

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

- | |
|---|
| <ol style="list-style-type: none">1. Food and beverages<ol style="list-style-type: none">1.1. Primary<ol style="list-style-type: none">1.1.1. Mainly for industry1.1.2. Mainly for household consumption1.2. Processed<ol style="list-style-type: none">1.1.1. Mainly for industry1.1.2. Mainly for household consumption2. Industrial supplies not elsewhere specified<ol style="list-style-type: none">2.1. Primary2.2. Processed3. Fuels and lubricants<ol style="list-style-type: none">3.1. Primary3.2. Processed<ol style="list-style-type: none">3.2.1. Motor spirit3.2.2. Other4. Capital goods (except transport equipment), and parts and accessories thereof<ol style="list-style-type: none">4.1. Capital goods (except transport equipment)4.2. Parts and accessories5. Transport equipment, and parts and accessories thereof<ol style="list-style-type: none">5.1. Passenger motor cars |
|---|

- 5.2. Other
 - 5.2.1. Industrial
 - 5.2.2. Non-industrial
- 5.3. Parts and accessories
- 6. Consumer goods not elsewhere specified
 - 6.1. Durable
 - 6.2. Semi-durable
 - 6.3. Non-durable
- 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.: -cattle; - sheep; - pigs.	the USA, Canada, the EU E: Australia, Turkey I: the Near East
2. A market of meat, incl. : - beef and veal; - pork; - lamb and goat meat; - birds meat	E: Australia, Brazil, the EU, the USA, Argentina E: Denmark, Canada, the USA, Benelux E: Australia, New Zealand E: the USA, the EU, Brazil; 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). I: Japan, the EU, Canada, Hong Kong.
5. A market of cereals, incl.: - wheat - corn - rice	E: theUSA, Canada, Australia, Argentina, Ukraine,the EU countries. I: Mexico, the USA, CIS, Japan, China, the EU, Brazil, Egypt, Indonesia, Algeria. E: the USA E: Thailand, Vietnam, China, Pakistan I: Indonesia, Iraq, Nigeria, Iraq
- rye	E: the EU, Canada I: Japan, Poland, Republic of Korea, China, the USA
6. A market of citrus and bananas	E: Mediterranean, Latin America. I: Europe and North America.
7. A sugar market	E: Cuba, Brazil, China, India (from sugar cane) 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.: - soybeans;	E: the USA, China, Brazil, Argentina

- rape	I: European countries, Japan. E: Canada, Australia, CIS, the USA
- Sunflower (seeds)	E: Central Europe, Russia, Ukraine, the USA, Argentina I: the EU, Turkey
- Olive oil	E: the EU, Spain, Italy, Greece, Tunisia. I: the EU, the USA, Syria, Morocco.
- Peanut oil	E: Senegal, Argentina, China, India, USA. I: the EU, Indonesia, Canada, Russia, Mexico, Japan, North Africa
9. A market of fish oil	E: Peru I: Norway, the EU, Canada, Mexico, Japan
10. A market of tobacco leaves	E: Brazil, the USA, Zimbabwe, China, Italy, India I: the United Kingdom, Germany, Russia, the USA, Japan, the Netherlands.
11. A tea market	E: India, China, Sri Lanka, Indonesia. 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 I: the USA, Germany, Netherlands, the United Kingdom, Switzerland. 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 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 $\frac{3}{4}$ 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 it 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		Rank	Importers	Value	Share	Annual	
				%	change					%	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.).

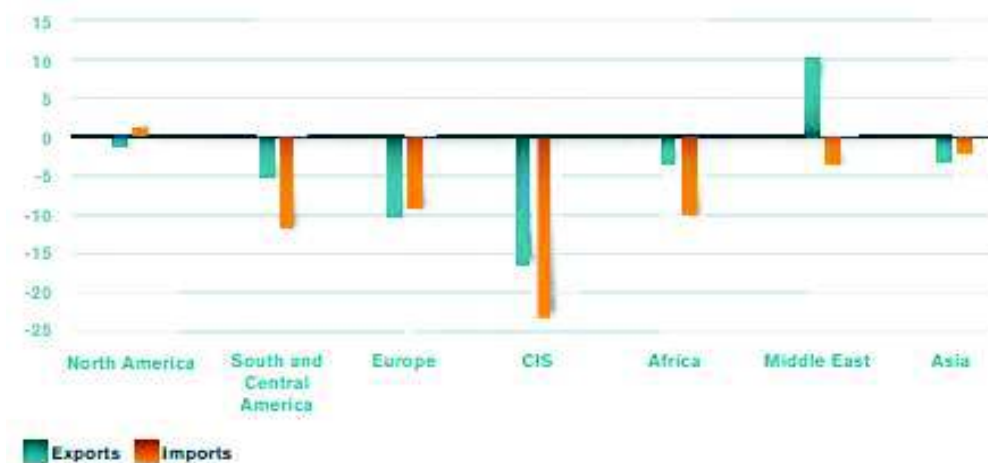


Fig. 5.1. Trade in commercial services by region, 2015 (annual percentage change) [22].

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	Rank	Importers	Value	Share	Annual
				% change					% 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 reducing 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 $\frac{3}{4}$ of services in international trips are provided by developed countries, $\frac{1}{4}$ - 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.