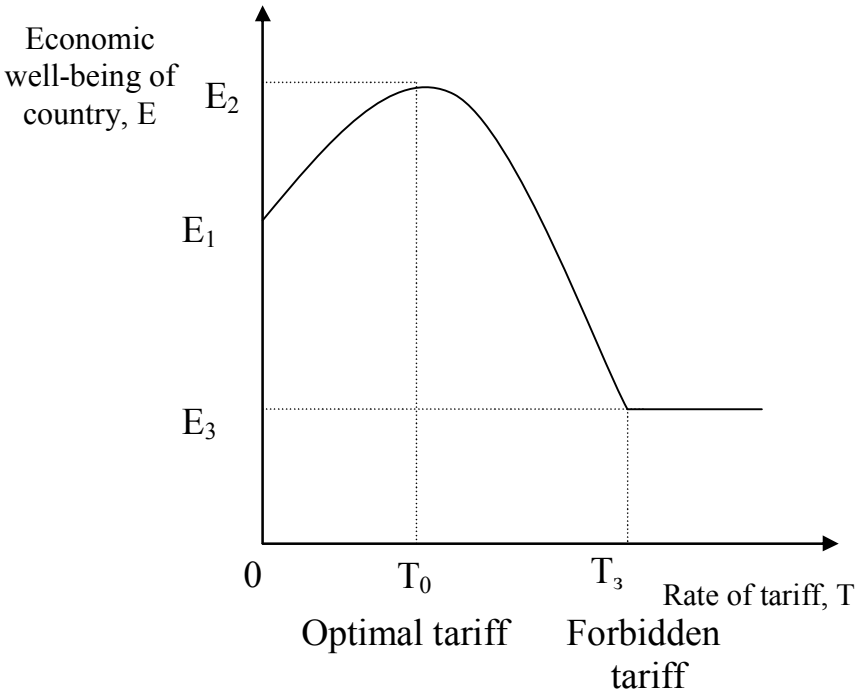



Fig. 4.2. Optimal tariff

Optimal tariff rate is usually not high, positive ($T_0>0$) and is less then prohibited tariff rate ($T_0<T_3$). Country improves its terms of trade by the installing of optimal tariff. But these terms of trade became worse in trading partners. The well-being of trade-partner country is reduced when the volume of trade and terms of trade are worsened at the same time. In this case trade-partner country can introduce its own optimal tariff. This way, the win of big country arises due to its trading partners as a result of income redistribution. At the same time it leads to losses in world economy, where factors of production are used irrational.

Tariff methods of foreign trade protection are usually connected with the extra expenditures of consumers. The economists calculated that the average Japanese consumer spends 890 dollars more, because of trade restrictions, for food, cosmetics and chemical products; the tariffs in 21 industries cause annual expenditures of $10,2 bill, or $40,8 per a consumer in the USA. Potential income of consumers due to the cancelling of all the tariffs and quantitative restrictions could be about $70 bill, or 1,3% of GDP [7].

### 4.3. Nontariff methods of international trade regulation

The tariff is not a unique method of the trade policy. The other trade restrictions are also applied for international trade regulation. These are non-tariff restrictions, which is widely used in the trade practice [2, p.185]. There are more, than 800 methods of non-tariff barriers: administrative, financial, credit and others. They are widely spread in the trade practice. More than half of world trade is the subject of non-tariff barriers that create major threat to the global trading system. According to the UN figures, Middle East countries and North African countries (57,69%) and developed countries (48,24) most frequently use non-tariff methods in their export of agriculture products; in the export of mineral products and fuels - Europe and Central Asia (6,72); in the export of industrial products - Latin America and the Caribbean (11,68%) [2, p.183].

The spread of non-tariff barriers is caused by the fact that their introduction is the privilege of the government, and they are not regulated by international agreements. Governments are free to apply any kind of non-tariff barriers, which is not possible with the tariffs, regulated by the WTO. In addition, non-tariff barriers usually do not result in immediate increase of the price of the goods and, therefore, a consumer does not feel their impact in the form of a supplementary tax (introducing a tariff makes the product price increases by the amount of the duty). In some cases, the use of non-tariff methods, with a relatively liberal customs treatment, can lead to a more restrictive nature of state trade policy as a whole.

Non-tariff barriers can be divided into the following groups: quantitative, hidden and financial ones.

#### 4.3.1. What kinds of quantitative restrictions are known?

Quantitative restrictions include quotas, licensing, “voluntary” export restraints.

**Setting quotas.** A quota is the most common form of non-tariff barriers. The quota is a quantitative measure of the export or import restricting of the goods by a certain number or amount for a certain period of time. Quotas are usually used to regulate the imports of agricultural products. If the goal of the government is to control the movement of some product rather than its restriction, then the quota can be imposed at a higher level than the possible imports or exports.

**By the direction of action**, quotas are divided into two types:

- the export quotas, that are imposed by the government of the country to prevent from the export of scarce products in the domestic market, as well as to achieve political objectives. These quotas are used rare;
- import quotas, that are imposed by the government of the country to protect the domestic market from the foreign competition, to achieve the balance in the trade balance, to regulate supply and demand within the country, as the adequate measure in response to discriminatory trade policies of other countries.

***By scope,*** quotas are divided into two types:

- global quotas, which are imposed on imports or exports of a certain product for a certain period of time. These quotas do not depend on the country importing or exporting this product (for example, the USA use quotas to regulate the importation of Roquefort cheese, certain sorts of chocolate, cotton, coffee, etc.). The goal of introduction of these quotas is to achieve the required level of domestic consumption. The amount of global quotas is defined as the difference between domestic production and consumption of the goods;
- individual quotas are the quotas, which are imposed as parts of the global quotas, of each country, which exports or imports the goods. They are imposed on the basis of bilateral agreements.

*Economic results of the introduction of quotas are as follows:*

- quotas are the more effective tools, than tariffs on import restrictions, their introduction allows imports to be kept at a constant level, despite the growth in demand that, in its turn, increases the price of a product. At the unchanged level of imports, domestic production and consumption increase;
- quotas are an absolute values and they are inflexible to the price of a product;
- they are more effective for rapid actions of administrative authorities, they are easy for manipulation (tariffs usually require the enactment of corresponding legislation);
- quotas are the direct source of monopoly profits; they always increase the incomes of producers of import-substituting products; they restrain the import competition (tariffs usually permit it).

**Licensing.** Quotas are imposed by government authorities through the issuance of licenses. A license is permission, granted by public authorities for export or import of goods in the assigned amounts for a certain period of time. A license is issued by the state through the special authorized agencies.

Licensing may be in the following forms:

- an integral part of the quota. In this case, a license is a document which certifies the right to import or export the goods within the obtained quota;
- an independent instrument of government regulation.

Licensing can act in automatic or non-automatic form. Automatic licensing does not install quantitative or other restrictions on export (import) of goods. Non-automatic form installs them.

There are several types of licenses:

1. Depends on the type of rights which are certified in license (for export or import) there are:
   - export licenses - the rights to export certain type of goods, which are subjected to quantitative restrictions or permitting procedure of export;
   - import licenses - the rights to import certain type of goods, which are subjected to quantitative restrictions or permitting procedure of import.
2. Depending on the period, the license may be:
   - general - open permission for export (import) operations as for designated product (products) or with defined country (group of countries) over the period of the licensing regime of this product (products);

- individual - permission for export or import of good within a specified period of time.

There are different types of individual licenses.

Individual licenses *depend on the volumes of rights*. According to this fact they may be divided into two groups:

- opened - open permission for export or import of goods within the specified period with the definition of its total volume;
- one-time - one-time permit, which has nominal nature and is provided to perform separate transaction by specific subject of foreign economic activity for a period, which is not less than necessary for the export (import) transactions.

There are three types of individual licenses *according to the grounds for establishing licensing regime:*

- anti-dumping - the right to import certain goods that are the subjects of anti-dumping investigations or antidumping measures within a specified period;
- compensation - the right to import certain goods that are the subjects of anti-subsidy investigation or compensatory measures within a specified period;
- special - the right to import certain goods that are the subjects of special investigations or special events for a specified period.

Licenses can be distributed in different ways. The most effective one is open auction, which is the sale of import quotas on a competitive basis. The exporter, who offers the highest price of license (as the right to export the product within the import quota) gets the license. Competitive sale of import quotas brings country the high income and prevents bribery and corruption.

There are another ways of distribution of licenses:

- the system of distinct advantages, which involves fixing of licenses by government for certain firms proportionally the sizes of their imports in the previous period or proportionally the structure of demand of national importers. This method gives the opportunity to support firms, which reduce import of goods as a result of import quotas introduction;

- the system of distribution of licenses on non-price basis is based on the governmental issuance of licenses to the firms, which showed their ability to provide export-import operations in the most effective way. This method is expensive, because it involves the formation of the expert committee and several stages of selection. It is important to begin from less market method (administrative one, ex. distribution of licenses on non-price basis) and gradually move to the most market (auction) in the process of choosing the method of distribution of licenses.

**"Voluntary" export restraints (VERs)** is a quantitative restriction of exports, based on the commitment of one of the trading partners to limit (or not to expand) the volume of exports, adopted within the intergovernmental agreement on quota imposing on product exports.

An importing country forces its trading partner to reduce "voluntarily" its exports. The reason of a VERs implementation is usually the statements of national producers about the fact, that the importation of some product causes the losses in production and disorganization of the local market. Instead of imposing import

quotas, an importing country put political pressure on an exporting country, requiring the imposition of restrictions on the exports of a particular product. A threat of imposing trade restrictions on such a high level that the very possibility of international trade between countries will be put into question is the mean of pressure on the trading partner.

In general, the economic effect of the introduction of "voluntary" export restraints by an exporter is negative for an importer. However, the amount of its losses reduces due to the increase of imports of similar products originating in countries, which do not impose "voluntary" restraints on their exports.

### 4.3.2. What kinds of hidden trade restrictions are known?

The hidden types of trade restrictions with more than 100 titles are very important methods of trade policy. They allow countries to restrict exports or imports unilaterally. They include: technical barriers, internal taxes and charges, public procurements, local content requirements.

**Technical barriers** are the national standards of quality, economic requirements, medical restraints, packing and marking of goods requirements, requirements to implement the complicated customs formalities, laws of consumer protection and etc. Technical barriers arise from the fact that national technical and administrative rules prevent from the imports of goods. It occurs in case of non-correspondence of the imported goods to the enforceable standards of quality, health and safety, which are applied to the similar domestic products, non-correspondence of agricultural products to the sanitary and phytosanitary norms, applied to prevent the import of pests and diseases that do not exist in a given country.

**Internal taxes and charges**. State and local governments may impose value added tax, excise taxes, charges for customs clearance, registration, port charges, etc. taxes on the imported goods with the goal of growth of their internal prices and decline competitiveness in the domestic market.

The sizes of internal taxes often exceed the value of the amount of import duties, and their rate can vary depending on the conjuncture of domestic market.

**Public procurements.** The policy within the government procurements is that the public authorities and enterprises must buy certain goods only from national firms, even if these goods are more expensive than the imported ones. It increases the government expenditures that lie heavy on the taxpayers. The volumes of such purchases often reach 10-15% of the GNP of a country. The use of public procurement policy, in some extent, discriminates foreign suppliers.

**Local content requirements**. This method of the hidden trade policy involves the legal establishment of a share of the final product, which should be produced by local (national) manufacturers, in case of selling this product in the domestic market. Typically, this method is used by the governments of the developing countries in order to replace imports with domestic production and also to avoid transferring the production to the developing countries with lower labor costs and to maintain the level of employment, as a result.

The requirements about local participation not only reduce imports but also include requirements for foreign investors: liabilities of the foreign company-investor to export certain part of output from the host country. Such requirements distort international trade and contribute to installation of non-tariff barriers.

### 4.3.3. What is the essence of the financial methods of trade policy?

The purpose of financing, as a method of the international trade regulation, in particular, the exports expanding, is discrimination of foreign companies for domestic producers and exporters by reducing the value of the exported goods and enhancing their competitiveness in the world market. Export financing is available from the following sources: the state budget, banks, funds of exporters and their banks. Financial methods of trade policy include: dumping, subsidies, export crediting.

**Dumping** is the export of goods at prices lower than the cost of production, or, at least, at lower prices than in the domestic market. Thus, dumping is considered as a form of international price discrimination.

There the factors, which facilitate the implementation of dumping: differences in the demand for product in different countries; the presence of certain assumptions that allow the manufacturer to establish and dictate prices; trade barriers and high transport costs which allow the manufacturer to protect the foreign market, where he sells goods at low prices, from the domestic market, where the sale of goods may be provided at higher prices.

There are sporadic, persistent and predatory dumping in international trade practice.

**Sporadic dumping** is an episodic sale of surplus goods in the world market at the lower prices than in the domestic market. This type of dumping is used in case of overproduction of goods. When a firm is unable to sell the goods in own country and does not want to stop its production, it sells goods on the foreign market at lower price, than domestic.

**Persistent dumping** is a long-term sale of product in the world market at a lower price than in the domestic market.

**Predatory dumping** is a temporary intentional reduction of export prices in order to drive out competitors from the market and introduce subsequently monopolistic prices.

Dumping can be done at the expense of individual firms, which want to seize the foreign market of their products and by government subsidies to exporters.

Despite the fact that dumping brings some benefit to a country-importer, improving its terms of trade, governments consider all types of dumping of foreign producers a form of unfair competition. Therefore, it is prohibited both by the international WTO's rules and national legislation in several countries. If the fact of dumping is proved, the country has the right to impose trade restrictions in the form of anti-dumping duties. There are two criteria, which are needed for legal introduction of anti-dumping duties: sale of goods abroad at a lower price than in

country of origin, and causing material damage to the domestic industry. There are the factors, which have negative influence on the domestic industry:

- actual or potential decline in manufacturing, sales, loss of market share, profits, productivity, income from investments or capacity utilization;
- the impact on domestic prices;
- the actual or potential impact on the cash turnover, inventories, employment, wages, growth rates ability to attract capital or investments.

**Subsidies.** Governments of many countries use subsidies, i.e. carry out state subsidies to producers when they enter the world market in order to develop certain industries and provide the necessary export policy. In other words, the subsidy is a financial or other support of the production, processing, selling, transporting, exporting of the goods by public authorities in the result of which the entity of economic-legal relations of an exported country receives benefits (profit). This support of national producers, at the same time, discriminates against importers.

Depending on the nature of payments, there are direct and indirect subsidies.

**Direct subsidies** are direct payments to an exporter after the export operation, which are equal to the difference between the expenditures and the received profit. Direct subsidies contradict international agreements and are prohibited by the WTO.

**Indirect subsidies** are hidden subsidies of exporters in the form of tax exemptions, preferential terms of insurance, repayment of import duties, etc.

According to specificity, a subsidy can be *legitimate* (does not give reasons to apply compensatory measures) and *illegitimate* (gives reasons to apply compensatory measures).

There are domestic and external (export) subsidies depending on the subject, receiving a subsidy.

*Domestic subsidies* are government financing of domestic production of goods, which compete with imports. They are considered as one of the most disguised financial instruments of trade policy, as well as the best method of import restrictions in comparison with import tariff and quota, because they do not distort domestic prices and provide smaller losses for the country (losses occur for the national economy because of next facts: a) as a result of receiving subsidies, inefficient local producers can sell their goods; b) subsidies are financed through the budget, i.e. by means of taxes).

*Export subsidies* are budgetary financing of national exporters, which allows to sell the goods to foreign buyers at lower prices than in the domestic market, and thereby to promote the exports.

Export subsidies may be granted in the following main forms:

- providing an enterprise with direct subsidies;
- payment of premiums after export operations;
- introducing preferential (rates, base of calculation, mechanism of charging, etc.) transport or freight tariffs for export shipments compared to transfers in the national market;
- direct or indirect delivery of imported or national goods by a public authority to use the export goods in the production under more favorable

conditions than the conditions of supply of competing goods to produce the goods, intended for consumption in the domestic market, if these conditions are more beneficial for their exporters than in world markets;

- exemption or deferral of payment of direct taxes, which must be paid by exporters, implementing export transaction or paying to social insurance funds;
- giving discounts in case of paying taxes;
- introducing exemptions of payment or repayment of indirect taxes, in the case of production and delivery of goods for exports;
- reduction of rates or repayment of taxes on imports of material and technical resources, the goods for export;
- implementation of state programs, which guarantee or insure export credits, guarantees or insurance programs of non-arising of the cost of the exported goods or exchange risk programs, using premium rates, insufficient to cover the long-term costs and losses, arising from the implementation of these programs.

An export subsidy reduces an export price of the product and demand for the product increases abroad. As a result, the terms of trade of the country, that exports, deteriorate. However, due to the decrease in the export price, the quantity of the exported goods increases. Because of the growth of exports, fewer products appear in the domestic market, a domestic price increases. The benefit or loss of the exporting country depends on the fact, whether it can compensate the losses, linking with the worsening terms of trade, i.e. decline in export prices, by means of increase in sales.

An export subsidy is an expenditure line of the budget, and hence an additional tax burden for the taxpayers (the costs of financing the subsidy are equal to the quantity of goods, exported after the introduction of the subsidy, multiplied by the amount of the subsidy).

Thus, as the subsidies reduce the costs of producers, they have an impact on international trade by means of artificial improving of competitiveness of certain firms in export markets, or providing the advantages of internal products compared with imported ones.

The importing country may impose countervailing duties levied on goods that are subject to countervailing measures when an export subsidy occurs (the use of illegitimate subsidies). These measures can be used in the event of serious damage to the interests of other countries, particularly in the following cases:

- total amount of subsidy as for the product cost is greater than 5%;
- subsidies cover the cost of production of industries;
- subsidies are not one-time events and they cover the production costs of the enterprise;
- there is direct write-off of debt by the government.

**Export credits**. Governments use export credits, providing financial incentives to develop exports by domestic producers in order to hide the export subsidies.

Export credits can be provided in several forms, these are:

• subsidized credits for domestic exporters. These credits are issued by state banks at the lower interest rate than the market one;

• state credits for foreign importers, who must purchase the goods only from firms of the country, providing this credit.

There are the classifications of export credits by purpose and time of granting (Tab. 4.2).

Table 4.2

**Characteristics of the export crediting**

| Purpose of credit | Time of crediting |
|---|---|
| For exports of consumer goods and raw materials | Short term (1 year) |
| For export of machinery and equipment | Medium-term (1-5 years) |
| For export of investment products and large projects | Long-term (over 5 years) |

Export crediting is a tool of struggle for foreign markets; it promotes export of commodities, and accelerates the growth rates of development of the national economy.

# Chapter 5. World markets of goods and services

## 5.1. What international trade classifications exist?

International trade in manufactured goods and primary goods is based on international trade classifications. In these classifications all the products are divided into sections, specific chapters, headings, and subheadings, etc. by the features. The list of trade names in the corresponding classification system is called a commodity nomenclature. International commodity nomenclatures are used as the basis for constructing a customs tariff (the more detailed is the commodity nomenclature, the more effectively the tariff can be used for protectionist purposes), are used for the classification of goods in the statistics, in transportation tariffs.

The Standard International Trade Classification of the UN (SITC) (the 4th edition, 2008), the Harmonized Commodity Description and Coding System (also known as the Harmonized System – HS); the Classification by broad economic categories of the UN (BEC) (the edition of 2002) are used for the classification of goods in international trade.

In SITC the classification of goods is carried out at the level of groups by types of raw material from which the goods are made; by the degree of processing of goods; the product destination; the place of goods in the international trade. (Tab. 5.1).

Table 5.1

**The classification scheme of SITC, Rev.4**

| Section codes and their names | Number of | | | |
|---|---|---|---|---|
| | divisions; their codes | groups | subgroups | positions |
| 0. Food and live animals | 10 (00-09) | 36 | 132 | 335 |
| 1. Beverages and tobacco | 2 (11-12) | 4 | 11 | 21 |
| 2. Crude materials, inedible, except fuels | 9 (21-29) | 36 | 115 | 239 |
| 3. Mineral fuels, lubricants and related materials | 4 (32-35) | 11 | 22 | 32 |
| 4. Animal and vegetable oils, fats and waxes | 3 (41-43) | 4 | 21 | 41 |
| 5. Chemicals and related products, n.e.s. | 9 (51-59) | 34 | 132 | 467 |
| 6. Manufactured goods classified chiefly by material | 9 (61-69) | 52 | 229 | 767 |
| 7. Machinery and transport equipment | 9 (71-79) | 50 | 217 | 642 |
| 8. Miscellaneous manufactured articles | 8 (81- 89) | 31 | 140 | 420 |
| 9. Commodities and transactions not classified elsewhere in the SITC | 4 (91, 93, 96, 97) | 4 | 4 | 6 |
| **Total** | **67** | **262** | **1023** | **2970** |

The classification is used to publish data about the foreign trade of countries-members of the United Nations and international organizations. The comparative indices of the volume and structure of export and import of different countries are determined based on this classification; moreover it is possible to do a regroup of commodities in other classifications by using a special ”key”.

The Harmonized Commodity Description and Coding System represents international requirements for the classification and statistical information on goods that enter the foreign trade (Tab. 5.2).

Table 5.2

**The classification system of the HS**

| Name of sections | Quantity | | |
|---|---|---|---|
| | Groups (codes) | Positions | Sub-positions |
| I. Animals and animal products | 5(01-05) | 14 | 194 |
| II. Products of vegetable origin | 9(06-14) | 790 | 270 |
| III. Fats and oils of animal and vegetable origin; cleavage products; finished edible fats; waxes of animal or vegetable origin | 1(15) | 22 | 53 |
| IV. Products of flavoring industry; alcoholic and non-alcoholic drinks; tobacco and artificial tobacco substitutes | 9(16-24) | 56 | 181 |
| V. Mineral products | 3(25-27) | 67 | 151 |
| VI. Products of chemical and allied industries | 11(28-38) | 176 | 759 |
| VII. Plastic and products of it; rubber and its products | 2(39-40) | 43 | 189 |
| VIII. leather materials; leather; fur; fur materials; goods made of fur; saddlery and harness; travel goods; handbags and similar goods; products of guts | 3(41-43) | 21 | 74 |
| IX. Wood and products of it; charcoal; cork; goods of cork; products made of straw, vines and other materials for weaving; baskets and basketry | 3(44-46) | 27 | 79 |
| X. Paper pulp of wood or other cellulose-fibrous materials; paper and cardboard waste paper; paper, cardboard and products made of it | 3(47-49) | 41 | 149 |
| XI. Textile and products of it | 14(50-63) | 149 | 809 |
| XII. Shoes, hats, umbrellas, sticks, rods and their parts; trimmed feathers and products of it; artificial flowers, and hair products | 4(64-67) | 20 | 55 |
| XIII. Products of stone, plaster, alabaster, cement, asbestos, mica or similar materials; ceramic products, glass and products of it | 3(68-70) | 49 | 138 |
| XIV. Natural or cultured pearls, semiprecious and precious stones, precious metals, base metals, lacquered precious metals and products made of it; jewelry and coins | 1(71) | 18 | 52 |
| XV. Ferrous and non-ferrous metals and products of it | 11(72-76,78-83) | 157 | 587 |

| | | | |
|---|---|---|---|
| XVI. Machines, equipment and mechanical appliances, electrical equipment and its parts; record and reproductive equipment; video equipment and its parts | 2(84-85) | 133 | 762 |
| XVII. Means of land, air, space, water transport, equipment and parts to it | 4(86-89) | 38 | 132 |
| XVIII. Optical, photo and cinematic instruments and apparatus, measuring, control, precision, medical and surgical instruments and apparatus; watch; musical instruments and its parts. | 3(90-92) | 56 | 230 |
| XIX. Arms and ammunition, its parts | 1(93) | 7 | 17 |
| XX. Various finished products | 3(94-96) | 32 | 131 |
| XXI. Products of art, items for collectibles and antiques | 1(97) | 6 | 7 |
| **Total** | **96** | **1241** | **5019** |

Harmonized system was developed by the Harmonized System Committee set up by the Customs Co-operation Council (CCC). CCC is an intergovernmental organization that plays a leading role in working with multilateral regulation of customs and tariff practices; it is a coordinating and methodical center in the field of customs control. CCC adopted the International Convention on the Harmonized Commodity Description and Coding System in 1983, which was ratified by 53 countries and the EU member states at the end of 1987. From the 1st of January 1988 the majority of countries of the world have gone over to a new customs tariff, based on HS. All the WTO member states, which account for more than 90% of world trade, adopted the Harmonized System.

The goals of the HS are:

• simplification of drafting and processing of commercial and customs documents;

• cost reduction by rewriting, classification and registration of foreign cargo by volume, value, destination countries and other parameters;

• simplification of accumulating, accounting of data, conducting economic analysis about foreign trade;

• simplification of the exchange of tariff discounts within the WTO.

The structure of the nomenclature of the Harmonized system (the NHS) consists of classification and coding system.

Classification system consists of 21 sections, 96 groups, 33 subgroups, 1241 commodity positions, 3553 sub-items, 5019 sub positions, i.e. the system has 6 degrees. Goods in the NHS are grouped by the following features:

• an origin (products of vegetable, animal origin);

• a purpose (foodstuffs and beverages; industrial raw materials; fuel and lubricating materials; machinery and equipment, which include tools; vehicles; industrial goods for consumers);

• a degree of processing (commodities for production and non-production purpose; half-stuffs for production and non-production purpose; finished products).

The Harmonized system contains detailed explanations, which contribute to the same understanding of classification groups, definition of the rate of duty, the comparability of statistical data of the foreign trade.

Coding system of the HS allows to provide information in a convenient form for the collection, transmission and processing, as well as to carry out its computer processing.

Thus, HS promotes unification, perfection statistical records and increased control over the export and import operations.

Classification of commodities by the BEC is based on goods included in the SITC and the HS. All products are distributed according to their destination in 7 groups and within each group according to the degree of processing. In addition, some products are combined into groups on commercial or personal consumption features depending on the term of usage (Tab. 5.3). The main purpose of the classification by broad economic categories is the compilation of data on international trade according to the broad economic classes of goods. Furthermore, it should serve as a means of converting of data of the SITC from international trade to the categories of final use, which are allocated within the System of National Accounts, i.e. which correspond to the three classes of goods: means of production, intermediate and consumer goods. This will help while carrying out the economic analysis at the national, regional and international levels to consider and compare foreign trade statistics together with other general economic statistics such as national accounts, industrial statistics, etc. The United Nations Statistical Commission believes that the BEC can also serve as a guidance for national classifications of import by broad economic categories, but it should not be considered as a standard (such as the SITC).

Table 5.3

**Classification by Broad Economic Categories**

| |
|---|
| 1. Food and beverages |
| 1.1. Primary |
| 1.1.1. Mainly for industry |
| 1.1.2. Mainly for household consumption |
| 1.2. Processed |
| 1.1.1. Mainly for industry |
| 1.1.2. Mainly for household consumption |
| 2. Industrial supplies not elsewhere specified |
| 2.1. Primary |
| 2.2. Processed |
| 3. Fuels and lubricants |
| 3.1. Primary |
| 3.2. Processed |
| 3.2.1. Motor spirit |
| 3.2.2. Other |
| 4. Capital goods (except transport equipment), and parts and accessories thereof |
| 4.1. Capital goods (except transport equipment) |
| 4.2. Parts and accessories |
| 5. Transport equipment, and parts and accessories thereof |
| 5.1. Passenger motor cars |

| |
|---|
| 5.2. Other<br>5.2.1. Industrial<br>5.2.2. Non-industrial<br>5.3. Parts and accessories<br>6. Consumer goods not elsewhere specified<br>6.1. Durable<br>6.2. Semi-durable<br>6.3. Non-durable<br>7. Goods not elsewhere specified |

## 5.2. World markets of goods

There are four forms of international trade concerning the subject of trade:

I. Trade in manufactured goods, machinery, equipment, including:

a) consumer goods. For example, clothes, footwear, detergents, furniture, household appliances, personal care products, perfumes and cosmetics, accessories, jewelry, fur products, cars;

b) machine-technical products:

• finished products. It is a supply of machines and equipment for use in the finished form. For example, vehicles, machine tool products, technical products for cultural and community purpose;

• disassembled products. This form of trade is particularly developed in the automotive industry (a share of disassembled cars and components is 40-50% in this market), a production of tractors, motorcycles, electrical household appliances, radio and electronic equipment, agricultural machinery;

•complete equipment. Complete objects are the industrial or other enterprises as whole, separate shops, plants, units that form the finished technological complex or its separate part. The complete equipment is considered to be a set of organically bound machinery and equipment by a single technological process, that ensures the release of finished products or complete technological stage. The volume of supply in contracts for complete equipment includes: design, technological documentation (engineering consulting services); equipment of specified performance indicating the costs of raw materials, fuels and output of finished products, technical services (an installation, an adjustment, a launch of equipment in commissioning, training of specialists).

**II. Trade in raw materials**: mineral raw materials, products of its enrichment and processing (by ferrous and non-ferrous metals), agricultural raw materials of vegetable and animal origin and products of their initial processing, and food products.

**III. Trade in services**. For example, transportation services, tourism, rental, computer, financial, engineering services, communications services, etc.

**IV.** Trade in products of intellectual work. Scientific and technical knowledge, which are the results of scientific research, development works, and the experience of their industrial development are the objects of sale and purchase. Trade in products of intellectual work includes trade in patents, licenses, trademarks, industrial designs, scientific and technical services (engineering).

### 5.2.1 What world markets of manufactured goods exist?

The manufactured goods, according to the Standard International Trade Classification, include chemicals and related products (Section 5), manufactured goods classified chiefly by material (Section 6), machinery and transport equipment (section 7), miscellaneous manufactured articles (Section 8).

In the structure of international trade in manufactured goods the trade in machinery, equipment and vehicles dominates (approximately 51,5%), the industrial products of sections 6 and 8 are in the second place (35,82%) and the chemical products are in the third place (12,68% ).

A high share of manufactured goods, machinery, equipment, vehicles in international trade shows a modern level of production, high-tech production.

The following features are inherent for the international trade in manufactured goods, which are caused by new demands of the market:

- reduction of the life cycle of most types of goods;
- increasing of the production of high-tech products that provides the steady differentiation of intermediate and finished products;
- the process of constant diversification of production to smaller industries and sub-industries, separation of which will automatically generate the need in exchange of the products of such industries that are more narrowly specialized further. The constant updating of nomenclature and range of goods is taking place;
- the development of intra-industry trade, that displaces the traditional inter-industry trade;
- the growth of the share of the recovered equipment in machine-tool products;
- the transition from single to system sales. The main product is offered with accessories and related products;
- increasing demands for technical and economic indices of the products;
- machine-technical products must meet the requirements of the International Organization for Standardization;
- the growth of trade in goods for production purposes is ahead of the growth in trade of machine-technical products for cultural and community purposes;
- strengthening of stamping of the social factor, which is in short supply and in increasing of the cost of skilled labor;
- development of the new, more effective constructional materials;
- the need for rapid implementation of the measures on the delivery of drawings of the products to the customer by the Internet and delivery of products by a system ”just in time”;
- the significant part of the world exports and imports of machinery and technical products is concentrated in industrialized countries;
- the state trade policy is aimed at promoting exports of machinery and technical products and at the protection of domestic producers, etc.
- the growth of a share of counterfeit products in the global consumer market.

In the world market of manufactured goods the trade of machinery and technical products is divided into the trade of finished products, the trade of the disassembling products and the trade of the complete equipment.

*The international trade of finished products* is characterized by following features:

- the growth of the world production of finished products is outpacing the growth of volume of the world production of raw material industries;

- the outpacing growth of the export of finished goods in comparison with the export of mineral raw materials and agricultural products;

-the real supply of technological equipment is the initial stage of the relationship between the exporter and the importer, for example. The use of this equipment for other purposes requires the carrying out of such mutual actions: installation and commissioning of equipment in operation, maintenance, supply of spare parts. Therefore, supporting services are provided (maintenance in warranty and post-warranty periods, staff training, creation of optimal stocks of spare parts). The similar interaction of partners after the delivery of the finished product is beneficial for both sides. Exporter is fixed in the new market and raises the sales volume by providing a full range of necessary services for a particular consumer. Importer receives along with hardware also the set of skilled services from a provider, who knows all the features of the use of this product, in order to ensure specified performance and, consequently, to achieve economic results.

The development of *international trade of disassembling machine-technical products* is due to peculiarities of the international division of labor in modern conditions. Objectively the conditions have established for the dismemberment of the production process into separate operations and for separation of them in the independent productions, and also for the exchange between such links of the single technological cycle of their products (components of the final product).

Export of finished disassembling products raises its competitiveness; helps to overcome the various customs and administrative protectionist barriers aimed at limiting of import of finished products; reduces almost in 2 times transport costs because components and parts, as a more compact cargo, are being transported in containers. Import of finished products in the form of components and parts, of course, is accompanied by reduced fees. This fact promotes the organization of assembly industries, therefore, the development of a national industry and the increasing of an employment of the labor force. Supplying components and parts for assembly, the exporter provides a market penetration and an increasing of the amount of sales consisted of finished goods.

This form of trade often passes through the internal channels of the transnational corporation (TNC). A share of components and parts is about 30% in total exports of the OECD countries of the machines and vehicles. This proportion is higher in some developing countries where there are branches of western TNCs: in Taiwan – 36,3%, French Guiana - 49, Hong Kong – 46,2, Barbados – 61,6, Nicaragua – 81,6. This significantly increases the weight of the goods moving between countries, firmly linking the national economy of such countries.

Assembling enterprise in the form of a joint venture is organized according to the principle of a progressive assembly that involves a gradual and phased replacement of imported parts and components on parts and components of the national production. Basic principles of assembly production of joint ventures are:

- parts and components must be prepared so that the next assembly is not required a preparation of highly skilled workers;
- parts and components of the domestic production should have a quality not lower than an imported one and be interchangeable without any manual fitting;
- terms of supply of components and parts must be rhythmic and with an established optimal supplier storage reserve.

The development of *international trade of the complete equipment* is connected with the emergence and functioning of market of complete objects (goods-objects). The complete equipment, as it was noted earlier, is a unique technological complex of the enterprise or under construction object. Its delivery is inextricably linked with the provision of the design-research, engineering, technological services, execution of commissioning, the transfer of related licenses, an organization of a training of administrative and production staff.

Exporter of the complete equipment receives the opportunity to expand the export opportunities significantly due to the non-standard, more expensive equipment, related services, including know-how, patents.

The supply of complete equipment enables the importer to get technologically established set of basic and auxiliary equipment in short term, to learn the production staff and to begin the production of the finished products after starting of commissioning.

The proportion of deliveries of complete equipment is 10-15% in total world export of machinery and equipment. This form of trade is widespread in both the industrialized countries and the developing countries, especially in India, Brazil, Argentina, and Mexico.

The trade of complete equipment is carried out according to the following terms of general contractor:

- construction of the objects on a “turn-key basis”. Such supplies are the agreements, when the counterparty of the customer is responsible for the construction of objects for industrial and non-industrial purposes and represents the customer in relations with other entities involved in the construction of the object. The counterparty passes the object , that is ready to use, to the customer;
- construction of the objects on the term “for the finished products”. This agreement stipulates the duty of the contractor to ensure the commissioning of the enterprise until its achievement of design capacity and the development in output of agreed nomenclature, quality and quantity;
- construction of the objects on the terms ”for the production and realization of the products”. The contracts of this type suggest a wide range of obligations and responsibilities of suppliers. The supplier provides not only the commissioning of enterprises in the initial period, but also sales of its products;
- the supply of complete equipment on the terms BOT (according to build, operate, transfer). The term BOT means an attraction of international consortium to

finance all costs associated with the construction of the objects on a "turn-key basis", as well as operation and maintenance of the object under the guarantee of the government to purchase products of this company during 10-15 years at prices, that provide reimbursement of expenditures and receipt of revenue of those, who constructed the object. Exporters at this form of supply are able to sell their products in the market of another country and get pre-approved revenue and importers get finished object without significant financial costs and do not face difficulties in commissioning [2, p.258].

International trade in manufactured goods is characterized by regions of the world by the data in Tab. 5.4.

Table 5.4

**The world export of manufactured goods by regions of the world**

| Regions of the world | Exports of **manufactured goods** (share in global exports of goods,%) | | | | | | |
|---|---|---|---|---|---|---|---|
| | Total | Ferrous metals and products from them | Chemical products | Office and tele-communication equipment | Automobile products | Textiles | Clothing |
| World | 64,1 | 3,7 | 10,9 | 9,3 | 7,2 | 1,6 | 2,4 |
| North America | 66,7 | 1,4 | 10,9 | 9,9 | 11,4 | 0,7 | 0,5 |
| Central and South America | 26,6 | 2,6 | 6,7 | 0,8 | 3,4 | 0,6 | 2,1 |
| Europe | 74,1 | 3,1 | 16,3 | 5,6 | 9,9 | 1,3 | 2,0 |
| CIS | 23,2 | 6,6 | 6,3 | 0,5 | 0,7 | 0,5 | 0,4 |
| Africa | 16,4 | 1,4 | 3,4 | 0,5 | 1,5 | 0,5 | 1,6 |
| Middle East | 19,7 | 0,5 | 6,4 | 1,1 | 1,0 | 0,5 | 0,8 |
| Asia | 78,3 | 3,0 | 8,0 | 19,0 | 6,0 | 3,0 | 4,4 |

Source: [19]

On the world market the countries as Belarus, Germany, Israel, India, Italy, Canada, China, Latvia, Lithuania, Pakistan, Republic of Korea, Russia, the United States, Singapore, Finland, Czech Republic, Sweden, Japan, etc, are the countries, where the export of manufactured goods is priority (more than 50% of total export of goods and services).

The experts of the WTO underline the increase of the EU's share in the world export of automobiles up to 51,2% among the main trends of the development of the trade of industrial goods, while reducing of the share of Japan and the United States according to 11,7 and 9,3%, and also the record paces of

growth of the world export of clothing and textile products on 17% (up to 725 billion) including China – on 20% (up to 248 billion dollars).

### 5.2.2. What are world markets of raw commodities?

Raw materials are generally products of mining and agriculture. Therefore, the main commodities markets are food markets, markets of agricultural raw materials, markets of ores and metals, fuel.

A trade of commodities is characterized by several features:

• supply and demand for raw commodities depends on climatic conditions, natural stocks, political and economic crises. Therefore, in general, the international raw commodity trade is characterized by instability of the market;

• the long-term excess of supply of raw materials over the demand. This leads in some cases to the resource crisis in developing countries, with a narrow resource specialization as export of raw materials gives them from 50 to 100% of export revenues;

• partners strive to set a fairly lengthy relationship based on long-term international contracts, in which the exporter is ensured stable sales, and the importer is guaranteed a regular supply. About 30% of the global primary exports are accounted on long-term contracts, while for natural gas - 100%, copper, tin, lead-zinc concentrates - 90%, coal - 75%, iron ore - 60%, manganese ore - 30%;

• purchase and sale of commodities closely associated with delivery of other types of goods are part of commercial transactions, complex types of external economic cooperation (technical-economic, scientific and technical), large-scale agreements on compensation basis;

• the growth of export commodities with an absolute increase in the size of the trade of this commodity group is reducing;

• the growth of trade of fuel and raw materials of mineral origin is outpacing the growth of trade of food and agricultural raw materials;

• a trade of semi-finished products made on the basis of mineral and vegetable raw materials, as well as the raw material of deep processing/refining and specially trained materials of superior quality is increasing;

• requirements of importers to the ecological safety of products supplied are increasing;

• high degree of monopolization. The largest commercial and industrial companies are seeking to establish exclusively high prices on commodity markets. The intra corporate supply of raw materials is conducted at reduced transfer prices;

• governmental interference in the determination of the volume, directions, forms and methods of trade of commodities and foodstuffs is increasing.

The raw materials export is about 20% of world export, and it is about 40% with the trade of half-finished products (ferrous and nonferrous metals and chemical products).

Export of raw materials on the world market is a priority for such countries, as Albania, Bolivia, Vietnam, Ghana, Guadeloupe, Guinea, Zambia, Iceland, Cuba, Mongolia, Namibia, Niger, Nicaragua, New Zealand, Peru, Somalia, Sudan,

Tanzania, Togo, Uganda, Chad, Chile, Equatorial Guinea, etc (more than 50% of total export of goods and services).

**International trade in food products**, according to the SITC, includes: foodstuffs and animals (section 0): live animals, meat and meat products; dairy products and eggs; fish and seafood; grain and grain products, vegetables and fruits; sugar and honey; coffee, tea, cocoa, spices; cattle feed; a variety of foodstuffs; beverages and tobacco (section 1); oil (section 2, group 22); fats, oils, waxes of vegetable and animal origin (section 4).

Sections 0 and 4 are on the main place in the world market of food products. Trade in food, ready to use is rapidly developing.

Major exporters and importers of certain types of food in the world market are presented in Tab. 5.5.

Table 5.5

**The main exporters and importers on the 13 markets of food**

| Name of the market | Basic exporters (E) and importers (I) |
|---|---|
| 1. A market of live animals, incl.:<br>-cattle;<br>- sheep;<br>- pigs. | <br>the USA, Canada, the EU<br>E: Australia, Turkey<br>I: the Near East |
| 2. A market of meat, incl .:<br>- beef and veal;<br>- pork;<br>- lamb and goat meat;<br>- birds meat | <br>E: Australia, Brazil, the EU, the USA, Argentina<br>E: Denmark, Canada, the USA, Benelux<br>E: Australia, New Zealand<br>E: the USA, the EU, Brazil;<br>I: Russia, China, the EU countries of Near and Middle East |
| 3. A market of dairy products, including: creamy butter, cheese, milk (dry powder or condensed). | E: the EU, New Zealand, the USA, Australia, Argentina |
| 4. A market of eggs | E: the USA, China, the Netherlands (70% of world exports).<br>I: Japan, the EU, Canada, Hong Kong. |
| 5. A market of cereals, incl.:<br>- wheat<br><br><br>- corn<br>- rice | <br>E: theUSA, Canada, Australia, Argentina, Ukraine,the EU countries.<br>I: Mexico, the USA, CIS, Japan, China, the EU, Brazil, Egypt, Indonesia, Algeria.<br>E: the USA<br>E: Thailand, Vietnam, China, Pakistan<br>I: Indonesia, Iraq, Nigeria, Iraq |
| - rye | E: the EU, Canada<br>I: Japan, Poland, Republic of Korea, China, the USA |
| 6. A market of citrus and bananas | E: Mediterranean, Latin America.<br>I: Europe and North America. |
| 7. A sugar market | E: Cuba, Brazil, China, India (from sugar cane)<br>Trends in the market and prices depend on the volume of production and purchase of sugar by Russia and China. |
| 8. A market of seeds, vegetable oils, incl.:<br>- soybeans; | <br><br>E: the USA, China, Brazil, Argentina |

| | |
|---|---|
| - rape<br><br>- Sunflower (seeds)<br><br>- Olive oil<br><br>- Peanut oil | I: European countries, Japan.<br>E: Canada, Australia, CIS, the USA<br><br>E: Central Europe, Russia, Ukraine, the USA, Argentina<br>I: the EU, Turkey<br><br>E: the EU, Spain, Italy, Greece, Tunisia.<br>I: the EU, the USA, Syria, Morocco.<br>E: Senegal, Argentina, China, India, USA.<br>I: the EU, Indonesia, Canada, Russia, Mexico, Japan, North Africa |
| 9. A market of fish oil | E: Peru<br>I: Norway, the EU, Canada, Mexico, Japan |
| 10. A market of tobacco leaves | E: Brazil, the USA, Zimbabwe, China, Italy, India<br>I: the United Kingdom, Germany, Russia, the USA, Japan, the Netherlands. |
| 11. A tea market | E: India, China, Sri Lanka, Indonesia.<br>Offer of higher grades of tea in the world market is declining. Competition among major importers is growing, causing higher prices for tea and reducing consumption |
| 12. A cocoa market | E: Ivory Coast, Ghana, Nigeria, Indonesia, Brazil<br>I: the USA, Germany, Netherlands, the United Kingdom, Switzerland.<br>Exporting countries concluded with importing countries in 1972 International cocoa agreement to regulate the market |
| 13. A coffee market | E: Brazil, Colombia, Mexico, Ivory Coast, Indonesia, India<br>I: Germany, Japan, France, Italy, Spain |

Source: [9]

Central and South America (23,8 %), North America (9,0%), Europe (8,8%) dominate among the regions of the world in the export of food products [19].

There is a pricing problem at food markets because prices expose to fluctuations, which is difficult to predict. Pricing in food markets is characterized by several features: prices on individual food items orientate on stock prices or prices of auctions; prices are unstable; plurality of prices in connection with the availability of various sorts, centers of commerce, differences in terms of supply; strong competition from artificial and synthetic substitutes; an impact of foreign trade policy.

There are such commodity groups of section 2 of the SITC **on the global market of agricultural raw materials:** leather, fur; rubber, cork and wood; pulp and waste paper; textile fibers and wastes; raw materials of animal and vegetable origin, not elsewhere specified.

The world export of agricultural raw materials by regions of the world consists of (in billions): North America-251, Central and South America – 206, Europe – 670, Africa – 59, Near East – 32, Asia-382 [6, p. 119].

The markets for agricultural raw materials develop under the influence of the same macroeconomic factors as the food markets. The leading position on the markets for agricultural raw materials is occupied by natural rubber, wood, cotton, wool.

The center of the world production of *natural rubber* is Southeast Asia. Thailand, Indonesia and Malaysia are the largest of its producers, which account ¾ of the world production.

The main importers of natural rubber are industrially developed countries (countries of America account 23% of the world consumption, Europe-18%, Japan - 12%) and Asian developing countries.

The dynamics of prices on natural rubber determines the increase or decrease in stocks under the influence of the ratio of supply and demand. Reduction in the world stocks leads today to a rise in prices on this product.

Control of the stability of prices in the market of natural rubber is carried out by the International Rubber Conference Organisation (the INRO), which was created in 1980.

The world production of *forest products* is increasing constantly. The most dynamically this industry develops in the United States and Canada.

There are changes in recent years in the structure of forest products: proportion of raw materials for pulp and paper production and wood has increased and the proportion of raw materials for mechanical wood processing has decreased.

In the international trade of *textile fibers* about a half falls on cotton (fiber). A world production of cotton is 27,4 million tons per year. The main producers are China, India, the United States, Brazil, Australia, Uzbekistan, which produce approximately 87% of cotton in the world. The largest consumers are China, India, Pakistan, Turkey, and Bangladesh.

The New York Cotton Exchange, the Chicago Rice and Cotton Exchange and cotton and mediation market of the Liverpool Cotton Association are the leading centers of the world trade in cotton.

The most expensive kind of textile raw material is wool. A world wool production is about 2 million tons per year, while the share in the total consumption of all textile fibers is about 5%. The main producers of wool are Australia, New Zealand, Argentina, Uruguay, South Africa, and CIS. Auctions and trade houses play an important role in a trade in wool.

The ores and metals market includes the ferrous metals and non-ferrous metals market, including: steel market (52,7%), gold (14,9%), copper (9,6%), aluminum (7,6%), silver (2,1%), nickel (2,0%). The world market of metals increased by 28%, on average, over the past five years. The highest growth rates are observed in the gold market (212%), silver (182%), tin (47%), steel (25%), copper (22%).

**The ores and metals market** includes a market of ferrous metals and non-ferrous metals market. The leaders are: steel market (52,7%), gold (14,9%), copper (9,6%), aluminum (7,6%), silver (2,1%), nickel (2,0%). The world market of metals increased by 28%, on average, over the past five years. The highest growth rates are observed in the gold (212 %), silver (182 %), tin (47 %), steel (25 %), copper (22 %) markets [6, p. 121].

Major exporters and importers in the world market of nonferrous metals are:

- market of copper concentrates and refined copper: exporters – the United States, Chile, Portugal, the Philippines, Russia, Canada, Kazakhstan; importers – Japan, Germany, Spain, the Republic of Korea;

- market of aluminum: exporters – Russia, Australia, Norway, Brazil; importers are Japan, the United States, Germany, Italy, Belgium, France, the Netherlands, the United Kingdom;

- market of refined lead: exporters-Australia, Canada, Mexico; importers-the United States, the EU countries;

- market of zinc ores and concentrates: exporters – Canada, Sweden, Peru, Mexico; importers - Germany, France, Belgium, Japan;

- market of tin concentrates and refined tin: exporters – Australia, Peru, Bolivia, Canada; importers - the EU countries, the United States, Japan;

- market of nickel: exporters – Canada, New Caledonia; importers - Japan, the United States, Germany;

- market of gold: exporters – the Republic of South Africa, the United States, Australia, Canada.

The peculiarity of the market of non-ferrous metals is the lack of world prices on raw materials of non-ferrous metals. This is connected with the presence of a large variety of qualitative characteristics of the feedstock. Prices on raw materials directly depend on prices on a refined metal.

**The world market of fuel** includes the trade in goods from section 3 of SITC: coal, coke, briquettes; petroleum, petroleum products and similar products; natural and manufactured gas; electricity.

The leading role in this market belongs to the petroleum (about 40% of world production and consumption), coal (about 31%), and gas (about 23%).

The biggest exporters of petroleum and petroleum products are Saudi Arabia (17,6%), Russia (14,8%), Nigeria (6,5%), Iran (5,6%), and importers - the USA (21,9%), China (11,2% ), Japan (8,3%).

OPEC ensures 36,5% of total demand for oil of consumer countries. In the closest 5 years this indicator will increase to 40% and during 10 years will exceed 50%. According to forecasts, the oil demand raises by an average of 1.6% annually; it will make 120 million barrels per day until 2030 year.

To ensure this growth in demand the great investments will be necessary. Over 60% of increase of oil demand will be determined by developing countries (especially Asian). The share of developing countries in the world demand will increase in 2030 up to 43% [6, p. 122].

In the next decade oil with the share of 40% will maintain a dominant role in the global primary energy consumption. Its price will remain a benchmark in the global market of energy products.

The international trade *in coal* has a tendency to expand. For the last 10 years the turnovers of coal market grew by nearly 50% and accounted for 1 billion tons in 2013. It is connected to the fact that the reserves of coal in the world huge and they are relatively easily accessible; there is the opportunity to diversify its supplies; it is sold all over the world at very stable prices.

Australia, the USA, South Africa, Indonesia, South America, Canada, CIS are the main exporters of coal, and Western Europe, Japan, South Korea, Taiwan are the importers.

In price struggle on the global market those countries can win, which mine the coal by opencast methods (South Africa, Australia).

The world market of *natural gas* develops under the influence of the changes in the market of liquid fuels. Special interest is manifested to liquefied natural gas because its use in electric power plants, in cars, airplanes, helicopters is constantly growing. The trade in liquefied gas is concentrated mainly in the Asia-Pacific region and is makes about 75% of the world trade in these products. The world exports of liquefied natural gas is approximately 90 million tons and the cost of its global commodity turnover exceeds $ 10 billion.

The share of gas in the global energy supply will increase to 26-28% and coal - will be in the range of 19-24% by 2020.

Russia, Norway, the Netherlands are the leading exporters of natural gas in continental Western European countries.

Today at the expense of petroleum, gas and coal 85% of energy demand is covered and their total share will be 60% in 50 years.

The world export of fuel by the world regions is (billion dollars).: North America - 400, Central and South America - 323, Europe - 822, Africa - 382, CIS - 521, the Middle East - 847, Asia - 700 [6, p. 123].

The countries conclude different international agreements to stabilize the development of international trade in raw materials:

- the stabilization agreements that are intended to provide the stabilization and the balance of supply and demand. The quota on the volume of raw materials are provided in them. They are concluded concerning the trade in copper, tin, zinc, nickel, aluminum, coffee, cocoa, rubber;
- administrative and trade agreements that are intended for the statistical analysis of the markets of raw materials and making recommendations for the conduct of trade in certain products, such as sugar, wheat and other cereals;
- the international trade agreements for development measures that are intended for creation and development of the export-oriented production of raw materials. They are concluded, for example, on jute, valuable types of wood, vegetable and olive oil, and others.

### 5.2.3. What types of world prices for manufactured and raw commodities are known and how are they formed?

National markets of particular goods, which create global commodity market, have their own specifics. These specifics are the reason of diversity of commercial and trade-political factors that influence the dynamics and the level of world prices. A lot of different prices for the same goods or goods with the same quality in one field of rotation (export, wholesale, retail) and based on the same transport are on the world market. Two criteria are used for choosing the price:

- large commercial agreements are concluded at this price;
- these are the prices of the agreements concluded in the largest centers of world trade, such as Chicago Mercantile Exchange, London Metal Exchange, etc. [9].

For certain goods, the world prices are the import or export prices of the major exporters or importers.

Thus, world prices are the prices of goods on the world market, where the commercial transactions should be done on a regular basis, should carry separate commercial nature, should be performed in a free trade policy regime and to be realized in a freely convertible currency

There are the following types of prices:

- prices of the trade agreements with the payment in convertible and non-convertible and partly convertible currency;
- clearing prices;
- transfer prices.
- prices by the programs under the state aid and so on.

The advertised prices and accounting prices are used by determining the prices level.

Advertised prices are the prices, which level is reported in the specialized and proprietary information sources. They usually reflect the level of world prices.

Advertised prices include:

- reference prices (prices of goods in the internal wholesale trade or in the external trade of foreign countries), that are printed in economic newspapers, magazines, special bulletins, company catalogs, price lists;
- exchange quotation (the prices of goods that are the subject of exchange trading);
- auction and bidding prices;
- the prices of actual transactions, that are not published on a regular basis, but they are compared with reference prices in order to establish the real contract price;
- prices of the proposal of the large firms.

Accounting prices are used to non-standard equipment and are calculated by exporting firm. We can find the information about them sporadically in print, that's why these prices can't be used for comparison in case of choosing the prices level.

When analyzing world prices, they are divided into two groups: the prices of manufactured goods and the prices of raw materials.

Export prices of major manufacturers and their exporters are the world prices for the products of manufacturing industries. Base of export prices is formed with domestic prices, which are calculated using the method of complete and direct costs.

All the costs, which are connected with the manufacturing (materials, labor, indirect costs), must be summarized according to the complete costs method. The value of expected profit must be added to them. Then we can define expected income from sales. We can calculate the factory unit price of the product by dividing of expected income value on monthly output.

The rate of loading of capacities is taken as 75-85% in case of using this method. Premium (discount) on income must be added to factory price. This measure is defined as the ratio of real income to the invested capital (in percentages). This ratio is calculated on prospect and is called "target" rate of profit, its value is not constant and may vary depending on the position of a company in the market, the nature of its pricing policy and state. Excise may be an

example of such premium, and discounts – are the corrections on wholesalers. Method of direct expenses provides a more complete account of market conditions at the initial stage of pricing. It is based on the allocation of all costs on overhead (fixed) and direct (variable) costs (Tab. 5.6) [9].

Table 5.6

**Price determination by the method of direct costs (monthly costs, dollars).**

| Costs | Variants | | | |
|---|---|---|---|---|
| | I | II | III | IV |
| Expected sales volume, items | 400 | 600 | 800 | 900 |
| Estimated price per unit | 18,0 | 16,0 | 15,0 | 14,0 |
| Total direct (variable) costs | 8,58 | 8,46 | 8,4 | 8,34 |
| "Marginal profit" per unit | 9,42 | 7,54 | 6,6 | 5,66 |
| The total "marginal profit" | 3768 | 4528 | 5280 | 5094 |
| Fixed costs at 100% capacity utilization | 3000 | 3000 | 3000 | 3000 |
| Realized profit | 768 | 1524 | 2280 | 2094 |

Several options for predictable prices and the corresponding predicted volumes of sales are determined by the method of direct costs. Then the sum of direct costs is calculated and "marginal" (additional) profit per unit of output (the spread between the selling prices and variable costs) is determined, and then - on the whole amount of projected sales for predictable price. Then fixed costs are deducted from the total obtained "marginal profit" and earnings from sales are defined. The calculations show that the maximum income is received in the sale of 800 items at a price of $ 15 per unit. It is possible to determine the optimal combination of production volume, selling prices and costs by this method, but it is difficult to use, because firms usually do not know the demands and sales volumes of their products.

Full-cost method is preferred. Since pricing is influenced by many factors, prices that were calculated using described methods, serve only as a basis for further maneuvering on the market with constantly changing conditions. Businesses refine these prices by using branched out system of discounts and extra charges for variation of quality allowances for shift quality, delivery conditions, packaging, labeling etc. Few operations are carried out by list prices. Large consignments are realized at a discount from list prices or at contract prices.

Not size of the internal expenses play the main role in the formation of world prices of raw materials, but:

- the ratio of supply and demand in the market of raw commodities;
- the combination of prices of main producers (exporters) and exchange quotation or auction prices;
- prices plurality of major manufacturers (exporters) defined by the specifics of regional markets, the difference in the use of currency at calculations, the imbalance of supply and demand for commodities;
- the state or groups of states-leading exporters and / or importers of the certain products play the special role in the formation of world prices. Groups of states (the main manufacturers and exporters) can create interstate foreign trade associations to monitor the level of production of given kind of goods and have an

influence on the formation and dynamics of world prices (e.g., Organization of Petroleum Exporting Countries - OPEC).

The mechanism of formation of world prices on raw commodities testifies to the divergence of world and domestic prices for similar goods. As a rule, domestic prices are higher than the world ones. This fact is more typical for import and less - for export prices. But it occurs to the contrary in the trade of some primary commodities, such as oil: world prices exceed the internal prices. This fact is connected with customs barriers between countries, with the activity of the most competitive firms in the global market and dependence of world prices on price indices for products of the market leaders.

Leading exporters and importers in international trade in goods are presented in Tab. 5.7.

Table 5.7

**Leading exporters and importers in global trade in goods, 2015 ($ billion and %)**

| Rank | Exporters | Value | Share | Annual % change | Rank | Importers | Value | Share | Annual % change |
|---|---|---|---|---|---|---|---|---|---|
| 1 | China | 2275 | 13.8 | -2.9 | 1 | United States | 2308 | 13.8 | -4.3 |
| 2 | United States | 1505 | 9.1 | -7.1 | 2 | China | 1682 | 10.0 | -14.2 |
| 3 | Germany | 1329 | 8.1 | -11.0 | 3 | Germany | 1050 | 6.3 | -13.0 |
| 4 | Japan | 625 | 3.8 | -9.5 | 4 | Japan | 648 | 3.9 | -20.2 |
| 5 | Netherlands | 567 | 3.4 | -15.7 | 5 | United Kingdom | 626 | 3.7 | -9.4 |
| 6 | Korea, Republic of | 527 | 3.2 | -8.0 | 6 | France | 573 | 3.4 | -15.4 |
| 7 | Hong Kong, China | 511 | 3.1 | -2.6 | 7 | Hong Kong, China | 559 | 3.3 | -6.9 |
| | - domestic exports | 13 | 0.1 | -16.2 | | - retained imports | 134 | 0.8 | -10.7 |
| | - re-exports | 498 | 3.0 | -2.2 | | | | | |
| 8 | France | 506 | 3.1 | -12.8 | 8 | Netherlands | 506 | 3.0 | -14.2 |
| 9 | United Kingdom | 460 | 2.8 | -8.9 | 9 | Korea, Republic of | 436 | 2.6 | -16.9 |
| 10 | Italy | 459 | 2.8 | -13.4 | 10 | Canada a | 436 | 2.6 | -9.1 |
| 11 | Canada | 408 | 2.5 | -14.0 | 11 | Italy | 409 | 2.4 | -13.8 |
| 12 | Belgium | 398 | 2.4 | -15.7 | 12 | Mexico | 405 | 2.4 | -1.5 |
| 13 | Mexico | 381 | 2.3 | -4.1 | 13 | India | 392 | 2.3 | -15.3 |
| 14 | Singapore | 351 | 2.1 | -14.5 | 14 | Belgium | 375 | 2.2 | -17.5 |
| | - domestic exports | 174 | 1.1 | -19.6 | | | | | |
| | - re-exports | 177 | 1.1 | -8.7 | | | | | |
| 15 | Russian Federation | 340 | 2.1 | -31.6 | 15 | Spain | 309 | 1.8 | -13.8 |
| 16 | Switzerland b | 290 | 1.8 | -6.9 | 16 | Singapore | 297 | 1.8 | -19.0 |
| | | | | | | - retained imports c | 120 | 0.7 | -30.5 |
| 17 | Chinese Taipei | 285 | 1.7 | -10.8 | 17 | Switzerland b | 252 | 1.5 | -8.7 |
| 18 | Spain | 282 | 1.7 | -13.2 | 18 | Chinese Taipei | 238 | 1.4 | -15.7 |
| 19 | India | 267 | 1.6 | -17.2 | 19 | United Arab Emirates d | 230 | 1.4 | -8.0 |
| 20 | United Arab Emirates d | 265 | 1.6 | -29.3 | 20 | Australia | 208 | 1.2 | -12.0 |
| 21 | Thailand | 214 | 1.3 | -5.8 | 21 | Turkey | 207 | 1.2 | -14.4 |
| 22 | Saudi Arabia, Kingdom of | 202 | 1.2 | -41.1 | 22 | Thailand | 203 | 1.2 | -11.0 |
| 23 | Malaysia | 200 | 1.2 | -14.6 | 23 | Russian Federation a | 194 | 1.2 | -37.0 |
| 24 | Poland | 198 | 1.2 | -10.0 | 24 | Poland | 193 | 1.1 | -13.9 |
| 25 | Brazil | 191 | 1.2 | -15.1 | 25 | Brazil | 179 | 1.1 | -25.2 |
| 26 | Australia | 188 | 1.1 | -21.9 | 26 | Malaysia | 176 | 1.0 | -15.7 |
| 27 | Viet Nam | 162 | 1.0 | 7.9 | 27 | Saudi Arabia, Kingdom of d | 172 | 1.0 | -0.9 |
| 28 | Czech Republic | 158 | 1.0 | -9.7 | 28 | Viet Nam | 166 | 1.0 | 12.3 |
| 29 | Austria | 152 | 0.9 | -14.5 | 29 | Austria | 155 | 0.9 | -14.7 |
| 30 | Indonesia | 150 | 0.9 | -14.8 | 30 | Indonesia | 143 | 0.9 | -19.9 |
| | **Total of above e** | **13848** | **84.0** | - | | **Total of above e** | **13126** | **78.3** | - |
| | **World e** | **16482** | **100.0** | **-13.2** | | **World e** | **16766** | **100.0** | **-12.2** |

Source: [21]

The table shows that seven countries among first 20 leading exporting and importing countries are located in the Asia-Pacific region (29,3% of world exports), seven countries are located in the EU (24,3%). It testifies to a key role of these regions in the world economy. Total export of these 20 countries is 73 % of world exports and total import is 71 % of world imports.

### 5.3. Services and their classification in international trade

The world market in services is the exchange of services between countries. It is an integral part of international economic relations along with world commodity markets.

The services are exchanged in this market. They are the result of the operation in the most important areas of human activity: science, technology, production, management.

**Service** is an execution by one party (the contractor) under the order of the other party (customer) of specific actions under the contract or performance of certain activities that are consumed in the process of implementation. Services as a result of work are displayed in beneficial effects, especially in consumer value. Services in foreign economic activity - are the economic relations between the two parties - residents and non-residents.

Services and trade in them are qualitatively different from the trade in goods.

The main characteristics of services is in the fact, that they cannot be, unlike goods, seen and felt to the touch; they cannot be preserved; services trade is related to their production; services export means providing services to foreigners, it means to non-resident, even if he is on the custom territory of the country. However, the above description of characteristics is limited. Some services can be seen (for example, consultant report on diskette), some of them are stored (for example, telephone answering system).

The difference between the goods and services is also in the way of the government's protection of domestic producers. If manufacturing industries fence themselves off by setting tariffs, quantitative restrictions, etc., so the service sector dissociate itself mainly by national regulations and rules on foreign direct investment and foreign service providers participating in the activities of domestic enterprises.

Services sector protection can't be achieved through measures at borders as intangible nature of services and the fact that few services operations are related with border crossings.

International organizations systematize and classify the services that are the subjects of international trade.

The International Monetary Fund (IMF) has developed the guidelines for the balance of payments, which is represented by the composition of services included in the current account. Classification of services, adopted by the IMF, shows payments between residents and non-residents and includes 11 sectors:

I. Transportation services:

A) passenger transportation (international passenger transportation by all models of transport and providing of related services);

B) freight transportation (international freight transport by all types of transport and providing related services).

II. Travel services:

A) services associated with business travel [goods and services purchased by non-residents, traveling on business reasons (business trip)];

B) services related to personal travel [goods and services purchased by non-residents, traveling on personal reasons (tourism)].

III. Communication services (postal services, courier, telephone and other communication between residents and non-residents).

IV. Construction services (building facilities abroad, implemented on an interim basis by residents).

V. Insurance services (non-resident insurance by the resident companies).

VI. Financial services (financial intermediation between residents and non-residents (commission for opening letters of credit, currency exchange, brokerage, etc.).

VII. Computer and information services (consulting in computer programs, information services (data processing, use of databases, subscription on information line), computer services).

VII. Royalties and license fees (usage of the rights of property (trademark, patent, copyright, etc.) and usage of the originals or prototypes (films, manuscripts) based on the license).

IX. Other business services:

A) intermediary services (mediation commission);

B) leasing (leasing and freight of ships, airplanes and other transportation equipment);

C) other business, professional and technical services (legal, accounting, management, advertising and other services, and services of the design, cartography, construction supervision, crop protection).

X. Personal, cultural and recreational services:

A) audiovisual services (film production, radio and television programs, CDs, artists' fees);

B) others services (Showing of exhibitions, sporting and other events).

XI. Government services (supplying of goods to embassies, consulates, international organizations, UN peacekeeping operations).

The World Bank classifies services for aggregated groups, including revenue traffic. Services are divided into two groups:

I group - factor services, which include payments, that arise in connection with the international movement of factors of production - capital, labor (income on investments, royalties, wages, paid by non-residents, etc.).

II group – nonfactor services, which include other services (transport, travel, and other non-financial services), that are not related with the factors of production [9].

In the GATS World Trade Organization offered the classification of services by the 12 sectors: (1. Business (Business services and professional services: accountancy services; advertising services; architectural and engineering services; computer and related services; legal services) 2.Communication (audiovisual services; postal and courier, express mail services; telecommunications) 3.Construction and Engineering; 4. Distribution services; 5.Education services; 6.Environmental services; 7. Financial services; 8. Health and social services; 9. Tourism and Travel services; 10. Recreation, cultural, and sporting; 11. Transport; 12. Other services) and by 155 subsectors.

Various characteristics of services affect the way of charring out international operations in the service sector. If international transactions of goods provide their physical movement from one country to another, so only some kinds of services provide movement across borders. However, time and place of consumption cannot be separated for most of transactions in services, which requires approximation service supplier to the consumer.

Services are provided at the international level using four methods: cross-border supply, consumption abroad, commercial presence, and presence of natural persons.

The total number of services traded in last two methods, is significantly higher than the first two. However, the latest achievements of ICT and e-commerce development create more and more opportunities for companies to provide services in a mode of cross-border movement without creating a commercial presence in the importing country.

It can be, when not only one way of delivery for providing services may be used. For example, certain advisory service can be provided by means of telecommunications and individuals directly present there.

Service delivery is the fastest section of foreign trade. More and more types of services become market commodities and are recorded on the current account balance.

In 2015, world trade in commercial services was down by 6%, with some regions experiencing significant declines (Fig. 5.1.).

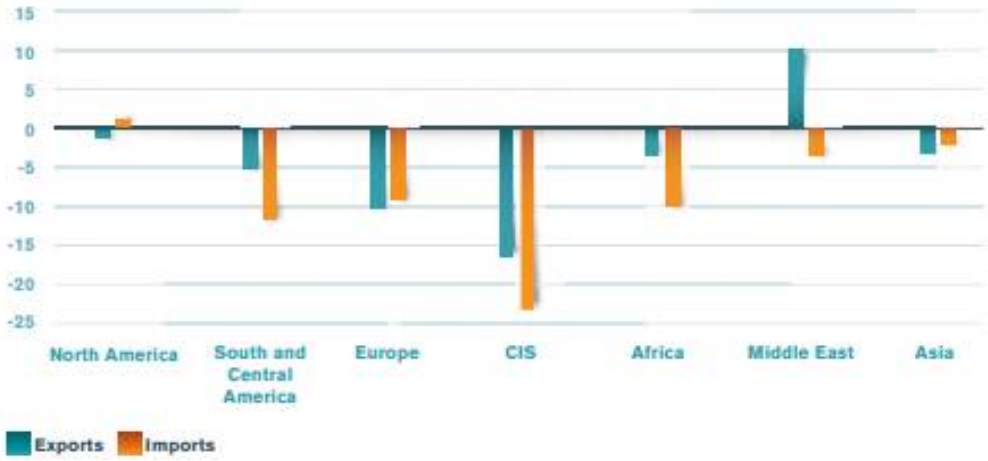



Fig. 5.1. Trade in commercial services by region, 2015 (annual percentage change) [22].

In 2015, the top ten exporters of commercial services were the same as the top ten importers but the order of the top ten differed (Tab. 5.8). The United States maintained its position as the world's leading trader of commercial services. Although US exports stagnated, its imports were up by 3 per cent, reflecting its ongoing economic recovery.

China was the second-largest services exporter in 2015, with a 6 per cent share in global services exports. The country was the only leading services exporter to record positive growth for both exports and imports (2 % and 3 % respectively). However, China remained a net importer of services, mainly due to the rapid increase in its travel imports in recent years.

In US dollar terms, leading European traders saw declines in their services trade, with the sharpest export reduction in France (-13 per cent) and the biggest fall in imports in Germany (-12 per cent). However, it should be noted that in euro terms growth was positive in both countries [22].

Table 5.8

**Leading exporters and importers of commercial services, 2015 ($ billion and %)**

| Rank | Exporters | Value | Share | Annual % change | Rank | Importers | Value | Share | Annual % change |
|---|---|---|---|---|---|---|---|---|---|
| 1 | United States | 690 | 14.8 | 0.0 | 1 | United States | 469 | 10.3 | 3.5 |
| 2 | United Kingdom | 341 | 7.3 | -4.7 | 2 | China | 437 | 9.6 | 14.7 |
| 3 | Germany | 246 | 5.3 | -9.8 | 3 | Germany | 292 | 6.4 | -11.5 |
| 4 | France | 239 | 5.1 | -13.1 | 4 | France | 224 | 4.9 | -11.0 |
| 5 | China | 229 | 4.9 | -0.7 | 5 | United Kingdom | 205 | 4.5 | -1.8 |
| 6 | Netherlands | 176 | 3.8 | -9.5 | 6 | Japan | 174 | 3.8 | -8.8 |
| 7 | Japan | 158 | 3.4 | -0.2 | 7 | Netherlands | 166 | 3.6 | -4.1 |
| 8 | India | 158 | 3.4 | 1.2 | 8 | Ireland | 151 | 3.3 | 4.5 |
| 9 | Singapore | 140 | 3.0 | -7.3 | 9 | Singapore | 144 | 3.1 | -7.6 |
| 10 | Ireland | 128 | 2.7 | -4.1 | 10 | India a | 126 | 2.7 | -1.1 |
| 11 | Spain | 118 | 2.5 | -10.9 | 11 | Korea, Republic of | 112 | 2.5 | -2.1 |
| 12 | Switzerland | 108 | 2.3 | -7.6 | 12 | Belgium | 104 | 2.3 | -11.2 |
| 13 | Belgium | 106 | 2.3 | -12.7 | 13 | Italy | 98 | 2.1 | -13.7 |
| 14 | Hong Kong, China | 104 | 2.2 | -2.3 | 14 | Canada | 95 | 2.1 | -10.6 |
| 15 | Italy | 99 | 2.1 | -12.7 | 15 | Switzerland | 93 | 2.0 | -5.4 |
| 16 | Korea, Republic of | 97 | 2.1 | -12.7 | 16 | Russian Federation | 85 | 1.9 | -28.3 |
| 17 | Luxembourg | 94 | 2.0 | -5.6 | 17 | Hong Kong, China | 74 | 1.6 | 0.2 |
| 18 | Canada | 76 | 1.6 | -10.4 | 18 | Luxembourg | 72 | 1.6 | -6.5 |
| 19 | Sweden | 70 | 1.5 | -6.2 | 19 | Brazil | 69 | 1.5 | -19.8 |
| 20 | Denmark | 61 | 1.3 | -15.9 | 20 | Spain | 63 | 1.4 | -7.1 |
| 21 | Thailand | 60 | 1.3 | 9.6 | 21 | Sweden | 58 | 1.3 | -10.8 |
| 22 | Austria | 60 | 1.3 | -10.2 | 22 | Saudi Arabia, Kingdom of | 58 | 1.3 | -6.7 |
| 23 | Chinese Taipei b | 56 | 1.2 | -0.1 | 23 | Australia | 54 | 1.2 | -14.0 |
| 24 | Russian Federation | 49 | 1.0 | -24.5 | 24 | Denmark | 54 | 1.2 | -13.7 |
| 25 | Australia | 48 | 1.0 | -9.4 | 25 | Thailand | 50 | 1.1 | -4.6 |
| 26 | Turkey | 46 | 1.0 | -7.8 | 26 | Austria | 47 | 1.0 | -11.2 |
| 27 | Poland | 43 | 0.9 | -9.6 | 27 | Norway | 47 | 1.0 | -16.1 |
| 28 | Norway | 41 | 0.9 | -17.5 | 28 | Chinese Taipei b | 47 | 1.0 | 3.8 |
| 29 | Malaysia | 35 | 0.7 | -17.0 | 29 | Malaysia | 40 | 0.9 | -11.8 |
| 30 | Israel | 34 | 0.7 | -2.9 | 30 | Poland | 32 | 0.7 | -11.5 |
| | **Total of above** | **3910** | **83.6** | **-** | | **Total of above** | **3741** | **81.9** | **-** |
| | **World** | **4675** | **100.0** | **-6.4** | | **World** | **4570** | **100.0** | **-5.4** |

Source: [21]

In the structure of the world export of services the largest share accounts for travel services – 25,9% and other commercial services – 52,5%, transport services – 18,4% and goods-related services – 3,2 %.In the structure of the world import of services transport services account for 23,6%, travel services – 26,4% (Tab. 5.9).

Table 5.9

**World trade in commercial services by category, 2015 (Billion dollars and percentage)**

| | Value | Share | | | | |
|---|---|---|---|---|---|---|
| | 2015 | 2005 | 2010 | 2013 | 2014 | 2015 |
| Exports | | | | | | |
| All commercial services | 4755 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Goods-related services | 150 | 3.3 | 3.6 | 3.5 | 3.3 | 3.2 |
| Transport | 875 | 22.4 | 21.5 | 19.9 | 19.2 | 18.4 |
| Travel | 1230 | 26.5 | 25.0 | 25.2 | 25.6 | 25.9 |
| Other commercial services | 2495 | 47.9 | 49.9 | 51.5 | 51.9 | 52.5 |
| Imports | | | | | | |
| All commercial services | 4610 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Goods-related services | 100 | 2.6 | 2.1 | 2.3 | 2.1 | 2.1 |
| Transport | 1090 | 27.1 | 26.5 | 25.8 | 24.6 | 23.6 |
| Travel | 1215 | 26.0 | 23.3 | 23.8 | 25.3 | 26.4 |
| Other commercial services | 2210 | 44.3 | 48.1 | 48.1 | 48.0 | 47.9 |

Source: [22]

The dynamics of the world trade in commercial services by category and by region is shown in the Table 5.10. In 2015, world travel exports fell by 5 per cent to US$ 1,230 billion, largely as a result of strong exchange rate fluctuations, in particular the appreciation of the US dollar against major world currencies, rather than declining demand for international tourism. Despite rising security concerns and geopolitical tensions in various destinations, global international tourist arrivals grew by 4 per cent, reaching 1,184 million in 2015 [22].

Table 5.10

**Growth of commercial services exports by category and by region, 2005-2015 (Annual percentage change)**

| | **World** | **North America** | **South and Central America** | **Europe** | **CIS** | **Africa** | **Middle East** | **Asia** |
|---|---|---|---|---|---|---|---|---|
| **Commercial services** | | | | | | | | |
| 2005-10 | 8 | 8 | 9 | 6 | 12 | 9 | - | 12 |
| 2014 | 7 | 3 | 2 | 7 | -9 | 4 | 6 | - |
| 2015 | -6 | -1 | -5 | -10 | -16 | -3 | 5 | -3 |
| **Goods-related services** | | | | | | | | |
| 2005-10 | 10 | 12 | -12 | 9 | 11 | 16 | 19 | 15 |
| 2014 | 2 | 19 | 7 | 2 | -22 | 16 | 15 | -2 |
| 2015 | -9 | 8 | -2 | -17 | -17 | -14 | 2 | -1 |
| **Transport** | | | | | | | | |
| 2005-10 | 7 | 6 | 8 | 6 | 12 | 10 | 9 | 9 |
| 2014 | 3 | 2 | -3 | 4 | -5 | 3 | 9 | 4 |
| 2015 | -10 | -7 | -12 | -13 | -14 | 2 | 6 | -9 |
| **Travel** | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2005-10 | 7 | 5 | 6 | 4 | 9 | 8 | 15 | 13 |
| 2014 | 8 | 3 | 6 | 4 | -13 | 5 | 10 | - |
| 2015 | -5 | 0 | 3 | -13 | -17 | -5 | 9 | -1 |
| **Other commercial services** | | | | | | | | |
| 2005-10 | 9 | 10 | 17 | 7 | 16 | 11 | - | 13 |
| 2014 | 8 | 2 | 1 | 9 | -7 | 4 | -1 | 12 |
| 2015 | -5 | -1 | -8 | -7 | -17 | -3 | 0 | -2 |

Source: [22]

The dynamics of the world trade in transport and travel services by region are shown in the Tab. 5.11, 5.12 [22].

Table 5.11

**World trade in transport by region, 2015 (billion dollars and %)**

| | Value | Share | | Annual percentage change | | | |
|---|---|---|---|---|---|---|---|
| | 2015 | 2010 | 2015 | 2010-15 | 2013 | 2014 | 2015 |
| Exports | | | | | | | |
| **World** | **875** | **100.0** | **100.0** | **1** | **3** | **3** | **-10** |
| North America | 98 | 10.3 | 11.1 | 3 | 3 | 2 | -7 |
| South and Central America | 26 | 3.0 | 3.0 | 1 | 5 | -3 | -12 |
| Europe | 412 | 48.4 | 47.1 | 1 | 6 | 4 | -13 |
| European Union (28) | 366 | 43.4 | 41.7 | 0 | 5 | 4 | -13 |
| Commonwealth of Independent States (CIS) | 35 | 3.9 | 4.0 | 2 | 6 | -5 | -14 |
| Africa | 30 | 2.9 | 3.4 | 4 | 2 | 3 | 2 |
| Middle East | 36 | 2.8 | 4.1 | 9 | 7 | 9 | 6 |
| Asia | 240 | 28.7 | 27.4 | 0 | -3 | 4 | -9 |
| Imports | | | | | | | |
| **World** | **1090** | **100.0** | **100.0** | **2** | **3** | **2** | **-10** |
| North America | 130 | 10.9 | 11.9 | 4 | 5 | 4 | -1 |
| South and Central America | 45 | 4.6 | 4.2 | 0 | 0 | -5 | -14 |
| Europe | 357 | 35.9 | 32.8 | 0 | 6 | 3 | -12 |
| European Union (28) | 327 | 32.7 | 30.0 | 0 | 6 | 4 | -11 |
| Commonwealth of Independent States (CIS) | 22 | 2.4 | 2.0 | -1 | 4 | -12 | -21 |
| Africa | 64 | 5.7 | 5.9 | 3 | 1 | 4 | -9 |
| Middle East | 107 | 7.4 | 9.8 | 8 | 1 | 4 | -2 |
| Asia | 364 | 33.1 | 33.4 | 2 | -1 | 3 | -11 |

Table 5.12

**World trade in travel by region, 2015 (billion dollars and %)**

| | Value | Share | | Annual percentage change | | | |
|---|---|---|---|---|---|---|---|
| | 2015 | 2010 | 2015 | 2010-15 | 2013 | 2014 | 2015 |
| Exports | | | | | | | |
| **World** | **1230** | **100.0** | **100.0** | **5** | **7** | **8** | **-5** |
| North America | 212 | 17.2 | 17.2 | 5 | 7 | 3 | 0 |
| South and Central America | 57 | 4.5 | 4.6 | 6 | 4 | 6 | 3 |
| Europe | 422 | 40.9 | 34.3 | 1 | 8 | 4 | -13 |
| European Union (28) | 368 | 36.0 | 29.9 | 1 | 8 | 4 | -13 |
| Commonwealth of Independent States (CIS) | 19 | 1.8 | 1.5 | 2 | 9 | -13 | -17 |
| Africa | 41 | 4.5 | 3.3 | -1 | -7 | 5 | -5 |
| Middle East | 60 | 4.9 | 4.9 | 5 | 7 | 10 | 9 |
| Asia | 419 | ... | 34.1 | ... | 10 | ... | -1 |
| Imports | | | | | | | |
| **World** | **1215** | **100.0** | **100.0** | **7** | **8** | **14** | **-2** |
| North America | 160 | 14.4 | 13.2 | 5 | 3 | 4 | 4 |
| South and Central America | 42 | 4.0 | 3.4 | 4 | 11 | 2 | -17 |
| Europe | 377 | 42.0 | 31.0 | 1 | 6 | 6 | -13 |
| European Union (28) | 337 | 38.1 | 27.7 | 1 | 6 | 6 | -13 |
| Commonwealth of Independent States (CIS) | 48 | 4.1 | 4.0 | 7 | 22 | -5 | -26 |
| Africa | 26 | 3.0 | 2.1 | 0 | 0 | -3 | 1 |
| Middle East | 81 | 7.5 | 6.6 | 5 | 4 | 17 | -4 |
| Asia | 482 | 25.1 | 39.7 | 17 | 10 | 35 | 12 |

Tables 5.11, 5.12 show that the largest share in export and import of transport and travel services accounts for countries of Europe and Asia.

The rates of growth of the world trade in commercial services are growing annually during the period of 2010-2015. The CIS countries, Latin America and Asia are characterized by the highest rates of trade, both in total and by main types of services.

The growth of trade in services is due to the following factors:

- revolutionary technological changes;
- increasing the rate of development of technological programs in the field of telecommunications and information;
- increase in demand for financial, insurance and banking services.

The global services market is characterized by rapid development of the financial services market. So, according to experts of "Mercer Oliver Wyman," rates of growth of the sector of the global financial services will significantly accelerate over the next 15 years, and its share will make almost 10% of the global GDP by 2020. The total revenues of the global financial sector services will increase in 3 times (from 2 trillion to 6 trillion dollars by 2020).

Revenues of the financial services sector in North America and Western Europe will grow by 5,5% annually. This parameter will grow even faster (for example, in Russia, Brazil, India and China it will grow two times faster than in other countries) in other regions. The financial services sector of China was almost the same as in Italy in 2010, but it can overtake the financial services sector of Germany by 2020.

The situation on the markets of financial services in Latin America and Africa is less favorable.

It is predicted that the volume of retail banking operations will grow faster, than the wholesale banking business or insurance. Revenues from the provision of retail loans on mortgage and credit cards will grow by 4% annually until 2020. Services in the field of medical and pension insurance are characterized by similar rates of growth. The slow rates of growth of services (2%) are expected in the wholesale banking business [2, p. 286].

In recent years there has been a decrease in the volume of import between the EU countries, that reflects the strengthening of trade relations of the EU with other countries. It should be noted that the common European market of services has not been established yet. The reason for this is the presence of numerous national barriers in this area, from the establishment of the new company, which is governed by different legal standards, to the establishment of sales prices, the level of which is influenced by various tax regimes. The absence of a single EU's market causes a number of negative aspects. Firstly, due to the fact that the role of services in the total gross product of the EU's countries reaches 70 %, problems, faced by certain companies, affect the economy of the region on the whole. Secondly, companies, especially small ones, do not have the opportunity to expand sales markets and bear the additional costs. Thirdly, it is difficult for consumers to

access to more qualified and affordable services, which they could use in terms of the common European competition between companies. Fourthly, service providers are experiencing difficulties in conducting advertising campaigns inside the EU, and also there are a lot of bureaucratic formalities during the contracts for work and different rates of indirect taxes.

External trade in services plays an important role in the development of the service sector in OECD countries. About 6% of the total volume of services, are produced in these countries, are being exported and rates of growth are constantly increasing. The largest share in the trade in services accounts for services in the field of transport, tourism and some types of business services. Each of these types of services in export and import of services rank 21-27%. Trade in insurance, computer and information services is growing the fastest. An important beginning of sales of services is foreign subsidiaries of companies. The share of turnover of foreign subsidiaries in the total turnover of the services sector is more than 20% in Hungary, Belgium, Ireland, Czech Republic, Poland, Italy [2, p.287].

Developing countries in the market of services offer the services to those sectors, where there is a potential for the development of export trade. For example, these are financial, telecommunications, construction, medical and other sectors. A large number of these countries largely depends on import of services, from liberalization of which they receive benefits, their import of services is constantly growing, as the productivity of the industry is closely related to accessible and affordable financial, computer and information services. Businesses while searching for foreign markets have to spend much more than before on marketing and scientific researches, advertising, etc.

Technological progress in the branch of communications gives providers that were previously connected to national markets, the ability to act in the international arena. Banks and insurance companies, using fax, e-mail, can act much more effectively. Architects, engineers can transfer their projects and observe the progress of construction from the distance of thousands of kilometers due to the modern information technology.

### 5.3.1. What are the essence and classification of international transport services?

International transports are the services of all types of transport of carrying goods of transport operation, provided by residents of one country to residents of another country.

The range of transport services is wide. Services are classified according to:

- mode of transport: water (sea, river); land (rail, road); air (aviation); space; pipeline;
- the subject of the transport operation (cargo, passenger, baggage);
- transport characteristics of product: dry (coal, ore), bulk (grain, cement), synthetic, liquid (oil, vegetable oils);
- frequency of transportation (regular and irregular);
- the order of passing the border (without reloading and with reloading)

- type of transport and technological system (by container, by ferry, by lighter etc.);

- message type (direct, indirect, etc.);

- geographic areas of transportation (international, intercontinental).

Currently so-called transport corridors are used widely, that link several modes of transport on certain areas for shipping through the territory of several countries with appropriate financial and legal security.

Transport services are distinguished by the following categories:

- passenger transportation;

- freight shipping;

- services of vessels rent (marine, river, air), land transport with team and operator;

- services of repair and maintenance of transport;

- shunting services (for rail transport);

- services for descent to water and towing (for sea and river transport);

- additional services (services of handling, storage, packaging / unpacking, navigation, sailing, servicing, commission payments, etc.).

An amount of international trade can be significantly affected by transport costs. Transportation costs (the cost of delivery of goods from producer to consumer, including the cost of freight, insurance, loading / unloading, packing / unpacking, and other accompanying costs) are so large that make unprofitable exports and imports of goods, it means that transportation costs transform products from the "market" the "non-market". This leads to a reduction of trade, of level of countries specialization, of benefit sizes from trade.

Transportation costs may affect the territorial division of labor. Thus, in the extractive industries the transport costs on transportation of finished products are lower than on transport of raw materials from which they are made. Since the final products of these industries is much lighter and more expensive than raw materials, so processing enterprises try to be located near the sources of raw materials extraction. Transportation costs for of finished goods are higher than of their components transportation in processing industries. Therefore, the assembly plants are located near sales markets. For example, juice concentrates are produced by major firm in the home country, but branches are located in other countries close to the markets, obtaining concentrate they made from it soft drinks, that are realized for local wholesale and retail [2, p.289].

First place on the transport market is taken by sea shipping, which accounts for 80% of world trade turnover.

Market of carriage of goods by sea is classified:

- by types of freighted vessels (transport by tankers, by dry cargo, by trailers, by refrigerators, by ferries, etc.);

- by the form of transportation organizations (linear or regular, with tramp or irregular tonnage markets);

- by type of ship (regular, rented);

- by geography (North European, the Mediterranean, Far Eastern, etc).

The volume of international maritime traffic is growing by 3.9% annually. This is caused by increasing the tonnage of developed countries, which make over 70% of the world's merchant fleet: Greece, Japan, the USA, UK, Norway, China, Russia and Germany.

The largest merchant fleet in the world is in Japan. Tonnage of Eastern and Central Europe countries is 4% of the world's tonnage, tonnage of developing countries is 19,7%.

The world's merchant fleet tonnage has increased by 23% over the past 10 years, weight of cargo - by 45%, turnover of maritime transport - by 34%. The development of science and technology has led to making cheaper maritime transport, which allows refusing transport costs in the value of world trade.

The commodity structure of international maritime transport has changed: if bulk cargoes (mainly petroleum products), which accounted about 56%, dominated in the physical volume earlier, now about 2/3 account on dry goods.

Dynamics of maritime transport are distinguished uneven in regions. Over the past three decades, the share of industrialized countries in the volume of unloaded cargo reduced from 79,9 to 62,4%, while the volume of shipped goods - on the contrary, increased from 31,1% to 42,5%. The most rapid growth of carriage of goods by sea is in the Asian countries: the share of developing countries of this region has increased in 3,5 times - from 6,4 to 20,6%, and countries with economies in transition - from 1,2 to 6,2%.

More than 3/4 of the world's carriage of goods by sea is the share of 25 countries, with the top 5 countries (the USA, Germany, Japan, United Kingdom and France), which control nearly 40% of freight and 30% of total tonnage [2, p.290].

Maritime transport market is governed by the Brussels Convention for the Unification of Certain Rules of Law relating to Bills of Lading ("Hague Rules", 1924) with changes in accordance with the Brussels Protocol 1968 that defines the relationship between the participants of the contract of maritime shipping and legal status of the bill of lading. The marine shipping of passengers and baggage is regulated by Athens Convention relating to the Carriage of Passengers and their Luggage by Sea.

### 5.3.2. What are the essence and classification of international trips?

The significant part of the world market is occupied by services related to international trips. International trips are highlighted in international trade as international economic transactions, and are set of products and services purchased by travelers abroad, if they are there less than a year and are considered as non-residents. There are tourists among the travelers that are the travelers, who spent one or more nights in the visit country and excursionists, that means travelers who spent abroad at least 24 hours.

International trips are divided into:

- business trips, which include all personal expenses of travelers who are abroad on business, to pay for goods and services. Herewith the costs, which are

done by a stranger from the name and for the account of the organization that sends in business trip, are not included;

- personal trips, which include all personal expenses of travelers who are abroad for personal reasons, to pay for goods and services (hotels, restaurants, travel agencies, travel agencies associated with recreation, gifts and other goods purchased and exported from the visits country). The costs associated with traveler transportation abroad and back are not included into personal travel. They are included in the passenger transport [2, p.291].

Business trips grow more quickly, their rate is twice bigger than the other types of tourism, that is related to internationalization of business. This concerns both TNCs and joint ventures.

Tourism is the fastest growing sector of the global economy. More than 9% of the world GDP is tourism. The cost of travel services is growing as new hotels need very expensive equipment and the creation of tourist centers of infrastructure development are based on the newest information technology and costs sometimes in 2 times higher than direct investments in construction. The great part of costs consist costs of professional training.

The feature of tourism as a commodity is that most part of it is produced with minimal costs and usually without using of the national currency.

The annual growth rate of flow of tourists in the world travel market was 104%, including Europe - 104%, in Asia -107%, America -103%, Africa - 105% in the Middle East - 108% over the past 5 years.

Approximately ¾ of services in international trips are provided by developed countries, ¼ - by developing countries and countries with economies in transition.

The most popular tourist destinations by 2020 are shown in Tab. 5.13.

Table. 5.13.

**The most popular tourist destinations**

| Country | Number of tourist arrivals, mln USD | Share in the global tourism market, % | Dynamics of growth in 1995-2020 years, % |
|---|---|---|---|
| China | 137,1 | 8,6 | 8,0 |
| The USA | 102,4 | 6,4 | 3,5 |
| France | 93,3 | 5,8 | 1,8 |
| Spain | 71,0 | 4,4 | 2,4 |
| Hong Kong | 59,3 | 3,7 | 7,3 |
| Italy | 52,9 | 3,3 | 2,2 |
| Great Britain | 52,8 | 3,3 | 3,0 |
| Mexico | 48,9 | 3,1 | 3,6 |
| Russia | 47,1 | 2,9 | 6,7 |
| Czech Republic | 44,0 | 2,7 | 4,0 |
| Total | 708,8 | 44,2 | - |

Source: [http://tourlib.net/books_tourism/kvartalnov_tourism17.htm]

The leading countries of travel market spend tens of millions of dollars to noncommercial advertising of their tourist facilities, for example, Turkey allocates 70 million dollars from budget for advertising and development of tourism industry, Austria - 140 million dollars, Spain - 45 million dollars, Romania - 3 million dollars, Ukraine – 2,4 million dollars.

The current global market for services is a holistic system, which consists of subsystems such as transport, tourism, finance, construction, insurance and other services. They are closely interrelated, are sensitive to market movements caused by the constant fluctuations in demand and supply of services in the market, characterized by a high rate of capital turnover, associated with short production cycle in the service sector and the continuing increase in range.

# Chapter 6. The regulation of international trade

## 6.1. International trade regulation in the WTO system

### 6.1.1. What are the goals, objectives, and principles of the WTO?

World Trade Organization is the leading global trade regulator. It monitors the multilateral trading system, supports trade flows by encouraging non-discriminatory, predictable trade policy in the countries-members of the WTO, eliminates trade barriers via multilateral negotiations, and creates impartial procedures of resolving trade conflicts between member states.

The main goals of the WTO are liberalization of international trade, elimination of discriminatory barriers on the way of flows of goods and services, free access to national markets and sources of raw materials. Achieving these goals will ensure the strengthening of the global economy, investment growth, expanding of trade links, rise of employment level and incomes worldwide.

The functions of the WTO are:

- supervision of the state of world trade and consulting in the sphere of management of international trade;
- providing mechanisms of settlement of international trade disputes;
- development and adoption of world standards of trade;
- oversight of trade policy of countries;
- discussing the pressing problems of international trade.

The main principles of the international trade system, which are distinguished by the WTO, are:

- non-discrimination, which is realized on the basis of regime of the Most favored nation (MFN) treatment, which is priority in the agreements of GATT, GATS, TRIPS and national treatment that complements the MFN;

- free trade. This principle implies the conduction of the rounds of multilateral trade negotiations that are directed at elimination of existing trade barriers and creation the conditions for the free trade. Protection of national industry must be carried via tariff, whose rates are reduced. The use of the quantitative restrictions excepting some situations (difficulties with the balance of payments, the sphere of agriculture) is forbidden;

- predictability. Principle requires tariff rates to be reduced and bound for avoidance of further increase. Predictability of trade processes also is contributed by transparency of national trade policy, which is achieved by informing the WTO about the use by the government of certain instruments of trade policy and by publishing legislative and normative acts concerning the trade policy in the media;

- fair competition. In a broad sense “competition policy” includes any policy connected with competition in the market, including trade, regulatory, government policies regarding anti-competitive activity of public and private companies. In narrow meaning this term is used only for marking the legislation or policy within field of anti-competitive behavior of the enterprise. The main types of entrepreneurial practice, which has anti-competitive consequences, affects

international trade and is forbidden by the majority of competitive legislations, are as follows:

a) agreements between competing firms producing identical or similar products;

b) anti-competitive agreements between firms across the whole industrial and distribution cycle;

c) abuse of dominant position;

d) merging of companies;

- promotion of development and economic reforms. The realization of this principle is achieved through the creation of the conditions for the use of the potential benefits of participation in the international trade by the member governments.

The most important problems of multilateral regulation of international trade, ways of its liberalization are solved in negotiations (rounds). The provisions of the GATT in 1947 were the legal basis of the rounds. Altogether there were 9 rounds. Some rounds got their names from the names of public figures, which essentially influenced their conduction, or from the names of places of their start.

*The first round* was held in Geneva in 1947, which was attended by 23 countries. There the General Agreement on Tariffs and Trade was created; 45,000 tariff concessions that covered almost half of world trade volume were carried. The tariff reduction was 21.1% in the US in 1947.

*The second round* began in Annecy (France) in 1949. Nine countries were joined to the GATT. 5000 tariff concessions were "exchanged".

*The third round* was held in Torquay (UK) in 1951. Four countries were joined to the GATT. The result of the negotiations was the implementation of the 8700 tariff concessions.

*The fourth round* was held in Geneva in 1956. One more state adhered to the GATT; rates were declined moderately. The average rate of industrialized countries has been reduced to 15%.

*Fifth round* (1960-1961) was held in Geneva and was named "Dillon Round". It was attended by 34 countries, the results were: 4400 tariff concessions, but there has not been implemented any concessions for agricultural products and other sensitive products, despite the fact that due to the creation of the EEC, there was expected the increase of tariffs and trade barriers for these products.

*Sixth round* (Kennedy Round) was held in Geneva (1964-1967); it was attended by 74 countries. It introduced a new method conducting tariff negotiations – formulaic (linear decrease). A decrease in the average level of tariffs on industrial goods by 35% was the result of this round. Negotiations "position by position" regarding agricultural products were not so successful. There were considered some non-tariff measures besides tariff issues and adopted the Agreement on Anti-dumping measures, the Agreement on Customs Valuation. The questions of giving the preferential treatment to developing countries also were considered in the round. Since this round special attention has been paid to non-tariff restrictions and problems of agricultural products trade.

The *seventh, Tokyo, round* (1973-1979) was attended by 99 countries, which accounted for 90% of world trade volume. Approximately 33000 tariff lines were bound; the tariffs for thousands of industrial and agricultural products were reduced. Average import tariff for industrial products in industrialized countries was decreased to 6%. There were concluded agreements, which included rules on preferential tariffs and non-tariff regime for the benefit of developing countries; agreements on non-tariff measures and specific products; agreements on subsidies and compensation measures, technical barriers of trade, government purchases, customs valuation, import licensing procedures, anti-dumping, beef, dairy products, civil aircraft.

*The eighth, the Uruguay round* (1986-1994) was attended by 117 countries, it stimulated further liberalization of international trade both by reducing tariffs and eliminating tariffs on certain product groups. Tariffs on industrial goods were reduced from 6,4% to 4% (by 40%) in industrialized countries. In 1947 GATT was amended by agreements on transshipment inspection, rules of origin, investment measures, dispute settlement etc. A new edition of the GATT of 1994 (GATT, 1994) is a basic set of rules on trade of goods. The General Agreement on Trade in Services (GATS) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) were also adopted in this round. The World Trade Organization was created for institutional processing of created trading system and ensuring the functioning of the GATT, GATS and TRIPS.

*The ninth, Doha round* (2001-2013) was held in Doha, Qatar. In 2001 the Ministerial Declaration IV of the WTO was adopted, which identified the directions for future trade negotiations on such questions:

- continuation of liberalization of agricultural trade. The emphasis is on preventing the emergence of restrictions and disproportions in world agricultural markets; improving the access to markets; reduction of all forms of export subsidies; use of special and differential treatments for developing countries;
- liberalization of trade in services;
- access to markets of non-agricultural products. The main attention is paid to reduction or, where it is required, elimination of import tariffs, tariff peaks, elimination of non-tariff barriers in particular it concerns products that represent export interest for developing countries;
- trade-related aspects of intellectual property rights. Support of public health by ensuring access to existing medicines, the development of new medicines, creating a multilateral system of notification and registration of geographical indications for wines and alcohol drinks, as well as the protection of geographical indications for other products, protection of traditional knowledge and folklore;
- interrelation between trade and investment. Provision of stable conditions for long-term cross-border investment, particularly foreign direct investment, which will assist the expansion of trade, as well as activation of technical assistance to developing countries;
- relationship between trade and competition policies;
- rules of carrying out public purchases;

- trade facilitation for the purpose of acceleration of turnover, warehousing and customs clearance of goods;

- mechanism of protecting domestic markets from unfair competition (anti-dumping, countervailing measures);

- settlement of disputes;

- trade and the environment. Attention is paid to the relationship between WTO rules and concrete trade obligations that are fixed in multilateral economic agreements; reduction or elimination of tariff and non-tariff barriers for ecological goods and services; the impact of ecological measures on access to markets;

- e-commerce;

- relationship between trade, debt and finance. The purpose is to facilitate the resolving the external debt problem of developing and least developed countries; rise of coherence in international trade and financial policies to prevent trading system from the effects of financial and monetary instability;

- trade and technology transfer. Purpose – to broaden the flow of technology to developing countries;

- technical cooperation. Development of a new strategy for WTO's technical cooperation to further growth and integration.

However, the negotiations of member states concerning the development of world trade reached a dead end since 2008. A basis for the completion of the Doha Round of negotiations was created by so-called Bali package of agreements, signed by WTO countries on 12.07.2013 on Bali (Indonesia). Adopted package of documents is intended to further liberalization of world trade, reduction of tariffs on trade in agricultural products and manufactured goods. The package includes an agreement on simplification of procedures for foreign trade (reducing red tape on customs control, etc.), five documents for agricultural sector (including the agreement on food security and declaration of export competition), as well as four documents on support of least developed countries (preferences for poorest states, easing the ban on subsidies for farmers if they provide famine relief, etc.).

Bali package of agreements is very important because it is the first global reform of international trade and it means the signing of the first juridical binding WTO documents since the inception of the organization.

Thus, the World Trade Organization is, on the one hand, the organization, and on the other – a set of international judicial documents, multilateral trade agreements that define the rights and obligations of member-states in the sphere of international trade and the formation of national trade policies.

The WTO system includes the following multilateral agreements:

1. trade in goods:

a) General Agreement on Tariffs and Trade (GATT 1994) and related agreements:

- Agreement on Implementation of Article VII of GATT 1994 (Customs Valuation Agreement);

- Agreement on Pre-shipment Inspection;

- Agreement on Technical Barriers to Trade;

- Agreement on the Application of Sanitary and Phytosanitary Measures;

- Agreement on Import Licensing Procedures;
- Agreement on Safeguards;
- Agreement on Subsidies and Countervailing Measures;
- Agreement on Implementation of Article VI of the GATT 1994 (anti-dumping);
- Agreement on Trade-Related Investment Measures;
- Agreement on Textiles and Clothing;
- Agreement on Agriculture;
- Agreement on Rules of Origin;

b) agreements and decisions:

- Understanding of the Balance-of-Payments Provisions of the GATT 1994;
- decisions about cases when customs administrations have reason to doubt the truth or accuracy of the declared value;
- Understanding on the Interpretation of Article XVII of the GATT 1994 (state trading enterprises);
- Understanding on Rules and Procedures Governing the Settlement of Disputes;
- Understanding on the Interpretation of Article II: 1 (b) of the GATT 1994 (binding tariff concessions);
- decisions on trade and environmental protection;
- trade policy review mechanism.

2. trade in services: the General Agreement on Trade in Services (GATS);

3. intellectual property rights: the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

The main legal documents are also multilateral trade agreements with a limited number of participants:

- Agreement on Trade in Civil Aircraft;
- Agreement on Government Procurement.

### 6.1.2. How is international trade in goods regulated?

The main rules of trade in goods are defined in the General Agreement on Tariffs and Trade 1994, which consists of four parts: “Generalities”, “Rules of trade policy”, “Procedural issues” and “Trade and Development”.

There are four basic rules fixed by the General Agreement on Tariffs and Trade in practice of international trade regulation

**The first rule:** the protection of national industry is carried out only through the tariffs.

Despite the fact that the GATT is aimed at the gradual liberalization of trade, it is determined in the GATT, that countries could be forced to protect domestic production from foreign competition. However, the GATT requires that protection was carried out using tariffs. The use of quantitative restrictions (import quotas, licenses) is prohibited

**The second rule:** tariff rates must be decreased and be bound to avoid further increases.

States should provide that the tariffs and other measures, used to protect the domestic market, should to be reduced and, where it is possible - to be eliminated through multilateral trade negotiations. As a result of trade negotiations, the WTO member states agree to open their domestic markets to the foreign goods and to "bind" themselves with corresponding obligations.

The tariffs, that are reduced and bound in such a way, are not liable to increase, and this is indicated in the national Schedule of concessions of the country. Schedule of concessions is an integral part of the legal system of the GATT.

**The third rule:** the trade on the basis of the Most Favored Nation (MFN).

The essence of the terms of this regime is to ensure that trade should not be discriminatory. MFN is the term, which is fixed in international trade agreements that provide concession of the contracting parties to each other all the rights, preferences and privileges, which are given or will be given to any third country.

**The fourth rule:** trade on the basis of national treatment.

The principle of national treatment complements the MFN principle and it assumes that the imported product that crosses the border after the payment of duty and other charges, should receive the treatment that is no less favorable than the treatment obtained by similar goods produced by domestic producers. Therefore, the state cannot impose on imported goods the internal taxes (for example taxes on sale) at higher rates than those applied to similar domestic products after the goods arrived to the country after paying the duties on the customs. And the rules that regulate the sale and purchase of goods in the domestic market should not be more stringent towards to imported goods.

### 6.1.3. How is international trade in services regulated?

The international regulation of trade in services is based on the General Agreement on Trade in Services (GATS). It aims to promote the economic growth of all trading partners and the development of developing countries, through the expansion of trade in services, and seeks to achieve this by applying to trade in services the rules of the GATT.

The GATS involves international trade in services, with the exception of services provided by public authorities, and many air transport services.

The GATS, firstly, is a comprehensive agreement, because it contains the main rules that refer to all types of services, appendixes concerning specific services and sectors. It also contains the schemes of specific commitments for each member. The GATS, secondly, is the framework agreement, which provides the initial conditions and rules that further will be specified and corrected by the parties [2].

The structure of the GATS contains 6 parts: "Scope and definition", "General obligations and disciplines", "Specific commitments", "Progressive liberalization", "Institutional provisions", "Final provisions".

**The most important general obligations** include the following:

1) providing the Most Favored Nation (MFN) treatment;

2) transparency of rules on trade in services. This commitment involves the creation of information and contact points;

3) mutual recognition of qualifications required for the provision of services;

4) the rules concerning monopolies, exclusive service suppliers and other business practices that restrict competition;

5) the measures aimed at liberalization of trade, in particular, to ensure greater participation of developing countries.

**Specific commitments** are the commitments assumed by separate countries on certain service sectors. Country is obliged to assume the obligations of market access, national treatment and other obligations in each of the selected service sectors.

Service delivery is executed by four ways:

1) cross-border supply, i.e. the provision of services across the border. Neither supplier nor customer of a service are moved across the border, it is crossed only by the service;

2) consumption abroad, i.e. move of consumers to the country of export;

3) commercial presence, i.e. the creation of commercial presence in the country where services should be provided (the opening of a branch or subsidiary);

4) presence of natural persons, i.e. a temporary relocation of individuals to another country with the purpose of providing services there.

The determination of such modes of service delivery is aimed at enhancing of identification of appropriate regulating measures.

## 6.2. The regulation of international trade in the UN system

### 6.2.1. How is the facilitation of international trade development by UNCTAD implemented?

In the regulation of international trade United Nations Conference on Trade and Development (UNCTAD) occupies an important place. It is the organ of the United Nations General Assembly, established in 1964. Its establishment was based on the reason that the GATT was a semi-closed organization, a kind of “club favorites”, the entrance to which was closed for many countries. Therefore, on the initiative of a number of socialist and developing countries, it was decided to establish a body within the UN system that would regulate international trade according to principles, as was expected, were fairer. The main idea is to move the emphasis in the mechanism of regulation for the benefit of developing countries, particularly the least developed ones. These principles are reflected in ”Charter of Economic Rights and Duties of States”, which was created by UNCTAD and adopted by the General Assembly in 1976.

The main goal of UNCTAD is to facilitate international trade to speed up the economic development, especially in developing countries, help them solve problems that arise in connection with the processes of globalization and integration into the world economy on the basis of equality.

UNCTAD achieves these goals through research and analysis of policy, intergovernmental meetings, technical cooperation and interaction with the business sector.

The main tasks of UNCTAD:

- analysis of trends in the global economy and assessment of their impact on development;
- assistance to developing countries, in particular to least developed countries to maximize the positive impact of globalization and trade liberalization, as well as their integration into the international trade system and active participation in international trade negotiations;
- exploration of global trends in flows of foreign direct investments and their influence on trade, technology, economic development;
- assistance to developing countries in attracting investment;
- assistance to developing countries in the development of enterprise and entrepreneurship, especially small and medium enterprises;
- assistance to developing countries and transition economies to improve the effectiveness of institutions that facilitate trade.

Functioning of UNCTAD is conducted in three directions. These are:

1. Intergovernmental meetings with involvement of experts. Intergovernmental negotiations under the auspices of UNCTAD facilitate the introduction of fair conditions of trade. The results of the negotiations are reflected in a number of important documents: the principles of the "New International Economic Order", Agreement on the Generalized System of Preferences, which provides preferential treatment for exports of developing countries to the industrialized countries, the Agreement on the Global System of Trade Preferences among Developing Countries (GSTP), the Integrated Programme for Commodities (IPC) and others.

UNCTAD deals with other issues of international economic cooperation, besides solely trading. It is currency and finance; maritime transportation; insurance of technology transfer; international investment.

2. Carrying out a research, strategy analysis and data acquisition that are used in the meetings of government representatives and experts. Analytical activity includes following areas: global economic trends and their impact on development process; macroeconomic policy; concrete development problems, using successful experience of developing countries, and countries with transitional economies; issues connected with financial flows and indebtedness. Bank of information which is provided to member states is created by results of the research.

3. Technical assistance to developing countries. The activity of UNCTAD includes more than 300 projects in more than 100 countries, for which it annually spends about $ 24 billion in the sphere of technical cooperation.

The main goal of UNCTAD was carrying out measures for the effective integration of all countries into the world trading system from the beginning of XXI century. The role of UNCTAD strengthens in solving the following issues today. These issues are:

- diagnosis of causes of the lack of progress in the least developed countries in the development sphere and working out recommendations for their elimination;

- improvement of support of South-South Cooperation;

- the expansion of international cooperation in support of sector of raw materials;

- development of measures to overcome the negative effects of climate change for trade and development of developing countries;

- development of the energy sector from the position of attracting new investments in energy infrastructure and the development of alternative energy sources as well as efficient energy use;

- assistance to countries with post-conflict and post-crisis renewal of economic mechanism connected with trade and development;

- developing mechanisms of technology transfer and its global distribution;

- interaction with organizations of the UN system to facilitate developing countries the access to markets of developed countries, which use different tariff barriers;

- facilitation the liberalization and trade expansion of developing countries within the "Trade Facilitation Programme".

Thus, UNCTAD acts as a coordinating centre of the UNO for the comprehensive consideration of issues of international trade and development, as well as relevant issues in finance, technology, investment and innovation.

### 6.2.2. What is the specificity of ITC activity in the sphere of international trade?

International Trade Centre UNCTAD/ WTO (ITC) is a joint subsidiary body of technical cooperation between the WTO and the UNO. It was established in the framework of the GATT in 1964, and became the structure of UNCTAD in 1968. Members of ITC are members of the WTO and UNCTAD. ITC has its headquarters in Geneva.

The main goal of ITC is the assistance the developing countries in developing and implementation of programs for the development of exports and the improvement of import technology.

The main tasks of the ITC:

- promotion the integration of enterprises of developing countries into the world trading system;

- supporting the national programs for the implementation of strategies of trade development;

- supporting the development of trade infrastructure;

- improving the efficiency of export in prospective sectors of the economy;

- promotion the international competitiveness development of member-states in general and in the sector of small and medium-sized enterprises in particular.

One of the main programs of ITC for the regulation of international trade is "Trade Facilitation Programme". It is a comprehensive model of technical assistance in the development of exports, which is the basis of its strategic

development and functioning. The model develops trade capacity of countries on three levels:

I level: governing bodies and institutions that make strategic decisions;

II level: trade promoting institutions (TPI);

III level: small and medium enterprises (SME).

The purpose of the model is to help the subjects of these three levels to study target markets, find ways to implement effective export operations.

Model of the technical assistance is based on three strategic goals, eight sub-goals and nine corresponding indicators (Tab. 6.1).

Table 6.1

**Strategic goals, sub-goals and their indicators of ITC**

| Strategic goals of ITC | Sub-goals of ITC | Indicators |
|---|---|---|
| 1. Support of governing bodies in integration of national entrepreneurial sector into the international economy | 1.1. Developing by the governing bodies the programs and political measures aimed at the development of the trade | Number of developed and implemented strategic programs of trade development. Number of national development programs that include measures of trade development with the support of ITC |
| | 1.2. Understanding the business needs and creation favorable conditions for entrepreneurial activity by the governing bodies | Number of national institutions operating within the framework of multilateral trade agreements due to the support of ITC |
| | 1.3. Attracting entrepreneurial sector in the process of trade negotiations | The number of cases in which due to the support of ITC the positions of state were supported by the participation of the business sector |
| 2. Development of competence of service suppliers in the sphere of trade before the business support | 2.1. Providing services that meet the requirements of enterprise-customers by TPI | Increasing the number of TPI, that raised their rating according to the system of evaluation of ITC trade promotion institutions, due to the support of ITC |
| | 2.2. Effective representation of the business sector by the forces of TPI as a factor of formation a favorable business environment | Number of proposals submitted by TPI to the competent authorities |
| 3. Improving the competitiveness of enterprises in | 3.1. Development of the operating strategies of international business | Increasing the number of enterprises that got the opportunity to develop |

| | | |
|---|---|---|
| the international market | development by enterprises | operating strategies of international business development due to educational programs of ITC concerning the management of export operations |
| | 3.2. The readiness of enterprises to do export operations | Increasing the number of enterprises that got the opportunity to prepare for doing export operations due to educational programs of ITC |
| | 3.3. The readiness of enterprises to convert business opportunities into business activity | Increasing the number of enterprises that have found potential buyers and signed agreements due to support of ITC |

The model of the technical assistance in export development includes five key tasks (areas of activity). These are:

- export strategy. The responsible persons must correctly identify priorities, develop and implement export development plan, taking into account market requirements;
- entrepreneurial sector in trade policy. Governing bodies should integrate the business sector in trade policy, in the process of regional and multilateral negotiations. The result of these measures should be development and implementation of trade policy that reflects business needs;
- strengthening the positions of trade promotion institutions. TPI should provide small and medium enterprises as well as governmental bodies more efficient services, that will lead to an increase in export resources of SME and will allow TPI to organize the growth trade capacity;
- analytical work in the trade sphere. It is necessary to expand the opportunities of clients to obtain analytical information concerning trade sphere with assistance of ITC;
- competitiveness of exporters. Active and potential SME-exporters have to increase the indicators of export activity and extend presence in the market.

These areas of activity are based on three principles, following them can lead to achievement more significant results:

- concentration, i.e. development not broadwise, but in the depth and focus on the concrete needs of clients;
- coverage, i.e. expansion of coverage through the development of relationship of strategic partnerships and resource mobilization;
- integration, i.e. the rejection of disparate measures in favor of the initiative, customer-oriented actions.

This approach allows the ITC to be the leading partner-supplier of technical assistance in the trade sphere and to increase the competitiveness of SME in the international market.

The national, regional and international programs are developed by ITC. The use of these programs helps the Centre to implement the strategic goals and objectives in the area of trade development.

**National programs**. A two-level methodology of providing assistance in the sphere of trade at the national level is developed by ITC. It involves targeted measures at the national level and comprehensive national programs. The methodology is based on four principles:

- needs: each program should be aimed at solving urgent for the country tasks, formulated in the strategic documents;
- coordination and partnership: all measures should be agreed with all initiatives of ITC, and if necessary – with measures of other organizations;
- participation and sustainability: any program should be implemented in cooperation with leading partners in this country, this will provide sustainable development after the completion of the project;
- results: an analytical plan must be made for the appraisal of effectiveness of the program.

**Regional programs**. In these programs ITC focuses on several points. These are:

- development of regional trade flows in order to realize the opportunities of regional market;
- formation of international production and distribution networks in order to increase competitiveness in scale of region;
- expansion of resources of trade facilitation (through the creation of regional centers of expertise);
- support of regional integration programs;
- reinforcement of the process of mutual enrichment of national and regional technical resources in the field of packaging, quality control and compliance with standards, logistics, access to trade information and its analysis;
- promotion of regional measures aimed at eliminating trade barriers, to facilitate access to both inter- and extra-regional markets.

The goals of any regional program must be conformed to national and regional priorities.

**International programs of ITC.** International activity of ITC is divided into five areas. These are:

1) corporate activities. This area includes all measures of ITC, providing technical assistance in the field;

2) expert meeting. This direction provides giving trainings that are dedicated to particular programs and main events of international importance;

3) websites, publications, e-education. Clients of ITC have access to essential information;

4) development of national, regional and thematic programs within areas of activity of ITC;

5) financing of priority programs.

Thus, the programs of ITC are aimed at strategic and operational research of market situation; providing range of economic-consulting services; trade information management; development of education in the sphere of export; development of branch-wise production and branch-wise markets; trade in services; management of production-sales chain.

### 6.2.3. What activity directions of UNCITRAL exist in the field of international trade law?

The UN Commission on International Trade Law (UNCITRAL) was established in 1966. It is the principal legal organ of the UNO in matters of international trade law. The main objective of UNCITRAL is to reduce and eliminate differences arising from the application of the laws of different countries in matters of international trade, which impede international trade flows and development of international trade.

The main tasks of UNCITRAL are:

- promotion the harmonization and unification of international trade law;
- coordinating the work of international organizations in the sphere of international trade law;
- promotion the broad participation of countries in the existing international conventions and the development of new international conventions on international trade law;
- manpower development in the field of international trade law, especially for developing countries.

The activity of UNCITRAL finds the main expression in the development and adoption of conventions that is of the documents which contain agreed norms, principles and standards in the field of international trade law.

Legislation developed by the Commission extends to the following areas:

1. International purchase and sale of goods and related with it agreements. In this sphere the following documents are developed:

- Convention on the Limitation Period in the International Sale of Goods (1974);
- United Nations Convention on Contracts for the International Sale of Goods (Vienna Convention, 1980);
- UNCITRAL Legal Guide on International Countertrade Transactions (1992);
- UNCITRAL Legislative Guide on Secured Transactions (2009).

2. International shipping. The main documents of this area:

- The UN Convention on the Carriage of Goods by Sea (“Hamburger Law”, 1978);
- The UN Convention on Liability of Operators of Transport Terminals in International Trade (1992).
- The UN Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (2008).

3. International commercial arbitration and conciliation procedures. The Commission has developed:

- UNCITRAL Arbitration Rules (1976);
- UNCITRAL Conciliation Rules (1980);
- UNCITRAL Model Law on International Commercial Arbitration (1985);
- UNCITRAL Notes on Organizing Arbitral Proceedings (1996);
- UNCITRAL Model Law on International Commercial Conciliation (2002).

4. Public purchases and infrastructure development. The main documents are:

- UNCITRAL Model Law on Procurement of Goods, Construction and Services (1994);
- UNCITRAL Legislative Guide on Privately Financed Infrastructure Projects (2001).

5. Contracts on capital construction. In 1988 the UNCITRAL Legislative Guide on Drawing Up International Contracts for the Construction of Industrial Works was published.

6. International payments. The documents of this area are:

- The UN Convention on the International Bills of Exchange and International Promissory Notes (1988);
- UNCITRAL Model Law on International Credit Transfers (1992);
- The UN Convention on Independent Guarantees and Stand-by Letters of Credit (1995);
- The UN Convention on the Assignment of Receivables in International Trade (2001).

7. E-commerce. The following laws are developed in this area:

- UNCITRAL Model Law on Electronic Commerce (1996);
- UNCITRAL Model Law on Electronic Signatures (2001).

8. Cross-border insolvency. This area includes:

- UNCITRAL Model Law on Cross-Border Insolvency (1997);
- Legislative Guide on Insolvency Law (2004). Its goal is to create an effective legal framework in matters of financial difficulties of the debtors.
- Practice Guide on Cross-Border Insolvency Cooperation (2009).

The technical cooperation and assistance in the application of legislation acts is an important area of UNCITRAL activity. The successful application of laws is proved by their use in different countries. They are the basis for improving trade legislation. UNCITRAL spreads the information about the contents of legal documents indicating their preferences. Technical cooperation and assistance to countries are realized through the implementation of various measures: promotion of process of regional harmonization of trade law on the basis of the relevant documents of the Commission, controlling the development of concrete laws, which bring into force the UNCITRAL Model Laws, etc.

# PART II. INTERNATIONAL MOVEMENT OF FACTORS OF PRODUCTION

## Chapter 7. International capital movement

### 7.1. What are the main points and forms of international capital movement?

International capital movement is a rather developed component of the international flows of factors of production. Its nature consists in the partial removal of the national capital, after which it is included to the manufacturing process or other turnover in other countries. Under modern conditions, the capital mobility is relatively high, although it has more restrictions than the international trade. The growth rates of capital movements between countries are several times greater than the growth rates of both production and international trade.

International capital movements can replace or complement the international trade, if the efficiency of use of capital is higher than the result of international trade.

International capital migration is not a physical movement of production means, but **a financial transaction**: loans, purchase and sale of securities, the investment.

Specific forms of international capital movements are distinguished by the following features:

- sources of capital origin;
- the nature of use of capital;
- terms of capital investment;
- the purpose of capital investment [3, p. 171].

By the sources of origin, capital is divided into official capital and private capital.

**Official capital** is funds of the state budget or the budget of international organizations (IMF, the World Bank, etc.), which move abroad or from abroad according to the decisions of governments or intergovernmental organizations. Its source is money of taxpayers.

**Private capital** is funds of private firms, banks and other non-state organizations, which are provided in the form of investment, commercial loans, interbank crediting.

By the nature of use, capital is divided into business capital and loan capital.

**Business capital** is funds that are directly or indirectly invested in the production for profit earning. It is usually private capital.

**Loan capital** is funds that are provided to a borrower to obtain a given percentage. On an international scale, loan capital is basically official capital.

By terms of investment, capital is divided into short-term, medium-term and long-term capital.

**Short-term capital** is capital investment for less than one year, mainly in the form of the trade credit.

**Medium-term and long-term capital** is capital investment for more than one year.

All investments of business capital are mainly in the form of direct investments, as well as in the form of state credits.

By the purpose of investment, capital is divided into direct and portfolio investment.

**Direct investment** is capital investment in order to acquire the control over the object of allocation of capital. It is mainly export of private business capital.

**Portfolio investment** is capital investment in foreign securities without the right of control over the investment object. It is mostly export of private business capital as well.

From a practical standpoint, the most important fact is the functional division of capital into direct and portfolio investment. The major role in international capital movements is played by international loans and bank deposits.

The forms of international capital movements are defined in the investment and banking laws of each country.

## 7.2. Foreign direct investments

### 7.2.1. What is the place of foreign direct investments in international capital movement?

Foreign direct investments (FDI) have a special place among the forms of international capital movements. This is due to the following two main reasons:

- foreign direct investment is a real investment, which, unlike portfolio investment, is not purely financial assets denominated in the national currency. It is invested in business, land and other capital goods;
- foreign direct investment, unlike portfolio investment, usually provides a managerial control over the object of the invested capital.

Prior to the emergence of transnational corporations (TNCs) all private foreign investments were mainly “portfolio” ones. With the appearance of TNCs (i.e. enterprises that own or control the production of goods and services outside of the country in which they are based), part of international capital movements take the form of foreign direct investment.

Foreign direct investment is a kind of foreign investment, intended to invest in production and to provide the control over the activities of enterprises by means of acquisition of a controlling interest. The proportion that determines the ownership varies in different countries. In the USA, formally a direct foreign investment is any capital investment if an investor holds a 10% interest in the company. Foreign direct investment covers all types of investment, either buying new shares, or simple crediting, if only an investing firm holds more than 10% interest in a foreign company. The proportion of participation in the company’s capital can be obtained in exchange for technology, skilled stuff, markets, etc.

Investor’s property (complete or partial) and his control over the foreign

enterprise, which becomes part of the organizational structure of TNCs as its branch or subsidiary company, are the main differences of foreign direct investment from other types of investing.

The hallmark of foreign direct investment can be considered a prevailing of the sales of the product, produced abroad with the help of FDI, over the sales of domestic products in the form of trade exports.

The factors that affect the growth of foreign direct investment and make proactive growth of FDI compared to the growth of the world trade (as well as GDP of the industrialized countries) are as follows: integration of production, its evolution towards a so-called international production; a growing role of TNCs; economic policies of the industrialized countries to support economic growth and employment; the trend of the developing countries and countries with economies in transition to overcome the crisis of the economy and social sphere; environmental factors that encourage the developed countries to transfer harmful production into the developing countries. When the government participates in foreign direct investment, their additional motive may be the achievement of certain political objectives: providing strategic resources, expanding its sphere of influence.

Foreign direct investment is the basis of TNCs domination in the world market. They allow the transnational corporations to use enterprises in foreign countries for producing and marketing of products and disseminating rapidly new products and new technologies at the international level and, thus, enhance their competitiveness. As far as they are concerned, FDI are motivated ultimately by profits.

The structure of the main factors of foreign direct investment can be presented as follows.

**Marketing factors**: 1) market size, 2) market growth, 3) a tend to hold a market segment, 4) a tend to succeed in export of parent company, 5) the need to maintain close contact with customers, 6) dissatisfaction with the existing state of market, 7) export base, 8) following the buyers, 9) following the competition.

**Trade restrictions:** 1) trade barriers, 2) preference of domestic goods by the local consumers.

**Cost factors:** 1) a desire to be closer to the sources of supply, 2) availability of labor resources, 3) availability of raw materials, 4) availability of capital and technology, 5) low-cost labor, 6) low cost of other production costs, 7) low transport costs, 8) financial and other incentives offered by the government, 9) more favorable price levels.

**Investment climate:** 1) the overall attitude to foreign investment, 2) political stability, 3) restrictions in the ownership, 4) exchange rates adjustment, 5) stability of foreign currency, 6) the structure of taxes, 7) good knowledge of the country.

**General factors:** 1) expectation of high profits, 2) other factors.

The mentioned above factors of FDI are specified during the development of investment policy through the system of indicators, comprising about 340 indexes and more than 100 evaluations of experts in economic, legal, technical, social and other spheres. The data analysis form 10 fundamental factors to assess the potential

of the country to act as host FDI or so-called competitive potential of the country. These factors include the following:

- dynamics of the economy (economic potential);
- production capacity of industry;
- dynamics of the market;
- financial support of the government;
- human capital;
- prestige of the state;
- availability of raw materials;
- the orientation to external markets (export potential);
- innovation potential;
- social stability.

Each of these 10 factors includes a system of specific indicators. For example, for human capital's evaluation, Swiss experts suggested using 36 indicators that include: population and its dynamics; the overall unemployment rate; migration of the labor force as a whole, including highly skilled one; the level of professional training; motivation of hired workers and their mobility; management and its professional adaptation; the level of wages; public expenditures for education per capita; the level of workforce with higher education; periodicals publishing; the health care system, etc.

In practice, most decisions concerning foreign direct investment are based on many motives and take into account many factors. Political motives for investing are rarely separated from economic ones.

On the basis of expert estimates, the most attractive conditions for FDI are possessed by the following countries: the USA, Canada, Germany, Switzerland, and Asia-Pacific newly industrialized countries (NICs).

### 7.2.2. Why it is necessary to identify the forms of foreign direct investments?

Foreign direct investments are carried out in the form of transfer of capital from one country to another by means of crediting or buying the shares from a foreign company, which is largely owned by the investor or under his control, or by means of setting up a new business. Therefore, foreign direct investments tend to imply a high level of investor commitments to the controlled firm in relation to transferring of new technologies, managerial know-how, the provision of the skilled stuff. Immaterial, mobile assets become a rather widespread form of FDI under modern conditions. They may occur even with small initial funding or without any movement of financial capital abroad.

The mentioned form of foreign direct investments provide the controlled branch with: the transfer of the management skills; trade secrets; technologies; the right to use the trade mark of the parent company; etc. Therefore, a particular attention should be paid to the technology transfer.

Technology transfer does not mean only the emergence of new equipment in

the market, but also mastery of technique of operations' performing on it. In the industries, where the role of intellectual property is essential, such as pharmacy, education, medicine, scientific researches, the access to the resources and developments of parent company generates benefits far beyond those that could be obtained by infusion of capital. It explains the interest of many governments to the fact that TNCs have research centers (capacities) in their countries. An integral part of the technology transfer is the management skills that are the most significant components of foreign direct investments.

The principles of technology transfer are usually the following:

1. The usefulness of the technology.
2. Favorable social and economic conditions for the transfer.
3. The willingness and ability of the host country to use and adapt the technology.

In the industrialized countries, complex technological processes are economically justified, and specialists from these countries are able to solve the problems and develop technology. The problems occur in the less developed countries with little industrial experience. Production capacity must be adapted to the production in small series; equipment and operations should be very simplified due to the lack of qualified and trained personnel. In most cases, in these countries the quality is only reaching the world standards. To overcome these problems, for example, the electronics giant 'Philips' created a special experimental plant. The plant contributes to the fact that a lot of elements, defining the possibility of production functioning, are adapted to the local circumstances, and thus the necessary know-how and other elements are transferred to the developing countries.

Technology transfer increases with the growth of the industrialization, which will create not only the demand for new technologies, but also complicate the processes and technology in the existing economic sectors.

### 7.2.3. What consequences of foreign direct investments could be?

Foreign direct investments has a significant impact on the socio-economic development of investing countries (where the capital comes from) and destination countries (where the capital comes in), on different social groups in these countries, and on the state and dynamics of the world economy as a whole and of individual regions as well.

The analysis of FDI impact on the well-being of the individual groups of population shows that foreign direct investment brings the following:

- **benefits:**

a) to foreign firms and investors;

b) to workers of the receiving country (workplaces);

c) to the population of the receiving country from a possible increase of social services because of taxes on incomes from FDI;

- **losses:**

a) to workers of an investing country, as FDI means exports of workplaces;

b) to competing firms in the receiving country;

c) to taxpayers of an investing country, as profits of TNCs are more difficult to tax and the government either shift the shortfall in tax revenue to other payers or reduce the budget-funded social programs.

The general conclusion of economists, analyzing FDI is as follows:

**1) an investing country** generally wins because the benefits for investors are more than losses of workplaces and other categories of persons in the home base country;

**2) a receiving country** also generally wins, because the benefits for workers and other categories of persons are more than the losses to investors of the receiving country who are forced to compete with firms that have technological, managerial and other advantages.

The simultaneous existence of both costs and benefits breeds differences in the business world, among politicians, scientists and economists about foreign investment. In many countries, FDI gives birth to nationalistic sentiments. In the USA, for example, according to the survey, 48% of Americans are opposed to Japanese investment and only 18% agree to take them. The position of the developing countries is ambivalent. On the one hand, they fear excessive foreign influence and exploitation and, on the other hand, the disinvestment as a means of access to the latest technology, exports expansion, etc.

In many countries in the sphere of investment policy there are powerful conflicting pressure groups, seeking to limit FDI inflow or their wide attraction.

In the home countries of TNCs, the lobbying influence of these corporations on foreign policies of the governments often results in international military conflicts in order to protect the interests of investing firms that do not coincide with the interests of nations as a whole.

In the global scale, FDI, which reached $1.5 trillion in 2011, and $1.6 trillion in 2012, play a positive role [7]. Their distribution by countries, economic sectors, industries largely determines the structure of the world economy, relationship between its separate parts. Foreign direct investment for TNCs is an instrument of establishing of the system of international production, placed in many countries, but controlled from one center.

### 7.3. What is the essence of international portfolio investments?

International portfolio investments are the capital investments in foreign securities, giving an investor no right to control the object of investment, but giving only a priority right to receive income according to the purchased share of the ‘portfolio’ of the investment object, which in international practice generally does not exceed 10%.

International investment portfolio of an individual company includes the following:

1) shares;

2) debt securities:

a) bonds, promissory notes, loan notes,

b) money market instruments:
- treasury bills;
- deposit certificates of a bank;
- banker acceptances, etc.;
3) financial derivatives.

The main motivation to implement international portfolio investments is the receiving of higher income abroad. For example, residents of one country buy securities of another country if the revenues there are higher. It leads to the international leveling of incomes. However, this explanation for the reasons of international portfolio investment does not take into account the fact that the flow of capital is bilateral. If incomes from securities in one country are lower than in the other one, then it explains the flow of investment from one country to another one. However, it is incompatible with the simultaneous capital flow in the opposite direction. To explain a bilateral capital flow, an element of risk must be taken into consideration. Investors are interested not only in profit, but also in a lower risk, associated with a specific type of investment. Thus, the risk of owning the bonds is linked with the possibility of bankruptcy and change of their market price, and the risk of the shareholding is in the possibility of bankruptcy, significant fluctuations of their market rate and the possibility of getting lower incomes. Thus, investors try to maximize the profits with an acceptable level of risk.

There is a certain link between profitability of securities and risk of their acquisition: the higher profit an investor can get, the higher is the risk. For example, the revenue from the shares of company A and company B is on average 30%. However, with equal probability, the profit from share A can be from 20% to 40%, and the profit from share B is from 10% to 50%. Shares B are associated with greater risk, because the range of values of the income for share B is much larger, so to minimize the risk the investors should buy the shares of company A. If the profit of shares A decreases with simultaneous increase of shares B and vice versa, owning two shares, an investor can get in average 30% of the profit but with lower risk.

The portfolio theory is based on the assumption that profits from securities may change over time in the opposite, and also the income can be obtained with less risk, and higher income can be with the same level of risk of the portfolio as a whole. As revenues from foreign securities are typically higher than revenues from national securities, a portfolio which includes national and foreign securities may have higher revenues and/or a lower risk than a portfolio which is formed of only national securities.

Such balanced portfolio requires a two-way flow of capital. For example, if share A, which has the same average profit like share B but a lower risk, is issued in country I, while share B (with the opposite revenue to revenue A), is issued in country II, portfolio investors of country I must also purchase share B (investing in country II), and investors of country II must purchase share A (investing in country I) for the balance of the investment portfolio. Thus, reciprocal international portfolio flows are explained by the opportunity to diversify risks [10, p.p. 344-345].

International portfolio investments rise as investors seek to diversify their

activities internationally to maximize the revenue with regulated risk. The volume of international market of portfolio investments is significantly greater than the international market's one of direct investment. More than 90% of international portfolio investments take place among the developed countries.

## 7.4. International movement of loan capital

### 7.4.1. What is the essence of international movement of loan capital?

International movement of loan capital are financial transactions, related to international loans, crediting, bank deposits and transactions, which cannot be characterized as direct, portfolio investment or reserve assets.

International crediting and loans are a movement of loan capital beyond the national boundaries of countries between the entities of international economic relations, providing currency and commodity resources under conditions of recurrence, urgency and interest payment.

Each country is an exporter and an importer of capital. International credit is involved in the turnover of capital in all stages, mediating its transition from one form to another one: from cash to a productive, then to commodity and to cash again.

International credit is considered as a special kind of international trade. This trade is not a one-time exchange of goods for goods, but supplying or receiving goods today in exchange for receiving or return of goods in the future. This exchange is called an intertemporal trade.

In economics, there is always a problem of choice between current and future consumption. As a rule, the produced goods are not consumed immediately, some of them are used as a productive capital for production expansion in order to increase consumption in the future. In other words, it is a choice between the production of consumer products now and in the future.

International credit gives you an opportunity to trade in time. If a creditor-country provides a loan, it sells the present consumption for future consumption. A borrower-country, taking a loan, can spend today more than earned, in exchange for the obligation to pay compensation in the future for today's consumption. The countries, taking loans, and the countries, providing them, are determined by production capacity. Countries with good current investment opportunities take loans from other countries, which do not have such relative investment opportunities but have great current incomes.

Countries with relatively large financial resources in comparison to their profitable use internally can increase their national income by means of providing credit to the countries which have higher rate of income on capital (percentage, dividend). An importer-country of capital receives an opportunity to increase its national income at the expense of foreign investment received in more favorable terms in comparison with the internal terms of crediting. In general, through international credit there is a maximization of the world product at the expense of the general increase in world production.

The importance of international crediting lie in a fact that due to it there is the redistribution of capital among countries in accordance with the needs and opportunities of more profitable use. Creditors and borrowers are banks, firms, public institutions, governments, international and regional currency-credit and financial organizations.

The effectiveness of crediting is reached upon condition that there are:

- free movement of capital;
- stability and predictability of the development of the world economy;
- borrowers' implementation of their obligations, full payment of their debts.

Development of international crediting today is largely determined by the activities of TNCs and its role's enhancement in the evolution of international economic relations.

The time limits for performance of liability commitments (sale of property) play an important role in the capital movement. They can be the following:

- long-term (over 5-7 years);
- short-term (up to 1 year).

The main form of international long-term crediting is international loans. Depending on who is the creditor, they are divided into private, governmental credits, credits of international and regional organizations.

Private loans are provided by major commercial banks in the world from their resources. In recent years, the proportion of external credits in the total export of loan capital of these banks has declined, but they do not lose their status of major international creditors. Private long-term loans can be provided not only by the resources of banks. Banks use the means of renters of large countries for these purposes with the help of the bond loans (external emissions). Investment banks place the securities (obligations) on the stock market of their countries, issued by private foreign companies or governmental agencies. Thus, creditors are big countries with a well-developed stock market and a significant surplus of loan capital. However, not all obligations of foreign loans are placed among other holders. Some part of the obligations with high reliability and profitability are left by the banks for themselves, receiving interest income from the loans (8-10% annually).

Governmental loans (intergovernmental, state loans) are given by government crediting institutions. A country assumes all the costs connected with the loan, it relieves expenditures in case of non-payment of debt.

Loans of international organizations are given mainly by: the International Monetary Fund; the structures of the World Bank; the International Bank for Reconstruction and Development; regional development banks and other credit and financial institutions.

It should be noted that the International Monetary Fund and the World Bank are not only the largest creditors, but also coordinators of international crediting.

For the purpose intended, international loans are divided into the following:

- production credits for the development of national economy, which are sent

to industry, transport, agriculture (purchase of equipment, materials, licenses, productive services, etc.);

- non-production credits to provide the government, the army, the purchase of weapons, the payment of interest on foreign debts, etc. The share of credits of non-production character in the total amount of foreign credits increases.

The movement of short-term loan capital has the following forms:

a) commercial and bank credit;

b) current accounts in foreign banks.

Commercial (corporate) credit is widely used in foreign trade and given by an exporter of one country to an importer of another country in the form of a payment delay. In the commercial credit, a loan operation is combined with the sale of goods, and the movement of loan capital is combined with the movement of commodity capital.

Bank short-term crediting is the provision of funds in the monetary form on the security of goods, commodity documents and bills.

The cost of short-term credits is high enough (6-9% annually). Commercial loans are commonly used by English, German, French, Japanese firms for the purpose of foreign trade expansion.

Companies and banks use current accounts in foreign banks to attract free money capital of other countries. Current accounts in foreign banks are characterized by high mobility, variability, dependence on the economic and political conditions. Thus, countries can use them with a view to the exploitation of less developed countries (for example, to “freeze” the deposits that are formed as a result of goods delivery).

### 7.4.2. Under what conditions does the international debt emerge?

The practice of international crediting clearly shows how the actual development of international loan disagree with such conditions of normal work of the credit system as stability and timely payment of debts.

A tangible proof of mentioned above statement is the global debt crisis.

The main reason of the periodic occurrence of international debt crisis is a presence of strong motivation of sovereign debtors to refuse the payment of the debt. If the governments of the debt countries come to the conclusion that all payment obligations do not provide net inflow of funds in the future any more, there is an incentive to abandon some or all payments of the debts but to avoid outflow of resources from countries.

A reason to stop paying by the sovereign debtors helps explain some features of the behavior of international creditors. One of them is perseverance in establishing a higher interest rate in loans to foreign governments in comparison with the loans to private and public borrowers in their own country. The requirement for a higher interest rate is a way to get some kind of insurance award in case of non-payment of debts: while there is no crisis, creditors receive this award, but in case of a crisis they bear large losses.

What can solve the problem of non-payment? It may not be a traditional

offer, linking new loans to the debtor with the requirement of "belt-tightening". To delay the time of non-payment of debts, new loans should cover at least the payments of interest and the principal sum of the loan. But even if the new loans are so high, their provision increases the total amount of debt, which a debtor can finally refuse to pay for, regardless of how long a new crediting lasts.

A reliable way to solve a problem of right of ownership of loans, granted to sovereign debtors, is the introduction of a pledge or security, i.e. the assets of any type, which may go into the ownership of the creditor in case of suspension of paying for the debt by the borrower. In transactions on loans within a country, a legal loan or security play an important role in maintaining of payments on debt and simultaneously strengthen the creditability of the debtor, allowing him to obtain loans at a lower interest rate and convenient temporary schema. In the past, the countries, paying for their debts on time, were those whose creditors were able to arrest the assets of the debtors in case of failure to meet the deadline of payment terms.

Despite the adoption of the measures by governments, the total debt of countries of the world in 2012 was amounted to $69,080 billion ($62,500 billion in 2011). Over the last 10 years, the total debt of all countries of the world increased by 2 times [13].

Thus, international debt is a serious problem in the world economy. The economic situation of a country, as a result of the globalization of financial markets, becomes more dependent on external resources, required to cover the budget deficit, domestic investment, socio-economic reforms and execution of debt obligations. Mobility and the scopes of capital flows depend on the level of the country's development. Financial resources, received in the form of loans on the commercial terms by a country, cause the incurring of external debt, since they require appropriate payment.

### 7.4.3. What is meant by external debt of the country and its restructuring?

***External debt*** is the amount of financial obligations of a country owed to foreign creditors for unpaid foreign loans and interests.

Long-term debt obligations of a country include the following:

- the external public (official) debt, which is the amount of obligations of central and local state bodies to external creditors for unpaid loans and interest. External creditors can be foreign governments, central banks, governmental bodies, international and regional monetary and financial organizations;
- the state-guaranteed debt, i.e. an obligation of private firms, banks, companies, where the guarantor of payment is the country;
- private non-guaranteed debt, i.e. a debt of private borrowers that is not guaranteed by a country. It occurs when a borrower receives bank and other loans by means of purchasing debt securities in the international stock market.

External debt service payments are usually made in a foreign currency.

Return of loans by sovereign debtors is the most possible in terms of their capacity to pay debt. Therefore, the creditors are ready for debt restructuring.

***Debt restructuring*** is a rescheduling of debt obligations, which have an expired payment term. Debt restructuring is used to alleviate the debt burden of the least developed countries and countries with economies in transition. International practice accepted the concordance of this process within the Paris Club of official creditors and London Club of private creditors.

The measures of debt restructuring include transfer payments, reduction of the amount of debt or its full cancellation, conversion of debt into national assets of a debtor-countries and recapitalization. The mechanism of recapitalization involves exchanging debts for obligations of debtors, or providing them with new target loans to pay off former debts. Recapitalization is the most popular measure for restructuring the debt to commercial bank creditors. This mechanism was adopted in 1989, and is called the Brady Plan. According to the plan, banks restructure some part of the debt of the developing country (usually it is a lower interest payment) only if its government implements a more radical program of macroeconomic and structural changes.

Every creditor bank has the right to choose the methods of restructuring that are foreseen in the contract. However, on the basis of existing practice, banks choose an Advisory Committee that represents the interests of all creditor banks and negotiates with the debtor government.

Analyzing the results of the multilateral programs of overcoming the international debt crisis of the developing countries, the World Bank came to the following conclusions:

1. A major role in the economic development of a country is not played by external financing (loans and assistance), but by internal resources and a balanced economic policy.

2. The focus on external capital leads in the long term to a greater dependence of the socio-economic development of the country on unfavorable external events. External financing can play a positive role only when it complements and reinforces a healthy domestic economic policy.

Debt restructuring requires an economic policy, endorsed by the IMF, from a debtor-country. However, the practice of implementation of the IMF recommendations, without taking into account a country specificity, in many cases leads to a deterioration of the economy, causes social conflicts, forcing to abandon some of the requirements of the IMF and thus makes the debt crisis difficult to overcome.

# Chapter 8. International labor migration

## 8.1. What are the causes of international labor migration?

International labor migration is the mobility of labor from one country to another for a period more than one year.

International labor migration covers the whole world: both the development part and the underdeveloped periphery. Currently there are more than 214 million of international migrants. International migration of the population has played an increasingly significant role in the development of societies and has become a global process that covered almost all the continents and countries, as well as various social strata. The total number of international migrants increases continuously.

More than half of migrants come from developing countries and countries with economies in transition. From these countries over the past 5 years, industrialized nations have taken 12 million migrants, in other words, the annual inflow of migrants is an average of 2.3 million people, of whom 1.4 million went into the North America and 800 thousand - into the Europe.

International labor migration is one of the objective bases of becoming an integrated international system. At the same time, the problem of free migration is the most dangerous for governments, both politically and in the social aspect.

Ethnic and religious superstition and direct economic threat to the interests of particular groups who are afraid of competition from immigrants make this problem too spicy. For politicians, the issue of migration is a "hot potato that it is better not to take out of the fire" [3, p. 246]. Therefore, during the migration policy implementation is very important to know the nature and general economic and social implications.

The international migration consists of the two basic interdependent processes: emigration and immigration. ***Emigration*** is a departure of labor from one country to another, ***immigration*** is the entrance of labor to the receiving country. Also as part of international flows of people distinguish ***remigration,*** which is the return of the labor to the country of emigration.

The main forms of migration:

- ***permanent migration***. This form of migration prevailed over others before World War I and is characterized by the fact that lots of people were left their countries for the permanent residence in the USA, Canada, Australia for ever;

- ***time migration*** providing the migrant's homecoming on the expiration of certain term. In this connection it is necessary to notice that modern labor migration has got rotational character;

- ***the illegal migration***, which rather favorable to businessmen of the country of immigration and makes an original reserve of cheap labor necessary for them.

Differently directed flows of labor, which cross national borders, form the international labor market functioning in interrelation with the markets of the capital, the goods and services. In other words, the international labor market exists

in the form of labor migration.

The international labor migration is caused by both factors of internal economic development of each separate country and external factors: a condition of the international economy as whole and economic relations between the countries. During the certain periods as motive forces of the international labor mobility could be the political, military, religious, national, cultural, family and other social factors. The reasons of the international labor migration can be understood also only as concrete set of the named factors.

Traditionally (in the neoclassical theory) as the basic allocate the economic reason of the international labor migration connected with scales, rates and structure of accumulation of the capital.

1. Differences in rates of accumulation of the capital cause the differences between an attractive and the repulsive forces of labor in various regions of the world economy that finally defines directions of moving of this factor of production between the countries.

2. Level and scales of accumulation of the capital have direct influence on an occupation level of able-bodied population and, thus, on the sizes of a relative overpopulation (unemployment), which is the basic source of labor migration.

3. Rates and the sizes of accumulation of the capital, in turn, in certain degree depend on migration level. This dependence means that rather low salary of immigrants and possibility to reduce payment to domestic workers allows to reduce the production costs and thereby increase the accumulation of capital. The same purpose is reached by the organization of production in the countries with low-paid labor. Transnational corporations for the purpose of acceleration of accumulation of the capital use either the labor movement to the capital, or move the capital to the regions with excessive amount of labor.

4. The reason of the labor movement is changes in the pattern of requirements and the production caused by scientific and technical progress. The production cutback or liquidation of some out-of-date branches release labor which searches for its applications in other countries.

So, the international labor migration, first of all, is the form of movement concerning surplus population from one centre of accumulation of the capital to another. It is the economic nature of labor migration.

However in the international labor migration not only the unemployed, but also a part of the working population are involved. In this case, the driving motive of migration is the search of more favorable working conditions. The labor moves from the countries with a low standard of living and salaries to the countries with higher ones. So, an objective basis of labor migration is national distinctions in the level of wages.

## 8.2 What are the main stages of the international labor migration?

Historically, there are four stages of the international labor migration.

***First stage of the international migration*** is directly connected with industrial revolution which was held in Europe from the end of the eighteenth

century right up until the middle of the nineteenth. A consequence of this revolution was that accumulation of capital was accompanied by growth of its organic structure. The latter has led to formation of "the relative overpopulation" that caused mass emigration from Europe to the North America, Australia, and New Zealand. It has begun the formation of the world labor market.

Formation of the world labor market promoted:

- the economic development in the countries of immigration as satisfied the critical need of these countries for labor resources in the conditions of high rates of accumulation of the capital and the absence of reserves of attraction of labor;
- the colonization of earth's areas with few population and the new countries' retraction in the system of the world economy.

***Second stage of international labor migration*** covers the period from 80' of the 19th century to the First World War.

The scales of accumulation of the capital considerably increase during this period. Also, this period is characterized by the strengthening of unevenness of this process within the limits of the world economy.

The high level of concentration of both production and capital in the advanced countries (the USA, Great Britain etc.) causes the increased demand for additional labor, stimulates immigration from less developed countries (the backward countries of Europe, India, China etc.). The general and qualifying structures of migrants change in this conditions. In the beginning of the 20th century the basic mass of migrants was formed by unskilled labor.

***Third stage of development of the international migration*** covers the period between two World Wars.

The feature of this stage is the reduction of scales of the international labor migration, including intercontinental migration and even remigration from the USA as the classical country of immigration.

It has been caused by following reasons:

1) consequences of a world economic crisis in years 1929 — 1933, the nature of which was in the unemployment growth in the developed countries, and necessity of restriction of migratory processes;

2) closed-totalitarian character of development of the USSR, which excluded it from a circle of the countries of labor emigration.

***Fourth stage of development of the international labor*** migration has begun after the Second World War to date.

This stage is caused by: a scientific and technological revolution; monopolization of the international markets of labor and capital; internationalization and integration processes.

Its characteristic features:

- growth of intercontinental migration, in particular in Europe and Africa;
- increase in demand from modern production on highly-skilled personnel, the occurrence of a new kind of the labor migration, which have received the name of "the brain drain";

- strengthening of the state and international regulation of labor migration.

Nowadays, such directions of the international labor migration were generated:

- migration from developing countries to industrially developed countries;
- migration within the limits of industrially developed countries;
- labor migration between developing countries;
- migration of scientists and the qualified experts from industrially developed countries to the developing ones;
- migration from the former Union of Soviet Socialist Republics to the developed countries;
- labor migration of within the limits of the former USSR.

### 8.3 What are the modern centers of labor migration?

The international labor migration in modern conditions has got character of the global process. Migration captures the majority of the countries of the world. The quantity of the countries involved in the international migratory process, has essentially increased, first of all at the expense of Central and Eastern Europe, as well as CIS. According to the experts' forecast, the quantity of migrants which are accepted by the developed countries, will remain at high level in the nearest decades.

In 2011, countries leading in emigration were Mexico, India, China, Russia, Ukraine and, in turn, countries leading in immigration were the USA, Russia, Germany, Saudi Arabia and Canada.

As the major centers of gravity of foreign workers, which define modern directions of the international labor migration, can be identified: North and South America, Western Europe, South-East and Western Asia. In beginning of the 21st century annual inflow averaged 2,3 million people, 1,4 million people of whom went to the North America, and 800 million people - to Europe. The largest centers of attraction of migrants are the USA and Canada (their readiness to accept foreigners is estimated accordingly in 1,1 million people and 211 thousand people accordantly).

The defying competition ones are countries of Western Europe, where the aggregate number of the people captured by migration during the post-war period, is estimated in 30 million people. It is characteristic that last 20 years over 1 million people annually moves, looking for a job, from one European country to another, i.e. take part in a intercontinental interstate exchange of labor. For modern European migrations such directions are characteristic: from less developed countries of Southern and Eastern Europe (Greece, Spain, Turkey, Poland, Hungary, etc.) to the advanced countries of Western and Northern Europe (France, England, Germany, Sweden, etc.); from the countries of North Africa, India, Pakistan to the West European labor market; labor movements from one advanced country to another.

Emigration in the countries of the European Union has increased. Number of the foreigners living today in the EU countries reaches 17 - 21million people, 12-14 million people of whom (about 4 % of the population of EU) arrived from the countries which are not members of the Union: 29 % of migrants are citizens of Turkey and former Yugoslavia; 20,7 % - citizens of the African countries, 7 % - Americas, 13,6 % - Asia, 7,8 % - the countries of Central and Eastern Europe. Among the EU countries which have accepted the foreigners, the first places occupy: Germany (over 7 million people); France (about 5 million people) and Great Britain (about 3 million people). The main countries of emigration to Germany are Turkey, the countries of the former Yugoslavia, Italy, Greece and Poland; to France – Algeria, Morocco and Portugal; to Great Britain – India.

The important centre of gravity of labor is Australia. The area of Persian Gulf became new point of concentration of international groups of labor, where in 1975 the aggregate number of nonlocal population in 6 countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates) id 2 million people, and in the beginning of the 21st century - 4 million people, or about 40 % of all population. The most part of the Arabian emigrants arrives from Palestine, Egypt, Iraq, Syria, Jordan.

On the African continent the centers of gravity are the countries of Southern and Central Africa. The aggregate number of migrants in all countries of Africa reaches 6 million people

Along with Western Europe, for last two decades the new centers of gravity of foreign workers reflecting labor migration from one developing country to another, moving of foreign labor from more developed to less developed countries, which in general was not characteristic for interstate migration in the past. These include, in the first place, “the new industrial countries” of Asian-Pacific region. And in Latin America they are Argentina, Venezuela, Brazil.

The largest direction of migration in the world is the Mexico - United States one: in 2011 the number of migrants amounted to 11.6 million people. The next ones by the volume are: Russia - Ukraine, Ukraine - Russia, Bangladesh - India; in these directions, many indigenous people were migrants without moving to other countries, as a result of the establishment of new state borders [7].

As regards the structure of migrating labor, there are following main regularities. Structure of labor, which migrates to industrially developed countries and between the developed countries, is characterized by two moments.

***The first one:*** the necessity of a high share of the highly skilled and scientific personnel for development of new directions of scientific and technical progress. Industrially developed countries stimulate such moving of labor with the right of reception of the status of the constant resident. So, the share of foreigners among engineers in the USA is over 10 %, doctors – over 20 %. “The brain drain” in the USA occurs from both the developing countries and the countries with economies in transition. Within the EU the highly-skilled personnel concentrates in the most developed countries.

***The second one***: there is a considerable share of labor for branches with physically heavy, low qualification and unattractive kinds of work. For example, in

France emigrants make 25 % of all occupied in building, 1/3 – in motor industry. In Belgium they make half of all miners, in Switzerland – 40 % of building workers.

Migration of labor between developing countries is mainly migration between new industrial countries and OPEC member countries, on the one hand, to other developing countries, on the other hand. The basic structure of migrants from these countries is semi-skilled labor. Rather small flow of skilled labor goes from the developed countries to developing ones.

For migration within former world system of a socialism is characteristic the moving of labor from the countries with less favorable social and economic conditions to the countries with more stable economy and social conditions.

### 8.4. What are the consequences of labor migration?

Consequences of the international labor migration are various enough. They show up in the countries of emigration, as well as in the countries of immigration, bringing certain benefits and losses to both parties. However, as analysis shows, there are more benefits obtaining by countries of immigration, and losses exceed benefits in countries of emigration. The world as a whole wins, as migration freedom allows people to move to the countries where they can bring more significant contribution to world production.

***The countries of immigration obtain following benefits:***

a) in the country of skilled labor immigration, rates of growth of economy are accelerated: additional demand for the goods and services of immigrants stimulates growth of production and creates additional employment in the country of their stay;

b) there is the competitiveness increase of the goods made by the country owing to the reduction of the production costs connected with lower price of foreign labor and possibility to contain growth of a salary of local workers due to increased competition on a labor market;

c) the host country wins at the expense of the taxes which size depends on qualifying and age structure of immigrants. The highly skilled experts already knowing language of host country become large taxpayers at once;

d) the considerable income brings a transfer of knowledge from the emigration country. When the host country imports the skilled labor and scientists, it saves expenditure for education and professional trainings. So, 23 % of members of National academy of Sciences and 33% of Nobel Prize winners are immigrants in the USA;

e) foreign workers are often considered as the certain shock-absorber on a case of growth of unemployment: they can be fired first of all;

f) immigrants improve a demographic picture of the developed countries, suffering population aging. In Germany, France and Sweden 10 % of all newborns appear in families of immigrants, in Switzerland — 24 %, in Luxembourg — 38 %.

***The countries of emigration also obtain certain benefits:***

a) decrease in a rate of unemployment and, as consequence, - social pressure in the country;

b) free labor training for countries of emigration (new professional skills, knowledge of high technology, the work management, etc.);

c) reception of incomes in hard currency as a result of remittances of emigrants.

The remittances of migrants are a considerable part of currency receipts of states that positively influences national income of the state. It is one part of consequences of migration for countries of emigration. On the other part, these countries sustain essential losses from labor export: a) reduction of tax revenues because of reduction of number of taxpayers; b) the constant migration cased an outflow of the qualified, initiative workers, called "the brain drain", leading to slowing down the rates of increase of scientific and technical and cultural level of the country. By estimates of experts, these losses reach about 76 billion dollars.

Such measures of the state can be possible ways of removal of negative consequences of labor emigration:

- an emigration interdiction;
- the tax introduction for the “brain drain” to compensate the state investments in emigrants;
- creation of the high profit branches which are carrying out export of labor.

## Chapter 9. International technology transfer

### 9.1 What are the essences and forms of the international technology transfer?

The international technological exchange (technology transfer) is understood to be the complex of the economic relations of different countries concerning the transfer of scientific and technological achievements.

The scientific and technical knowledge being bought and sold in the world market, which is the result of scientific research, engineering and experience of their commercial exploitation, as well as engineering services for the use of scientific, technical, technological and managerial developments. They are the objects of intellectual property, possessing both scientific and commercial values. As commodities they include the following:

- a patent is a certificate, which is issued by the proper government agency to an inventor and certifies its monopoly for the use of the invention;
- a copyright is an exclusive right of an author of a literary, audio or video product for display and reproduction of the work;
- a trademark is a symbol (a picture, graphics, combination of letters, etc.) of a particular organization which is used to personalize the product manufacturer and which cannot be used by other organizations without the official permission of the owner;
- industrial designs, which must be new and original;
- non-divulged information (know-how), which is secret and kept in secret, has commercial value and is provided to the government and governmental organizations as a condition of approval for the marketing of certain products;
- a variety of technical, design, commercial and marketing documentation.

These products of intellectual work belong to so-called nonmaterial forms of technology, and trade operations in international practice are commonly referred to as international technological exchange. Thus, international technological exchange is understood to be the complex of economic relations between contractors of different countries for the transfer of scientific and technological achievements (nonmaterial types of technology) with scientific and practical values, on the commercial basis. It should be noted that there are also non-commercial forms of international technological exchange:

- technical, scientific and professional journals, patent publications, periodicals and other specialized literature;
- database and databanks;
- international exhibitions, fairs, symposia, conferences;
- exchange of delegations;
- migration of scientists and specialists;
- training of scientists and specialists in companies, universities and organizations;
- education of undergraduate and graduate students;
- activities of international organizations in the field of science and

technology.

Under modern conditions, international technological exchange has certain features [3, p.264]:

1. *The development of market of high technologies*. The generally accepted classification of high technologies for exports and imports of products, containing new and leading technology, is the classification developed in the USA, which is used by international organizations for statistical comparisons of different countries. The classification system allows to explore the trade in products of high technology in 10 main technological sectors: biotechnology; human life science technology; optoelectronics; computers and telecommunications; electronics; computerized production; new materials; aerospace technology; armament; nuclear technology.

2. *The monopoly of large firms in technology markets.* Research and development are concentrated in the largest firms of the industrialized countries, since only they have sufficient financial means for expensive research. Transnational corporations actively attract for R&D their foreign subsidiaries, characterized by increasing the expenses for scientific research in the total amount of the expenses of TNCs.

3. *Technology policy of TNCs*. In recent years there have been changes in the trends of R&D of TNCs. Research moves to the industries that determine success in the production and marketing activities:

- enhancement of traditional kinds of products to meet the requirements of the world market concerning the indicators of in material intensity, energy efficiency, security, reliability, etc.;
- creation of innovative products, market research, where you can expect high returns;
- improvement of the existing technology and creation of a new one. TNCs apply new approaches to the transfer of scientific and technological achievements:
- sale of licenses at the initial stages of the life cycle of products, in order to cover the expenses for R&D by incomes from realization of their results;
- establishment of exclusively high prices for the patented products, and limitation of the production and output of a new product by license buyers;
- agreement undertaking between TNCs to obtain exclusive rights to the patents for the most important inventions. The use of patents to control technique development or to hamper this development;
- deprivation of TNCs subsidiaries the autonomy in the choice of equipment and technology. They should be guided by the general licensing policy within the TNCs;
- TNCs transmission of licenses in non-commercial terms to their subsidiaries and affiliates;
- the establishment of strategic alliances between TNCs from different countries to solve jointly the scientific and technological problems.

4. Relationship between TNCs and the developing countries. TNCs try to create a structure of international division of labor, which would provide economic

and technical dependency of the developing countries. For example, in these countries, TNCs create enterprises that produce components that are supplied to the subsidiaries in other countries. Transferring the technology for manufacturing intermediate products to the countries with cheap labor force, a TNCs reduces the cost of their goods.

TNCs often moves to the developing countries the production of goods, the lifecycle of which expired and the profit from sales gradually decreases. They receive these goods at low prices and then sell them through their marketing network under their well-known trademark, getting a higher profit.

A technology, which is transferred to the developing countries, is generally ill-adapted to their possibilities, because it takes into account the level of development and the structure of the industry in the developed countries.

The developing countries account for about 10% of international technological exchange due to the small capacity of their technological market.

5. *Participation in international technological exchange of "venture" firms* (small and mid-sized firms employing up to 1 thousand people). The advantage of these firms in the market of technologies is a narrow specialization. Producing a limited product line, these firms have access to highly specialized global markets; they do not bear additional expenses for market research, advertising; they pay more attention to the direct solving of scientific and technical problems.

6. *Development of international technical assistance*. This assistance is provided by the developed countries to the developing countries and countries with economies in transition in the field of the transfer of technical knowledge, experience, technologies, technology-intensive products, personnel trainings.

The main buyers in the market of technologies are as follows: foreign subsidiaries of TNCs; individual independent firms.

Transfer of TNCs' new technologies to their foreign branches is conditioned by the fact that:

- overcoming the disagreement between the need for greater use of the latest technical developments with a view to maximize the profits and resulting therefrom threat of losing their monopoly for scientific and technological achievements;
- decreasing the specific costs for R&D;
- excluding the outflow of production secrets beyond the boundaries of TNCs;
- increasing the profit of the parent company (since in most countries the payments for the new technology reception are exempted from taxes).

Independent firms usually buy technology of the industries where the expenses for R&D are small (metallurgy, metal processing, textile and clothing industry).

Products of intellectual labor are sold in the world market through sales or by means of establishing the relations arising in connection with obtaining of a temporary right to use the results of scientific research and development on the basis of international licensing agreements, as well as contracts for engineering services.

## 9.2 What is the role of international license trade?

International license trade is the main economic mechanism of international technological exchange and currently has become widespread and rapid disseminated.

The growth of international license trade is due to a number of factors that encourage firms to sell and buy licenses in the world market:

- commercial interest in the technology transfer;
- increased competition in the world market;
- acceleration of the placing of new products in the market;
- gain of access to additional resources;
- penetration and winning of difficult markets in the countries with high tariff and non-tariff barriers;
- profits from the sale of licenses for the products that do not meet the new strategic priorities;
- countries with limited resources of scientific and technological development, participating in international technological exchange, have an opportunity to take a firm position in the world market without additional costs;
- licenses help to create advertising of domestic products and increase demand in other countries, as well as explore foreign markets;
- political and legal motivations.

International license relationships are mostly between the developed countries. The proportion of the developed countries is almost 98% in the total revenues from international license trade.

In general the turnover of license trade is about 30 billion dollars per year. However, the significance of this market is defined by the fact that the cost of products, manufactured in different countries with foreign licenses, is 330-400 billion dollars annually. The leading position in the market of licenses belongs to the USA (65% of income of the industrialized countries from license export).

**The objects of licenses** are as follows:

- a patented invention or technological process;
- technological knowledge and experience;
- know-how i.e. technical knowledge, practical experience of technical, commercial, managerial, financial and other character, which is commercial value, and is applied in production and professional practice and are not provided with patent protection;
- copyright;
- industrial designs (new art and design solution, which defines its outward appearance);
- trademark.

Licensing agreements are typically concluded for 5-10 years.

## 9.3 What is the role of international trade in engineering services?

The common form of international technological exchange is engineering. Engineering is a complex of engineering and consulting services for using technology and other scientific and technical developments.

The essence of international trade in engineering services is to provide on the basis of the engineering agreement by one party (a consultant) to the other one (a client) commercial engineering and design, consulting, construction engineering services. These services may include the following ones:

- preparation of production:

a) preliminary design services (socio-economic research, field studies, topographical survey, mineral exploration, feasibility studies, consultation and supervision of the work);

b) project services (master planning, preparation of diagrams, drawings, technical specifications, consultation, supervision, etc.);

c) post-project services (preparation of contract documents, supervision of construction, construction management, acceptance of delivery work etc.);

- the process of production (services for organizing the production process, enterprise management, staff training);
- the sales of products;
- the construction and exploitation of industrial, infrastructural, agricultural and other objects [3, p.273].

All of these services are intellectual and aimed at optimizing the investment projects at all stages of their implementation.

The main factors, influencing the development of international market of engineering services are as follows:

- acceleration of scientific and technical progress, which can lead to significant shifts in the structure of international trade towards the increase of the trade in related types of equipment that need special knowledge to solve technological and organizational issues, ranging from the design of enterprise to its introduction into operation;
- increase in public and private investment, which allows to extend the building and to introduce new objects, where engineering services are needed;
- free capital available in the market of engineering services;
- high demand for engineering services from the countries that started their independent economic development and do not have the necessary experience and experts for the exploration and exploitation of their natural resources, development of fuel-and-energy base, creation of heavy industry, etc.;
- striving of large TNCs for foreign economic expansion, i.e. to expand the spheres of influence. They use the technical services as a means of penetrating into the economies of other countries. For example, the provision of engineering services to any country subsequently causes the supply of machinery and equipment, whose value in 10-20 times higher than the cost of services for their delivery;
- increase in the number of major engineering firms with large turnover and

broad field of activity, creation of national and international associations of engineering firms to promote engineering [3, p.273].

The characteristics of the market of engineering services are as follows:

- results of the trade in engineering services are not embodied in material types of product, but in some useful effect, which may or may not have a material object, i.e. engineering is an implicit form of technology transfer. For example, services of staff training, construction management do not have material objects;
- engineering services related to the preparation and provision of the process of production and realization, for intermediate consumption of material goods and services. Productive services are not engineering services;
- the objects of sales are services, adapted for the use in specific contexts and transfer of the average available scientific and technical, operational, commercial and other expertise.

# Chapter 10. The regulation of the international movement of factors of production

## 10.1. How is the regulation of international investment carried out?

An important role in the regulation of international investment is occupied by Multilateral Investment Guarantee Agency (MIGA) and International Center for Settlement of Investment Disputes (ICSID).

The **Multilateral Investment Guarantee Agency** is an international financial institution which offers political risk insurance and credit enhancement guarantees. Such guarantees help investors protect foreign direct investments against political and non-commercial risks in developing countries.

MIGA is a member of the World Bank Group and is headquartered in Washington, D.C., United States. It was established in 1988 as an investment insurance facility to encourage confident investment in developing countries. MIGA's stated mission is "to promote foreign direct investment into developing countries to support economic growth, reduce poverty, and improve people's lives". It targets projects that endeavor to create new jobs, develop infrastructure, generate new tax revenues, and take advantage of natural resources through sustainable policies and programs.

MIGA is owned and governed by its member states, but has its own executive leadership and staff which carry out its daily operations. Its shareholders are member governments that provide paid-in capital and have the right to vote on its matters. It insures long-term debt and equity investments as well as other assets and contracts with long-term periods. The agency is assessed by the World Bank's Independent Evaluation Group each year.

MIGA is owned by its 181 member governments, consisting of 156 developing and 25 industrialized countries. The members are composed of 180 United Nations member states plus Kosovo. Membership in MIGA is available only to countries who are members of the World Bank, particularly the International Bank for Reconstruction and Development.

As of 2015, the seven World Bank member states that are *not* MIGA members are Brunei, Kiribati, Marshall Islands, San Marino, Somalia, Tonga, and Tuvalu. (The UN states that are non-members of the World Bank, and thus MIGA, are Andorra, Cuba, Liechtenstein, Monaco, Nauru, and North Korea.) The Holy See and Palestine are also non-MIGA members. Bhutan is the most recent country to have joined MIGA, having done so in December 2014.

MIGA is governed by its Council of Governors which represents its member countries. The Council of Governors holds corporate authority, but primarily delegates such powers to MIGA's Board of Directors. The Board of Directors consists of 25 directors and votes on matters brought before MIGA. Each director's vote is weighted in accordance with the total share capital of the member nations that director represents. MIGA's board is stationed at its Washington, D.C. headquarters where it meets regularly and oversees the agency's activities. The

agency's Executive Vice President directs its overall strategy and manages its daily operations.

MIGA focus on insuring investments in the areas where it can make the greatest difference:

- countries eligible for assistance from the International Development Association (the world's poorest countries);
- fragile and conflict-affected environments;
- transformational projects – large scale and significant investments, with the potential for bringing about transformational change in the host country;
- energy efficiency and climate change - complex energy and infrastructure projects that improve energy capacity as well as transportation projects that have a positive impact on pollution control (such as mass transport);
- middle income countries where MIGA can have strong impact.

MIGA offers insurance to cover five types of non-commercial risks: currency inconvertibility and transfer restriction; government expropriation; war, terrorism, and civil disturbance; breaches of contract; and the non-honoring of financial obligations. MIGA will cover investments such as equity, loans, shareholder loans, and shareholder loan guarantees. The agency may also insure investments such as management contracts, asset securitization, bonds, leasing activities, franchise agreements, and license agreements. The agency generally offers insurance coverage lasting up to 15 years with a possible five-year extension depending on a given project's nature and circumstances. When an event occurs that is protected by the insurance, MIGA can exercise the investor's rights against the host country through subrogation to recover expenses associated with covering the claim. However, the agency's convention does not require member governments to treat foreign investments in any special way. As a multilateral institution, MIGA is also in a position to attempt to sort out potential disputes before they ever turn into insurance claims.

The agency's Small Investment Program aims to promote FDI into specifically small and medium enterprises. Under the program, small and medium enterprises may take advantage of discounted insurance premiums and no application fees, which are not available to larger investors. To qualify an investment for the Small Investment Program, MIGA defines small and medium enterprise projects as having 300 or fewer employees, total assets not to exceed $15 million and annual revenues not to exceed $15 million. MIGA limits the request amount for the investment guarantee to $10 million, and will guarantee only up to 10 years with a possible 5-year extension.

As a multilateral development agency, MIGA only supports investments that are developmentally sound and meet high social and environmental standards. MIGA applies a comprehensive set of social and environmental performance standards to all projects and offers extensive expertise in working with investors to ensure compliance to these standards [17].

The **International Centre for Settlement of Investment Disputes** was established in 1966 by the Convention on the Settlement of Investment Disputes

between states and nationals of other states (the ICSID Convention). The ICSID includes 161 countries (signatory and contracting states).

ICSID's 161 member states which have signed the center's convention include 160 United Nations member states plus Kosovo. Of these member states, only 153 are "contracting member states", that is they have ratified the contract. The following member states have signed the ICSID convention (date in parentheses), but have not ratified it: Belize, Dominican Republic, Ethiopia, Guinea-Bissau, Kyrgyzstan, Namibia, Russia, and Thailand. Brazil, Mexico, India and South Africa are countries with large economies that have never been ICSID members.

All ICSID contracting member states, whether or not they are parties to a given dispute, are required by the ICSID Convention to recognize and enforce ICSID arbitral awards.

The ICSID is part of and funded by the World Bank Group, headquartered in Washington, D.C., in the United States. The ICSID Convention is a multilateral treaty formulated by the Executive Directors of the World Bank to further the Bank's objective of promoting international investment. ICSID is an independent, depoliticized and effective dispute-settlement institution. Its availability to investors and states helps to promote international investment by providing confidence in the dispute resolution process.

The ICSID is governed by its Administrative Council which meets annually and elects the center's Secretary-General and Deputy Secretary-General, approves rules and regulations, conducts the center's case proceedings, and approves the center's budget and annual report. The council consists of one representative from each of the center's contracting member states and is chaired by the President of the World Bank Group, although the president may not vote. The ICSID's normal operations are carried out by its Secretariat which comprises 40 employees and is led by the Secretary-General of the ICSID. The Secretariat provides support to the Administrative Council in conducting the center's proceedings. It also manages the center's Panel of Conciliators and Panel of Arbitrators. Each contracting member state may appoint four persons to each panel.

ICSID provides for settlement of disputes by conciliation, arbitration or fact-finding. The ICSID process is designed to take account of the special characteristics of international investment disputes and the parties involved, maintaining a careful balance between the interests of investors and host States. Each case is considered by an independent Conciliation Commission or Arbitral Tribunal, after hearing evidence and legal arguments from the parties. A dedicated ICSID case team is assigned to each case and provides expert assistance throughout the process. More than 600 such cases have been administered by ICSID to date.

The center has two sets of rules that determine how cases will be initiated and conducted, either under the ICSID's Convention, Regulations and Rules or the ICSID's Additional Facility Rules. To be processed in accordance with the ICSID Convention, a legal dispute has to exist between one of the center's contracting member states and a national of another contracting member state. It must also be

of a legal nature and relate directly to an investment. A case can be processed under the ICSID Additional Facility Rules if one of the parties to the dispute is either not a contracting member state or a national of a contracting member state. However, most cases are arbitrated under the ICSID Convention. Recourse to ICSID conciliation and arbitration is entirely voluntary. However, once the parties have consented to arbitration under the ICSID Convention, neither party can unilaterally withdraw its consent.

The ICSID Secretariat may also administer dispute resolution proceedings under other treaties and regularly assists tribunals or disputing parties in arbitrations among investors and states under the United Nations Commission on International Trade Law (UNICTRAL)'s arbitration regulations. The center provides administrative and technical support for a number of international dispute resolution proceedings through alternative facilities such as the Permanent Court of Arbitration in The Hague, Netherlands, the London Court of International Arbitration, and the International Chamber of Commerce in Paris, France.

The ICSID also conducts advisory activities and research and publishes *Investment Laws of the World and of Investment Treaties*.

Although the ICSID's proceedings generally take place in Washington, D.C., parties may agree that proceedings be held at one of a number of possible alternative locations, including the Permanent Court of Arbitration, the Regional Arbitration Centres of the Asian-African Legal Consultative Committee in Cairo, in Kuala Lumpur, or in Lagos, the Australian Centre for International Commercial Arbitration in Melbourne, the Australian Commercial Disputes Centre in Sydney, the Singapore International Arbitration Centre, the Gulf Cooperation Council Commercial Arbitration Centre in Bahrain, the German Institution of Arbitration, the Maxwell Chambers in Singapore, the Hong Kong International Arbitration Centre, and the Centre for Arbitration and Conciliation at the Chamber of Commerce of Bogota [14].

### 10.2. What is the essence of the regulation of international technology transfer?

The subject of international regulation in the technology market is primarily the protection of rights to invention, industrial samples, trademarks that constitute intellectual property.

Any unauthorized use of intellectual property is a violation of the rights of the owner. Standards that are accepted by different countries to protect their inventions, industrial designs, trademarks, as well as the efficiency with which they are applied, influence the development of international technological exchange. This is due, firstly, to the fact that economic activity in most industrialized countries generally becomes intense by research and technological developments. As a result, their export products contain more technological and creative components that concern to intellectual property rights (IPRs). As a consequence, manufacturers are interested in ensuring that no matter where they sell their products, their patents are adequately protected and this would give them

the opportunity to recoup their costs of research and development. Second, in many countries, after it had been removed the corresponding restrictions on foreign investment, there are new opportunities for the production of patented products on the basis of licenses or through joint ventures. However, the willingness of industrialists from the developed countries to transfer their technology depends on how the protection system of IPRs in the recipient country can provide them that their property rights to technology will be adequately protected and will not be usurped by local partners, who can use other people's creations. Third, the technological improvements of the product that enters into international trade, correspond to the technological advances that have made reproduction and production of surrogates, simple and cheap. In those countries where the legislation on IPRs is not clearly embedded in the life, it leads to the production of counterfeit goods or pirated goods not only for sale in the domestic market but also for export sales.

The problems of protection of intellectual property rights are solved by such international organizations as the **European Patent Organization (EPO), World Intellectual Property Organization (WIPO), and World Trade Organization (WTO).**

**The European Patent Organization** is a public international organization created in 1977 by its contracting states to grant patents in Europe under the European Patent Convention (EPC) of 1973. It has two bodies, the European Patent Office and the Administrative Council, which supervises the Office's activities. The European Patent Organization has its seat at Munich, Germany, and has administrative and financial autonomy. The EPO is not legally bound to the European Union (EU) and has several members which are not themselves EU states. There are 38 Contracting States to the EPC, also called member states of the European Patent Organization.

The main objectives of the European Patent Organization are: the grant of European patents; increased cooperation between European States in the sphere of protection of inventions, strengthening patent protection; facilitating the establishment and modernization of patent systems in developing countries (training and consultancy, provision of experts and documentation); the implementation of scientific, information and publishing activities (provision texts of the Convention on the Grant of European Patents, monographs, informative materials in different languages, the publication of the annual report, etc.) [12].

**The World Intellectual Property Organization** is one of the 17 specialized agencies of the United Nations. WIPO was created in 1967 to encourage creative activity, to promote the protection of intellectual property (IP) throughout the world.

WIPO currently has 189 member states, administers 26 international treaties, and is headquartered in Geneva, Switzerland.

Its mission is to lead the development of a balanced and effective international intellectual property system that enables innovation and creativity for the benefit of all.

The scope of activities of the world intellectual property organization is the industrial property, with regard to the protection of the rights on inventions, trademarks, industrial designs and copyright, mainly in literary, musical, artistic, photographic and audiovisual achievements. The main objectives of WIPO, the protection of intellectual property throughout the world through cooperation among countries and international organizations (new international agreements, the work on improvement of national legislation in terms of protection of intellectual property rights, technical assistance to developing countries); strengthening administrative cooperation among the unions of states in the field of intellectual property; dissemination of information.

WIPO provide: a policy forum to shape balanced international IP rules for a changing world; global services to protect IP across borders and to resolve disputes; technical infrastructure to connect IP systems and share knowledge; cooperation and capacity-building programs to enable all countries to use IP for economic, social and cultural development; a world reference source for IP information.

WIPO has established WIPOnet, a global information network. The project seeks to link over 300 intellectual property offices (IP offices) in all WIPO Member States. In addition to providing a means of secure communication among all connected parties, WIPOnet is the foundation for WIPO's intellectual property services.

Under the administration of WIPO are the following agreements:

- The Paris Convention for the Protection of Industrial Property, the first version of which was signed in 1883. Then, the Convention was repeatedly revised and supplemented. It was joined by 96 countries. its purpose is to provide more favorable conditions for patenting inventions, industrial designs, registration of trademarks of foreign nationals;
- The Madrid Agreement Concerning the International Registration of Marks (1891);
- Madrid agreement concerning the suppression of false data about the sources of origin of goods (1883);
- Hague Agreement Concerning the International Deposit of Industrial Designs (1925);
- Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks (1957);
- Lisbon Agreement for the Protection of Appellations of Origin and their International Registration (1958);
- Locarno Agreement Establishing an International Classification for Industrial Designs (1968);
- Trademark Registration Treaty, adopted at Vienna in 1973;
- Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure (1977);
- Patent Cooperation Treaty signed in 1970 in Washington, which provides the preparation and submission to the national office of the international

application in cases when the applicant wishes to provide protection for an invention in several countries;

- The Berne Convention for the Protection of Literary and Artistic Works (1886);
- The Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (1961);
- The Geneva Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of their Phonograms (1971);
- The Convention relating to the Distribution of Program-Carrying Signals Transmitted by Satellite (1974) [7; 18].

In the legal system of the **WTO** the Agreement on Trade-Related Aspects (TRIPS Agreement) is one of its three components in addition to GATT and GATS.

The necessity of protection of intellectual property rights is connected with the expansion of copies and analogues of goods in international trade turnover, which are lawfully protected by copyright, trademarks, patents.

Any illegal use of intellectual property is a violation of owner's rights.

TRIPS Agreement consists of 7 parts: "General provisions and basic principles", "Standards concerning the availability, scope and use of intellectual property rights", "Enforcement of intellectual property rights", "Acquisition and maintenance of intellectual property rights and related INTER-PARTES procedures", "Dispute prevention and settlement", "Transitional arrangements", "Institutional arrangements: Final Provisions".

The TRIPS Agreement is based on the provisions of the main international conventions on intellectual property rights. Its important feature is that the standard protection set by international conventions has received legal protection.

Countries mustn't use discrimination of foreigners or between foreign and national citizens concerting acquisition, volume and reservation of intellectual property rights, i.e., the countries are required to expand the MFN and national treatment.

The objects of intellectual property in the TRIPS Agreement include:

- copyright and related rights;
- trademarks;
- geographical indications;
- industrial designs;
- patents;
- layout-designs (topographies) of integrated circuits;
- undisclosed information.

Intellectual property rights are limited in duration. The minimum period of protection varies from country to country.

The minimum periods of protection:

- patents – 20 years from the date of the application for patent;
- trademarks – 7 years from the date of initial registration and each renewal of registration. Registration is renewed for an indefinite period;

- industrial designs – at least 10 years;
- copyright – during life of the author plus 50 years;
- topographies of integrated circuits – 10 years from the date of registration or, if registration is not required, 10 years after the first use.

It is assumed that countries can take appropriate measures, including legislative measures, to prevent the abuse of intellectual property rights by their owners and to apply practice that restrains trade or unfavorably affects the transfer of technology in order not to let improved and strengthened IPR protection make a negative effect on the transfer of technology on reasonable commercial terms.

The obligations for governments of member-states to provide in national legislation the procedures and guarantees intended to ensure the effective implementation of IPR are formulated in the Agreement.

The procedures:

- must be fair and based on principles of equality;

- do not have to be complicated, expensive, set unrealistic deadlines, lead to unreasonable delays;

- should provide for recourse to the courts for review of final administrative decisions and right to make the disputed issues at trial.

Implementation of provisions of the Agreement helps to control the manufacture and trade in counterfeit and pirated goods, as well as it helps the commercial enterprises to improve their sales strategies in foreign markets. They need to explore, if the processes, which they use to produce particular product or any of its components, are patentable or are liable to any other type of IPR protection in a particular export market.

The implementation of the TRIPS Agreement and compliance by governments of the provisions contained therein, the Council on trade-related aspects of intellectual property rights controls.

Governments often seek to limit, for whatever reasons, the transfer of technology. So, restriction of the export of the latest technologies is because of desire to retain technological leadership in the global market or national security reasons.

Import restrictions technology often associated with the need to reduce foreign competition, the preservation of jobs, and disparity of national standards to foreign technologies.

With the aim of fulfilling the provisions of international agreements, the participating countries perform the state control over the sale of technical advances that can be used to create chemical, biological, and missile weapons. The export of technologies designed to create products that have peaceful purpose, but can be used for the production of weapons of mass destruction, should be under the special control.

State mechanisms of international technology transfer can be direct, carried out by the export control authorities, methods of customs and border control, and indirect, carried out through the state system of registration of patents and trademarks [7].

## 10.3. How is the regulation of international labor migration carried out?

The regulation of international labor migration is carried out by the International Labor Organization (ILO) and the International Organization for Migration (IOM).

**The International Labor Organization** was formed in 1919 as an autonomous organization in the League of Nations; in 1946 it became a United Nations specialized agency. The International Labor Organization (ILO) is dealing with labor problems, particularly international labor standards, social protection, and work opportunities for all. The ILO has 187 member states, including Ukraine. The headquarters is located in Geneva. Unlike other United Nations specialized agencies, the International Labor Organization has a tripartite governing structure – representing governments, employers, and workers. The rationale behind the tripartite structure is the creation of free and open debate among governments and social partners. The ILO secretariat (staff) is referred to as the International Labor Office.

The primary goal of the ILO is to promote social justice in the work sphere, to protect the workers ' interests on the basis of social partnership, to improve the working conditions.

The ILO has four main strategic objectives:

- set and promote standards and fundamental principles and rights at work;
- create greater opportunities for women and men to decent employment and income;
- enhance the coverage and effectiveness of social protection for all;
- strengthen tripartism and social dialogue.

Functions of ILO: normative activities, technical cooperation, preparation of researches and publications.

Normative activities is the development of international Conventions and recommendations on the regulation of working conditions, employment, income, welfare and basic human rights and the management of labor. The development of standards is the main direction of ILO activities. The member-state must regularly submit to the Organization the reports on the implementation of its Conventions as well as information on compliance of national legislation with the standards of the ILO. Among the conventions the issues of wages, working hours, social insurance, paid vacations, service employment, and labor inspection are important. Conventions and recommendations of the ILO make up the "International labor code", which is the basis of the regulation of labor relations in member-countries.

Conventions and recommendations of the ILO are the acts of international legal regulation of labor. They are not international treaties and do not require ratification. The conventions and recommendations represent an appeal to the states wishing to incorporate the rules into national law.

Conventions and recommendations of the ILO cover almost all issues in the work sphere. They include some fundamental human rights, in particular freedom of association, the right to create an organization, labor relations, policy in the

sphere of employment, working conditions, social security, safety and protection of labor, employment and rights of migrants.

Technical cooperation is the development and implementation of the projects on the various aspects of labor relations in member-countries. The most relevant topics of the projects are: training; employment and development; workforce planning; labor market; working conditions and working environment; social security; labor relations; worker education; the rights of migrant workers; the ILO and the international trade union movement. For realization of technical projects the ILO send the experts and missions to the relevant countries.

Research activities of the ILO includes the analysis of sectoral and regional problems of labor; assessment of trends of socio-economic development. The ILO publishes reviews, issue bulletins on issues of labor relations.

The ILO accomplishes its work through three main bodies which comprise governments', employers' and workers' representatives:

- the International labor Conference sets the International labor standards and the broad policies of the ILO. It meets annually in Geneva. Often called an international parliament of labor, the Conference is also a forum for discussion of key social and labor questions.
- the Governing body is the executive council of the ILO. It meets three times a year in Geneva. It takes decisions on ILO policy and establishes the program and the budget, which it then submits to the Conference for adoption.
- the International Labor Office is the permanent secretariat of the International Labor Organization. It is the focal point for International Labor Organization's overall activities, which it prepares under the scrutiny of the Governing Body and under the leadership of the Director-General.

The work of the Governing Body and of the Office is aided by tripartite committees covering major industries. It is also supported by committees of experts on such matters as vocational training, management development, occupational safety and health, industrial relations, workers' education, and special problems of women and young workers.

Regional meetings of the ILO member States are held periodically to examine matters of special interest to the regions concerned.

International labor standards are backed by a supervisory system that is unique at the international level and that helps to ensure that countries implement the conventions they ratify. The ILO regularly examines the application of standards in member states and points out areas where they could be better applied. If there are any problems in the application of standards, the ILO seeks to assist countries through social dialogue and technical assistance.

The ILO has developed various means of supervising the application of Conventions and Recommendations in law and practice following their adoption by the International Labor Conference and their ratification by States. There are two kinds of supervisory mechanism:

- the regular system of supervision: examination of periodic reports submitted by Member States on the measures they have taken to implement the provisions of the ratified Conventions;

- special procedures: a representations procedure and a complaints procedure of general application, together with a special procedure for freedom of association [7, 15].

The **International Organization for Migration** is an intergovernmental organization that provides services and advice concerning migration to governments and migrants, including internally displaced persons, refugees, and migrant workers. It was initially established in 1951 as the Intergovernmental Committee for European Migration (ICEM) to help resettle people displaced by World War II. Its Constitution was adopted on 19 October 1953 and came into force on 30 November 1954. Following amendments made to the Constitution on 14 November 1989, the Organization was renamed the International Organization for Migration.

IOM currently counts 166 member states. A further 8 states hold observer status. IOM has its Headquarters in Geneva.

IOM's stated mission is to promote humane and orderly migration by providing services and advice to governments and migrants. IOM works to promote international cooperation on migration issues, to assist in the search for practical solutions to migration problems and to provide humanitarian assistance to migrants in need, be they refugees, displaced persons or other uprooted people.

The IOM Constitution gives explicit recognition to the link between migration and economic, social and cultural development, as well as to the right of freedom of movement of persons.

IOM works in the four broad areas of migration management: migration and development, facilitating migration, regulating migration, and addressing forced migration. Cross-cutting activities include the promotion of international migration law, policy debate and guidance, protection of migrants' rights, migration health and the gender dimension of migration.

The International Organization for Migration works closely with governmental, intergovernmental and non-governmental partners.

IOM is committed to the principle that humane and orderly migration benefits migrants and society.

As the leading international organization for migration, IOM acts with its partners in the international community to:

- assist in meeting the growing operational challenges of migration management;
- advance understanding of migration issues;
- encourage social and economic development through migration;
- uphold the human dignity and well-being of migrants.

IOM's strategic focus:

1. To provide secure, reliable, flexible and cost-effective services for persons who require international migration assistance.

2. To enhance the humane and orderly management of migration and the effective respect for the human rights of migrants in accordance with international law.

3. To offer expert advice, research, technical cooperation and operational assistance to States, intergovernmental and non-governmental organizations and other stakeholders, in order to build national capacities and facilitate international, regional and bilateral cooperation on migration matters.

4. To contribute to the economic and social development of States through research, dialogue, design and implementation of migration-related programs aimed at maximizing migration's benefits.

5. To support States, migrants and communities in addressing the challenges of irregular migration, including through research and analysis into root causes, sharing information and spreading best practices, as well as facilitating development-focused solutions.

6. To be a primary reference point for migration information, research, best practices, data collection, compatibility and sharing.

7. To promote, facilitate and support regional and global debate and dialogue on migration, including through the International Dialogue on Migration, so as to advance understanding of the opportunities and challenges it presents, the identification and development of effective policies for addressing those challenges and to identify comprehensive approaches and measures for advancing international cooperation.

8. To assist States to facilitate the integration of migrants in their new environment and to engage diasporas, including as development partners.

9. To participate in coordinated humanitarian responses in the context of inter-agency arrangements in this field and to provide migration services in other emergency or post-crisis situations as appropriate and as relates to the needs of individuals, thereby contributing to their protection.

10.To undertake programs which facilitate the voluntary return and reintegration of refugees, displaced persons, migrants and other individuals in need of international migration services, in cooperation with other relevant international organizations as appropriate, and taking into account the needs and concerns of local communities.

11.To assist States in the development and delivery of programs, studies and technical expertise on combating migrant smuggling and trafficking in persons, in particular women and children, in a manner consistent with international law.

12.To support the efforts of States in the area of migration, in particular short term movements, and other types of circular migration.

The Organization’s organs are the Council and the Administration.

The Council, on which each Member State has one representative and one vote, is the highest authority and determines IOM policies.

The Standing Committee on Programs and Finance (SCPF) is a subcommittee of the Council. It is open to the entire membership and normally meets twice a year to examine and review policies, programs and activities, to

discuss administrative, financial and budgetary matters and to consider any matter specifically referred to it by the Council.

The Administration, which comprises a Director General, a Deputy Director General and such staff as the Council may determine, is responsible for administering and managing the Organization in accordance with the Constitution and the policies and decisions of the Council and the Standing Committee on Programs and Finance. The Director General, who is the Organization's highest executive official, and the Deputy Director General are independently elected by the Council for a period of five years [7; 16].

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