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INTERNATIONAL TRADE and WORLD GOODS MARKETS

The textbook



Karaganda
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*Recommended the Academic council of academician
Ye.A. Buketov Karaganda State University*

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The textbook contains the systematized information about the exchange of capital, goods, and services across international borders or territories, which could involve the activities of the government and individual. International trade is also a branch of economics, which, together with international finance, forms the larger branch called international economics.

The textbook is addressed to students, masters of economic specialties and teachers, and also it can be useful for all who is interested in problems of international trade and world goods markets.

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INTRODUCTION

International trade and global goods markets as a scientific discipline, is both an important part of the theory of international economic relations, as well as the leading sector of the world economy significantly influencing on its condition.

One of the main characteristics of modern international trade and economic relations is consistently expanding and deepening internationalization processes. This is most clearly manifested in the increasing involvement of national economies into a single global reproductive process.

Capital movements become more active, rates of a gain of world trade exceed growth of global GDP. At the same time with an advancing trade at all groups of the countries- developed, developing, the countries of a transitional economy grow, at the greatest dynamics of quickly growing states (about 20 countries of Asia and Latin America).

The factor of international trade is shown in all spheres of life and activity practically of each person. Unlike last century nowadays the level of economic, social, cultural, information communication of people is so high that trade and economic interaction of people has reached absolute values. In turn world trade initially took priority as the general tendency accelerating process of internationalization of factors of production (productive forces), promoting regional and world integration of the world economy and processes of the international division of labor in his new schemes.

International trade - an independent complex area of economic activity, having the history in several millennia while the world economy which has begun to be formed with great geographical discoveries in the 16th century "was issued" (in the main qualitative characteristics) only in the 20th century.

In the textbook the wide range of theoretical questions of discipline "International Trade and World Goods Markets" is considered, evolution and its current state, including a regional, continental and country section, mechanisms of its regulation, major factors influencing dynamics of the world movement of goods, services and intellectual property is shown. At the same time authors place particular emphasis on students that have mastered not only concrete static situations and the actual material in all its extensiveness and completeness, but also have developed skills and abilities to the independent analysis, studying and research of a subject.

During the course, the student should possess certain knowledge, skills and abilities within the general cultural and professional competencies, which include the following elements:

- appropriate culture of thinking, the student's ability to generalizations and analysis; statement of a problem (purpose) and choice of ways to solve it; ability to understand value of information, to be able to use it; ability to analyze difficult historical, socio-economic and cultural phenomena and processes in world development, to predict development of foreign and international trade (including its entities, country and company);

- ability to use national and international rules regulating different spheres of foreign trade of Kazakhstan and international trade; logically and convincingly set out the arguments and counter-arguments in the reports and discussions;

- ability to collect and analyze the initial indicators needed to solve this goal; knowledge of basics of international trade theories.

As a result of studying the discipline "International Trade and World Goods Markets", student must:

know

- socially important problems of the world and national economic development; the basics of international trade; internationally accepted statistical indicators reflecting the dynamics of international trade and the major models used in international trade and international trade settlement;

- the basic rules of legal regulation of foreign trade, as well as put in the action within WTO;

- the basic facts and events in development of the international trade and economic relations for the last decades;

- analysis methods and prediction of the international trade development and foreign trade of the certain countries;

be able to

- search for information and analyze data in the field of international trade at the macro and micro level; use sources of trade-economic and political information for the analysis of the situation in international trade;

- highlight the main factors affecting the sphere of foreign trade and international trade as a whole;

- apply standard techniques to build theoretical and econometric models of different levels of international trade;

- critically estimate data of the different international organizations on international trade in which contradictory indicators are often given, to establish the reasons of divergences;

own

- skills analysis of major socio-economic problems, the ability to set goals and the choice of means to achieve them;

- modern information, statistical and other methods of collection, processing and analysis of socio-economic indicators and data on the country and international trade;

- skills and ability to carry out a comparative analysis of the world trade dynamics for a certain time log; highlight trends and develop forecasts;

- skills of using different international regulatory rules in the field of international trade;

- methods and techniques of trade analysis and economic processes on the basis of internationally used methods, models and formulas;

- skills of using modern technical, information and technological resources for solving problems of international, foreign trade of Kazakhstan.

In work on the textbook writing team sought to combine necessary scientific level and a logical, rational and simple statement of disclosure issue. At this point concrete practical and statistical material is followed by the theoretical analysis, conclusions, generalizations, and also control questions for self-examination of the material acquired by students. It can be naturally used in the educational process with the use of modern audio-visual and other instruments. Particular attention is given to the use of a variety of sources: the statements and concepts of authoritative analysts-economists; statistics from international organizations (UNCTAD, UNIDROIT, WTO, IMF, World Bank, Eurostat), national statistical reports and annual collections, as well as periodical literature.

Textbook's authors considered it useful to apply various techniques for consolidation of educational material (asking questions, control tasks, etc.).

LIST OF DESIGNATIONS AND ABBREVIATIONS

IDL	International division of labour
GDP	gross domestic product
AfMX	Africa Mercantile Exchange
NCE	Nairobi Coffee Exchange
ECX	Ethiopia Commodity Exchange
JSE	South African Futures Exchange
ASCE	Abuja Securities and Commodity Exchange
BMF	Brazilian Mercantile and Futures Exchange
CBOT	Chicago Board of Trade
CME	Chicago Mercantile Exchange
NYMEX	New York Mercantile Exchange
DME	Dubai Mercantile Exchange
HKME _x	Hong Kong Mercantile Exchange
ICDX	Indonesia Commodity and Derivatives Exchange
ICEX	Indian Commodity Exchange Limited
TOCOM	Tokyo Commodity Exchange
LCE	London Commodity Exchange
LME	London Metal Exchange
EEX	European Energy Exchange
ASX	Australian Securities Exchange
NASAAC	North American Special Aluminium Alloy
DCM	designated contract markets
SHFE	Shanghai Futures Exchange
US	United States
USD	United States Dollars
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
WTO	World Trade Organization
EUR	Euro

etc	Et cetera (и другие)
IT	Information technologies
OECD	Organisation for Economic Co-operation and Development
e-commerce	Electronic commerce
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
UNCTAD	United Nations Conference on trade and development
USA	United States of America
ICT	information and communication technologies
IFC	International Finance Corporation
IMD	Institute for Management Development
CIS	Commonwealth of Independent States
UN	United Nations
EMU	European Monetary Union
UK	United Kingdom
EU	European Union
EFTA	European free trade Association
FTA	free trade area
CEFTA	Central European Free Trade Agreement
NAFTA	North American Free Trade Agreement
MAST	Multi-Agency Support Team
TBT	Technical barriers to trade
STE	State trading enterprises
TRQ	Tariff rate quotas
RoO	Rules of origin
VER	Voluntary Export Restraints
SDGs	Sustainable Development Goals
EEC	European Economic Community
OEEC	Organization for European Economic Cooperation

Benelux	Belgium, the Netherlands and Luxembourg
ECSC	European Coal and Steel Community
Euratom or EAEC	European Atomic Energy Community
EAGGF	European Agricultural Guidance and Guarantee Fund
CAP	Common agricultural policy
USSR	Union of Soviet Socialist Republics
EEA	European Economic Area
TEU	Treaty of the European Union
FOCEM	Structural Convergence Fund of Mercosur
ASEAN	Association of Southeast Asian Nations
APEC	Asia-Pacific Economic Cooperation
SAARC	Association of regional cooperation of the Southern Asia
NIC	new industrial countries
PECC	Pacific Economic Cooperation Council
EAEU	Eurasian Economic Union
SCO	Shanghai Cooperation Organization
SAPTA	SAARC Preferential Trading Arrangement
SES	Single Economic Space
BRICS	Brazil, Russia, India, China, South Africa
FAO	Food and Agricultural Organization
FMD	foot-and-mouth disease
kg	Kilogram
SACU	Southern Africa Customs Union
HFCS	high fructose corn syrup
mln	Million
ha	Hectare
USGS	US Geological Survey
t	ton

WTI	West Texas Intermediate
OPEC	Organization of the Petroleum Ex- porting Countries
UAE	United Arab Emirates
NGLs	natural gas liquids
GECF	Gas Exporting Countries Forum
cu. m.	cubic metres
b/cd	barrels per calendar day
b/d	barrels per day
PC	personal computer
HP	Hewlett Packard
HDTVs	High-digital televisions
Ltd.	limited
LCD TV	Liquid-crystal-display televisions

I SECTION. INTERNATIONAL TRADE

THEME 1. THE ESSENCE AND ROLE OF INTERNATIONAL TRADE IN THE WORLD ECONOMY

1. Concept of the international economy. The essence, subjects, objects and types of international trade.
2. International division of labour (IDL) and its factors. Specialization and cooperation.
3. World market. The opened and closed economy. Structure of the world economy.

1. Concept of the international economy. The essence, subjects, objects and types of international trade.

International economics is concerned with the effects upon economic activity of international differences in productive resources and consumer preferences and the institutions that affect them. It seeks to explain the patterns and consequences of transactions and interactions between the inhabitants of different countries, including trade, investment and migration.

The theory of international trade is the application of general value theory and monetary theory to a special case in which the micro-economic decision units (households and firms) are grouped into sub-units (countries or regions) of the macro-economy differentiated from one another in the way just described. This special case emphasizes certain problems and approaches that are usually given much less prominence in general economic theory.

The theory of international trade is customarily divided into two major branches: the “pure,” or “real,” theory of international trade equilibrium (“the theory of international values”) and the “monetary” theory of balance-of-payments adjustment (“the theory of the mechanism of adjustment”).

The central concern of the pure theory of international trade is to explain the causes of international trade and the determination of the equilibrium prices and quantities of traded goods and to analyze the effects of trade on economic welfare; that is, the theory is concerned with both positive and normative questions (table 1.1).

The classical theory. The classical economists developed the basic concepts of the theory in two steps: Ricardo contributed the theory of comparative costs, which explained both the cause and the mutual beneficiality of international trade by international differences in relative costs of production; and John Stuart Mill added the principle that the relative prices of the goods exchanged must be such that the quantities demanded in international trade are equal to the quantities supplied.

Example: in England a gallon of wine costs 120 and a yard of cloth 100 units of work, while in Portugal the costs are 80 and 90 units of work, respectively. England has an absolute cost disadvantage in both goods but a comparative advantage in cloth, since the production of a yard of cloth involves sacrificing production of $1\frac{1}{8}$ gallons of wine in Portugal but only $\frac{5}{6}$ of a gallon in England, these being the prices of cloth in terms of wine that would rule in the two countries if labor in each is perfectly mobile and prices accurately reflect labor costs. Ignoring transport costs, a price of cloth in terms of wine anywhere between $\frac{5}{6}$ and $1\frac{1}{8}$ would make it profitable for England to export cloth and import wine and for Portugal to export wine and import cloth.

The modern theory. The modern approach to the question of the gains from trade recognizes that the inauguration of trade or a change in the conditions of trade, such as that involved in the erection or removal of tariff barriers, will have differential effects on the welfare of individuals—either by changing the relative prices facing them as consumers (affecting differentially individuals with different tastes) or by changing the relative prices paid for the factors of production (affecting differentially the incomes of individuals who own the factors in different ratios).

The Heckscher-Ohlin model. The classical theory of international trade explained trade by differences in the comparative productivity of labor. The theory originated with Heckscher but was significantly elaborated by Ohlin; in its contemporary form it owes a great deal to analytical techniques and propositions contributed by Samuelson. The Heckscher-Ohlin model assumes a perfectly competitive economy in which two commodities (call them X and Y) are produced by two factors of production (call them K and L), utilizing production functions characterized by constant returns to scale and diminishing marginal

rate of substitution between the factors. The quantities of the factors available are assumed fixed, and the production functions are assumed to be such that at any given ratio of the price of K to the price of L, the production of X is K-intensive and the production of Y is L-intensive, in the sense that X employs a higher ratio of K to L than does Y. For the analysis of international trade the world is assumed to be composed of two such national economies, the production functions and factors are assumed to be identical in the two countries, and the tastes of consumers in the two countries are assumed to be similar, in the sense that, at the same commodity price ratio, they will consume the two goods in roughly the same ratios (figure 1.1).

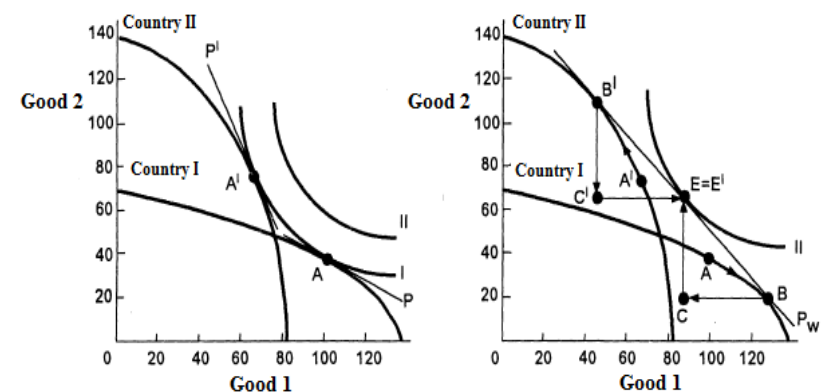


Figure 1.1 The Heckscher-Ohlin model

Stolper-Samuelson relationship. Now consider a rise in the relative price of factor K. This will raise the relative price of commodity X, which uses relatively more K than does commodity Y. It will induce a substitution of L for K in both industries, raising the marginal product of K and lowering that of L in terms of both X and Y, so that owners of K will be unambiguously better off and of L worse off, regardless of their tastes for the two goods. The induced decrease in the ratio of K to L in both industries, in combination with the fixed factor endowments, will necessitate an increase in the production of X (the K-intensive commodity) and a reduction in the production of Y, if all factor supplies are to remain employed.

Rybczynski theorem. Alternatively, consider an increase in the quantity of one factor available to the economy, the commodity price ratio and therefore the factor price ratio and factor-intensities remaining constant. To absorb the increased quantity of the factor while paying it the same price, the economy must release a quantity of the other factor to work in combination with it. This can only be done by contracting the industry that uses the other factor intensively and expanding the industry that uses the augmented factor intensively, thereby freeing some of the other factor for re-employment with the additional supply of the augmented factor. Hence, at constant commodity prices, an increase in the quantity of a factor implies an increased output of the good that uses it intensively and a reduction in the output of the other good. This relationship is referred to as the Rybczynski theorem (1955).

The gains from international trade are obviously dependent on the difference between the prices for exports in terms of imports established in international trade (“the commodity terms of trade”) and the prices that would rule in a closed economy (figure 1.2).

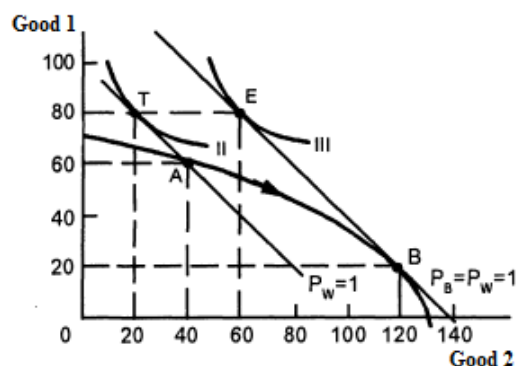


Figure 1.2 The gains from international trade

The pure theory of international trade assumes that money prices and costs will adjust passively to the real equilibrium of the international economy. The classical explanation of this adjustment was provided in Hume’s price-specie flow mechanism, originated to demonstrate the fallacy of the mercantilist view that national policy should aim at augmenting a country’s stock of gold by taking measures to

ensure a permanent surplus on the balance of trade. According to the theory, the stock of international money (which was initially identified with gold and silver, whose total quantity was assumed fixed, although the theory was subsequently extended to incorporate deposit money and the intervention of central banks) would tend automatically to be so distributed among nations that each would have the quantity it demanded, consistent with international equilibrium.

Table 1.1

Development of theories of international trade

Assumptions of classical theories	What, if	Theories	Authors
1	2	3	4
1. There is only one production factor - work	It is more than factors of production	Theory of a ratio of factors of production	Heckscher-Ohlin
2. There are only two countries, only two goods and only two factors of production	It is more than countries and goods, than two	Theory of comparative advantages widespread on a large number of the countries and goods	Ricardo - Samuelson
	It is more factors, than two	Theory of a ratio of factors of production widespread on a large number of the countries and goods	Heckscher-Ohlin
3. There aren't distinctions of factors of production of the countries in allocation	Security of the countries with factors of production isn't identical	Theory of a ratio of factors of production widespread on a large number of the factors	Heckscher-Ohlin
4. The technology is identical in the different countries	The countries use various technology	Theory of a ratio of factors of production widespread on a large number of the factors of production	Heckscher-Ohlin
	The technology changes over time	Theory of a technology gap	Posner (1961)
		Theory of a goods lifecycle	Vernon (1966)

Table 1.1 continuation

1	2	3	4
5. Goods 1 are labor-consuming, and goods 2 - capital-intensive in both countries	The same goods are labor-consuming in labor-saturated country, but capital-intensive in the capital-saturated country	Theory of a reverse of factors of production	Minhas (1962), Ball (1966)
6. There isn't complete specialization of each countries on production of certain goods	Each country specializes on production of goods on which it has a relative advantage	Theory of comparative advantages	Smith, Ricardo
		Cellular chart of equalization of the prices on factors of production	Edgeworth
7. Costs of production are constants, and their decrease increases the product demand	Costs of production grow	Standard model of international trade	Edgeworth, Haberler
8. Foreign trade doesn't influence on income distribution within the country, a price and a salary fluctuation are absent	Foreign trade has impact on income distribution within the country	Theory of a ratio of factors of production	Heckscher-Ohlin
		Theory of specific factors	Samuelson-Johns
		Theorem of growth of prices of factors of production	Stolper-Samuelson
		The theorem of impact of growth of factors on production in industries	Rybczynski

International trade is the exchange of capital, goods, and services across international borders or territories.

International trade is the field of international economics covers both international financial transactions and international trade in commodities and services. In most countries, trade represents a significant share of gross domestic product (GDP).

Subjects of international trade are the multinational corporations, entrepreneurs, commercial organizations who are engaged in promotion of final goods from producers to consumers.

Objects of international trade are the values, the relations regulated by the commercial right.

The types of international trade include inter-firm trade, intra-industry trade, intra-firm trade, inter-industry trade. All of these types of international trade involve the importation or exportation of goods and service. The only difference is the scope and methods in which the various trades are applied.

One type of trade included in types of international trade is intra-industry trade in which importers import goods that are similar to those produced in the country. An example of this type of sale can be seen in the importation of automobiles. Practically every country that produces automobiles also imports other types of automobiles from other countries.

In intra-firm trade, the international trade is confined to various arms or subsidiaries of a multi-national corporation. The corporation may be a franchise or it may simply be a big organization with international outlets. Inter-firm trade occurs between different types of companies that produce different types of goods. This type of trade may be seen in the case of a supplier of raw materials and a company that is importing the raw materials, which is based in another country.

2. International division of labour (IDL) and it's factors. Specialization and cooperation.

International division of labour are the specialization of particular countries in distinct branches of production, whether this be in certain products, or in selected parts of the production process. The concept suggests that the spread of markets and production processes world-wide creates (as indeed this same process has done within particular economies) a growing differentiation of economic activity.

Division of Labour is the specialisation of cooperative labour in specific, circumscribed tasks and like roles. Historically, an increasingly complex division of labour is closely associated with the growth of total output and trade, the rise of capitalism, and of the complexity of industrialisation processes. Division of labour was also a method

used by the Sumerians to categorise different jobs, trade, and economic interdependence. In addition to this, the division of labour helps to specialise and increase producer productivity.

The division of labour makes trade necessary and is the source of economic interdependence. Division of labour is a process whereby the production process is broken down into a sequence of stages and workers are assigned to particular stages.

Formation of the geographical division of labor affect various factors can be grouped into three groups:

1) geographical position of countries. For example, coastal country specialize on marine fisheries, maritime "hubs"-country - on maintenance of world maritime trade (Singapore, Cyprus, Panama, Greece), intracontinental European countries - in international transit land transport;

2) natural resource bases. Specialization of countries in the areas extractive industries, agriculture and forestry, medical and spa facilities, recreation and tourism;

3) socio-economic conditions. Various industry specific create under the influence of historical features of countries, national and religious traditions of the population, availability of mass or skilled of human resources accumulation of capital, scientific and technical progress, new technologies.

The economic concept of *specialization* helps answer this question. Under specialization, economic actors concentrate their skills on tasks at which they are the most skilled. Specialization has both micro- and macroeconomic applications.

Specialization in economics is not limited to individuals and firms, the realm of microeconomics. It also has applications in macroeconomics, which studies the economic actions of nations, regions and entire economies. In a macroeconomic context, specialization means nations concentrate on producing the goods in which they have the most advantage while engaging in trade with other countries to obtain other goods.

David Ricardo, an economist of the 18th and early 19th centuries, argued for specialization based on comparative advantage, which helps determine whether it is more beneficial to domestically produce a good or import it. Suppose, for example, that the United States produces clothing and computers more cheaply than India. While the

United States would appear to have an absolute advantage, it may not have a comparative advantage, which measures the ability to produce in terms of opportunity cost.

Because resources of production are limited, the opportunity cost of producing computers means fewer clothes are made. Compared to what has to be sacrificed, the country should specialize in producing the good in which it has a comparative advantage, while importing the other product.

3. World market. The opened and closed economy. Structure of the world economy.

A market is one of many varieties of systems, institutions, procedures, social relations and and infrastructures whereby parties engage in exchange.

Markets vary in form, scale (volume and geographic reach), location, and types of participants, as well as the types of goods and services traded. Examples include:

1. Physical retail markets;
2. Non-physical electronic markets;
3. Ad hoc auction markets;
4. Markets for intermediate goods used in production of other goods and services;
5. Labor markets;
6. International currency and commodity markets;
7. Stock markets, for the exchange of shares in corporations;
8. Illegal markets such as the market for illicit drugs, arms or pirated products.

In mainstream economics, the concept of a market is any structure that allows buyers and sellers to exchange any type of goods, services and information. The exchange of goods or services for money is a transaction. Market participants consist of all the buyers and sellers of a good who influence its price. There are two roles in markets, buyers and sellers. The market facilitates trade and enables the distribution and allocation of resources in a society. Markets allow any tradable item to be evaluated and priced. A market emerges more or less spontaneously or may be constructed deliberately by human interaction in order to enable the exchange of rights of services and goods.

Markets are a system, and systems have structure. The structure of a well-functioning market is defined by the theory of perfect competition.

An open economy is an economy in which international trade takes place. Most nations around the world have open economies, and many nations rely heavily on international trade to meet economic and social goals. As a general rule, open economies are viewed as stronger than closed economies in which international trade does not occur, and this type of economy tends to be better for companies, investors, and individual citizens. For the global economy, however, open economies can become problematic, because when a large trade partner experiences economic difficulties, it can have a ripple effect across the globe, instead of being confined to that nation alone as it would be in a closed economy.

In an open economy, both imports and exports are permitted, and they can consume a large portion of the company's total gross domestic product in any given year. Imports give citizens of a country access to products and services provided by other nations, which allows for more consumer freedom because people have a wider range of choices. Exports allow companies and citizens to break into other markets to find new buyers for their products.

Advantages of an Open Economy:

- *Greater Choice for Consumers.*

In an open economy, the domestic markets are merged with international markets and so the consumers are not limited to consume domestically produced goods and services. They can choose the best from the world market.

- *Increased competition and Lower Prices.*

A related benefit of an open economy is that the consumers have an increasing number of producers or goods and services competing for their business. Competition among producers results in lower prices and improved services. An open economy allows consumers to benefit from the lower labor and operating costs.

- *Expanded markets and Customer bases.*

The benefits of an open economy are not limited to consumers. Global interaction allows companies to gain access to customers in other nations. This motivates them to produce world class products, expand their business and customer base. American brands as McDo-

nald's, Apple and Starbucks, plus Finnish communications giant Nokia, have established worldwide customer bases.

- *Global Investment Opportunities.*

For investors, an open economy expands the opportunities for investing capital. Investors large and small can choose to invest in known domestic companies, or they can invest in established industrial giants of other nations. Investors with an appetite for risk, meanwhile, can invest in the emerging markets of Latin America, Africa and southern Asia. In an open economy, financial and goods markets are closely related. To understand this relationship, we look at the savings and investment identity.

- *Gains from Trade.*

One of the key principles of economics is that trade benefits all parties involved. International trade involves interactions with other economies and is therefore possible only among open economies. English economist David Ricardo, argued that trade allows nations to specialize in producing the goods in which they have comparative advantages and trade with other nations to obtain goods in which other nations specialize. This in turn provides consumers with a greater array of goods from which to select.

Considered an anomaly in the world today, *a closed economy* is a strategy that focuses all economic transactions inward rather than outward. The idea behind the closed economy is to meet all consumer needs with the purchase and sale of goods and services that are produced internally. In addition to meeting the needs and desires of all consumers within the economy, the method also excludes the possibility of exporting goods and services. Thus, the economy is considered to be completely self-sufficient.

When the concept of a closed economy is applied to a geographic location such as a country, the system is normally referred to as an autarky. Essentially, an autarky goes to great lengths to avoid trade with other countries. Using the natural resources and combined talents of the population, the country will seek to meet every want and need of the country through the development and application of all the materials located within the geographic boundaries of the nation.

Closed economies are the direct opposite of open economies. With an open economy, much of the goods and services produced within the country are exported to customers around the world. At the

same time, the open economy actively encourages importing any goods or services that cannot be produced domestically at competitive prices. The open economy motivates the interaction in a global community, while a closed economy is definitely built on the concept of isolation from other countries.

The difference between an open and closed economy lies in a country's policies on international trade and financial markets. An open economy allows its businesses and individuals to trade with businesses and individuals in other economies and participate in foreign capital markets. A closed economy prevents its businesses and individuals from interacting with foreign economies in an effort to remain isolated and self-sufficient. The basic distinction between an open and closed economy concerns whether a country's government allows its citizens to participate in the global marketplace.

Interaction with foreign countries is the basis of international trade. Trading between countries happens through the export, or sale, of goods and services by parties in one country and the import, or purchase, of those goods and services by parties in another country. On the surface, the ability to conduct trade across international borders may seem a luxury rather than a necessity, but the ability is incredibly important to the health of a country's economy. International trade expands the market for goods and services, allowing businesses to employ more people to make a quantity of goods that exceeds the demand in their home country.

The basic economic models of an open and closed economy

In a closed economy, all output is sold domestically, and expenditure is divided into three components: consumption, investment, and government purchases.

$$Y = C + I + G \tag{1.1}$$

In an open economy, some output is sold domestically and some is exported to be sold abroad. We can divide expenditure on an open economy's output Y into four components: C_d , consumption of domestic goods and services, I_d , investment in domestic goods and services, G_d , government purchases of domestic goods and services, X , exports of domestic goods and services. The division of expenditure into these components is expressed in the identity.

$$Y = C_d + I_d + G_d + X \tag{1.2}$$

The sum of the first three terms, $C_d + I_d + G_d$, is domestic spending on domestic goods and services. The fourth term, X , is foreign spending on domestic goods and services (the value of exports). Since, total domestic spendings is a sum of spending on domestic as well as foreign goods and services, we can say that, $C = C_d + C_f$, $I = I_d + I_f$, $G = G_d + G_f$. We substitute these three equations into the identity above:

$$Y = (C - C_f) + (I - I_f) + (G - G_f) + X \tag{1.3}$$

We can rearrange to obtain:

$$Y = C + I + G + X - (C_f + I_f + G_f) \tag{1.4}$$

The sum of domestic spending on foreign goods and services ($C_f + I_f + G_f$) is expenditure on imports (IM). We can thus write the national income accounts identity as:

$$Y = C + I + G + X - IM \tag{1.5}$$

Since the value of total imports is a part of domestic spending and it is not a part of domestic output, it is subtracted from the total output. This gives us the value of Net Exports ($NX = X - IM$), the identity becomes:

$$Y = C + I + G + NX \tag{1.6}$$

In closed economy: National savings = Investment. Closed economy countries can increase its wealth only by accumulating new capital.

If output exceeds domestic spendings, we export the difference: net exports are positive. If output falls short of domestic spending, we import the difference: net exports are negative.

Questions for discussion:

- Name historical stages of development of international trade.
- Formulate the Heckscher-Ohlin's theorem of the international trade based on a ratio of factors of production between the countries. Prove it graphically.
- Formulate the Heckscher-Ohlin-Samuelson's theorem of price equalization of factors of production. Prove it logically and graphically.
- What are essence and limitation at the mercantilist theory of foreign trade?
- What is the commodity? Describe the geographical structure of international trade and how have they changed over the last 50 years?
- Tell about current trends of trade development of countries with open and closed economies.
- What are the internationalization and globalization? Give characteristics.
- Tell about the economic concept of specialization and co-operation in the international division of labour.

THEME 2. PRICING IN THE WORLD MARKETS

1. Concept of the world prices and its factors.
2. Classification of the prices. World prices for primary and industrial goods. World prices for contracts.
3. Price dynamics and ratio.

1. Concept of the world prices and its factors.

The price and price formation is one of the crucial elements of market economy. The price regulates all commodity-money relationships.

The price is monetary amount, which consumer is willing to buy product and manufacture to sell. The buyer gets the goods when the value of the goods, expressed in monetary units, higher than its price.

Systematic approach to the theory of price information in the economy market-type associated with the fundamental developments Adam Smith, which were further developed in the classical studies by David Ricardo, John Stuart Mill, Karl Marx and the labor representatives of unearned theories, including Alfred Marshall, William Stanley Jevons, Joan Violet Robinson, Paul Samuelson and others. As a result of these studies was formed a mature theoretical basis of price formation, however, characterized by a significant spread of the basis principles of price formation.

In theory, the prices there are two main areas:

- Cost, based on the cumulative cost producers (variable and fixed);
- Market (value), which is based on consumer behavior and demand.

The basis of cost trends in the price formation is based on labor value theory, developed in the works of Adam Smith, David Ricardo, John Stuart Mill, Karl Marx. According to this theory, the costs, changing with the change in output, defined as variables, and the cost, which of value does not change with variations in output related to a constant. Adam Smith was the first who suggested the variable cost of labor as the main criteria for the price formation. This price formation Smith considers only labor costs, bringing the structure of commodity prices in three components: rent, wages and profits. In the interpreta-

tion of David Ricardo price formation approach of Adam Smith does not undergo drastic changes. It uses the reception of Smith's methodology, bringing total costs to variable cost of labor, Ricardo developed a category of multiplicative cost of labor, defined by him on the basis of value added.

John Stuart Mill is known in the area of price formation, especially his pioneer research of supply and demand and their impact on the cost and price. The central idea of Mill is that the cost – the result of supply and demand. In this regard, at a theoretical level, it anticipates the trend in theory of marginal price. Karl Marx in the design of its model price organizes cost base price formation, identifying the basic price formation position costs: costs of raw materials, labor and depreciation. The fundamentally new approach of Marx is the use of the category of socio-labor as the main criterion for the price formation. The procedure of price formation in the Marx becomes pronounced administrative features and consists of the following operations:

- Identifying the needs of society in the goods;
- Establishment of proportionality in social production, by centralizing product supply that meets this level of public need;
- Calculation of prices of goods on the basis of standard cost of labor.

Thus, the cost approach in the cost of goods and price. Cost is embodied socially in the product of useful labor, but not all, as the average conditions, skill and intensity of labor. As far as every product is the result of labor, it makes all the products a uniform, comparable and commensurate. The price of goods is the same money it cost, which may deviate from the value under the influence of various factors. As can be seen in the labor theory of value, it is assumed that the formation of value occurs primarily in the manufacturing sector.

Significant role in the development of the theory of prices was played by *Alfred Marshall*. Marshall argued that the value determines the ratio of prices only in rare cases of balance in all structures and sectors of the economy. Marshall formed a simple mechanism for the impact of the ratio of supply and demand on prices of goods in the conditions of perfect competition. Marshall stressed the need to incorporate the time factor in the analysis of prices, the various linkages between production costs and price, depending on which approach – the short-term or long-term lays in the basis of analysis. Marshall

firstly made the idea of the elasticity of demand and supply for the price. Value approach was developed in the theory of utility. The most important principle of consumer behavior and demand is an accounting of his personal tastes and preferences, which involves the constructions of the certain scales of utility consumption of goods. In addition, the consumer takes into account their purchasing power. Therefore, all actions aimed at maximizing of the consumer utility, it can draw from their income under a certain value of the goods. Also the authors of this theory are William Stanley Jevons, Carl Menger, Leon Walras, Vilfredo Pareto, and Irving Fisher.

In ordinary usage, *price* is the quantity of payment or compensation given by one party to another in return for goods or services.

In modern economies, *prices* are generally expressed in units of some form of currency.

The price mechanism describes the means by which millions of decisions taken by consumers and businesses interact to determine the allocation of scarce resources between competing uses.

The price mechanism plays three important *functions* in a market:

1) Signalling function

- Prices perform a signalling function – they adjust to demonstrate where resources are required, and where they are not;

- Prices rise and fall to reflect scarcities and surpluses;

- If prices are rising because of high demand from consumers, this is a signal to suppliers to expand production to meet the higher demand;

- If there is excess supply in the market the price mechanism will help to eliminate a surplus of a good by allowing the market price to fall.

Consider the left hand diagram below (figure 2.1). The demand for computer games increases. Producers stand to earn higher revenues and profits from selling more games at a higher average price. So an outward shift of demand leads to an expansion along the market supply curve (*ceteris paribus*).

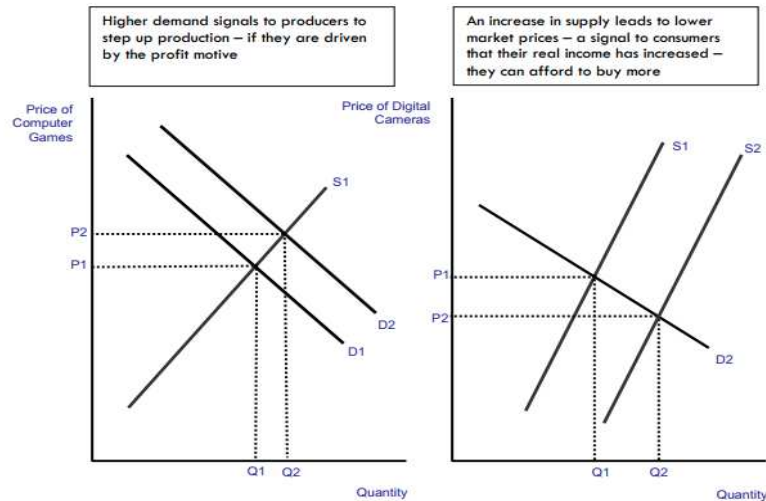


Figure 2.1 Signalling function of price mechanism

2) Transmission of preferences

- Through their choices consumers send information to producers about the changing nature of needs and wants;
- Higher prices act as an incentive to raise output because the supplier stands to make a better profit;
- When demand is weaker in a recession then supply contracts as producers cut back on output.

One of the features of a market economy system is that decision-making is decentralised i.e. there is no single body responsible for deciding what is to be produced and in what quantities. This is a remarkable feature of an organic market system.

3) Rationing function

- Prices serve to ration scarce resources when demand in a market outstrips supply;
- When there is a shortage, the price is bid up – leaving only those with the willingness and ability to pay to purchase the product. The market price acts a rationing device to equate demand with supply;
- The popularity of auctions as a means of allocating resources is worth considering as a means of allocating resources and clearing a market.

Pricing is the process of determining what a company will receive in exchange for its products. Pricing factors are manufacturing cost, market place, competition, market condition, and quality of product. Pricing is also a key variable in microeconomic price allocation theory. Pricing is a fundamental aspect of financial modeling and is one of the four Ps of the marketing mix. The other three aspects are product, promotion, and place. Price is the only revenue generating element amongst the four Ps, the rest being cost centers.

Pricing is the manual or automatic process of applying prices to purchase and sales orders, based on factors such as: a fixed amount, quantity break, promotion or sales campaign, specific vendor quote, price prevailing on entry, shipment or invoice date, combination of multiple orders or lines, and many others. The needs of the consumer can be converted into demand only if the consumer has the willingness and capacity to buy the product.

1) The basis of commodity prices.

According to capitalist commodity output not only socially necessary expenses of production make up the basis of commodity prices, but the correlation between demand and supply as well:

$$P_p = C + V + p \quad (2.1)$$

where, P_p – a price of production;

C – constant capital;

V – variable capital;

P – profit.

2) Price as a result of interbranch cash flow.

In the process of interbranch cash flow the difference in branch profit rates, which appears as a result of differences of organic capital structure, is considerably reduced by deviation of prices from value. An average profit rate is added to the expenses of production in different branches and calculated according to the formula:

$$P_p = C + V + p' \quad (2.2)$$

where, p' – average rate profit.

$C+V$ – advanced capital.

3) Price under the conditions of capitalistic commodity output.

In a simple commodity production prices are defined by the law of value only, but under the conditions of capitalist commodity output they are also defined by the law of surplus value, demand and supply. Thus, price is a monetary expression of the price of production, the interaction of laws of value, surplus value and the law of demand and supply.

4) Monopoly price of production.

With the appearance of monopolies, group monopolies (oligopolies) pricing process has become more complex and monopoly high and low prices have been established. As a result of this a price of production turns into monopoly one which is expressed by means of the formula:

$$Mpp = C + V + p + p' \quad (2.3)$$

where, Mpp - monopoly production price,
 C - constant capital,
 V - variable capital,
 p - average profit,
 p' - monopoly high profit.

2. Classification of the prices. World prices for primary and industrial goods. World prices for contracts.

It is important to have a pricing strategy that is tailored to your target market. There are various ways of setting prices as outlined in the following (table 2.1):

Table 2.1

Types of prices and its definition

Characteristics	Types of prices	Definition
1	2	3
The nature of the serviced traffic	Wholesale prices	the price of manufacturers of products that they sell manufactured products to customers - other businesses and organizations

Table 2.1 continuation

1	2	3
The kinds of retail prices	Retail prices	the price of the sale of individual and small customers, mainly people
	Estimated prices	limiting size of the construction cost of each facility
	Last prices	the average unit cost of construction products (1 square meter masonry, painting, whitewashing, etc.)
	Contract prices	the price agreed upon between the customer and the contractor
Depending on the method of fixation	Fixed prices	set at the time of signing the contract, not subject to change during the entire period of its validity doesn't not depend on the timing and order of delivery of consignment
	Flexible prices	price fixed at the conclusion of the contract, which may be revised in the future, if the market price of the goods at the time of its delivery will change
	Mobile prices	set for industrial, raw materials and food products to be supplied under long-term contracts

Table 2.1 continuation

1	2	3
	Sliding prices	price, calculated at the time of the contract by the revision of the contract (base-line) price to reflect changes in costs of production that occurred during the execution of the contract
At pre-determine the level	Published (advertised) prices	reported in the special and proprietary information sources
	Estimated prices (settlement prices)	calculated as of the settlement date, which is usually three days after the trade date
	Reference prices	the prices of commodities in the domestic wholesale and foreign trade, published in various newspapers, economic newspapers and magazines, specialized newsletters, trade catalogs and price lists

Foreign trade prices reflect the world prices that are in effect at a given time as well as the prices that are established by agreement with any particular group of countries.

The range of foreign trade prices covers the export list prices of firms that are the principal suppliers of a given type of product, stock market and auction prices on raw materials (such as nonferrous metals, rubber, and furs), prices offered by sellers, prices bid by prospective buyers, and contract prices. Prices in the latter category-contract prices

- are the most accurate ones, inasmuch as a wide-ranging system of discounts from list prices and bids is practiced in international trade; this system takes into account the size of the sale lots, regularity of deliveries, terms of payment, and specific commercial contract terms.

Variations in foreign trade prices also depend on shipping costs: CIF prices include the basic cost of an item plus insurance and freight costs; FOB prices represent costs up to loading only.

Franking is the payment for the carriage of goods from producer to consumer. "Franco" refers to any item on ways to move goods from manufacture transportation costs are included in the price.

Basic terms of delivery are determined by the contract. They describe:

First, the time of transfer of ownership;

Secondly, the composition associated with transportation and insurance costs of production are included in foreign trade price.

All existing basic conditions of supply are divided into four categories:

Group "E" - the seller provides the goods to the buyer directly to their premises;

Group "F" - the seller is obliged to provide goods to the carrier, which is provided by the buyer;

Group "C" - the seller is obliged to conclude a contract of carriage, but without assuming the risk of accidental loss of or damage to the goods or any additional costs after the loading of the goods;

Group "D" - the seller would bear all costs and assumes the risks to the delivery of the goods in the destination country.

The basis for determining the prices of specific foreign trade contracts are the world prices.

The world prices is called the price of a certain type of products (services), from which realized a considerable amount of these products in international trade, with payment in freely convertible currency.

The world prices is to maintain large contracts between large independent of each other's firms.

Prices of commodities traded on the prevailing world market, characterized by a number of features.

1. The world prices deviates from the domestic prices. The fact that world market prices are based on the international value, formed

by leading exporting countries. Domestic prices are based on national value and reflect the costs of domestic producers. As a rule, the world price is lower than domestic. The gap between them can be more than 30%, while at the finished goods it is more significant than the commodity that is associated with higher levels of tariff and non-tariff barriers in importing finished products. Thus, the domestic price in most cases does not determine the final level world prices. The shift from domestic price to world usually consists of a chain of co-payments, superimposed upon import at world prices (tariffs, countervailing duties, etc.) or "loose" when you export to domestic prices (tax, depreciation, transport and other benefits subsidies, etc.)

2. The multiplicity of world prices, i.e. presence of several rows of the price of one and the same product. Multiplicity of world prices due to a variety of quality goods, different conditions of supply, the nature of trade transaction, delivery times, etc. Therefore, the absolute value of the price should be detailed statement the following details:

- qualitative characteristics or origin of goods;
- conditions of supply;
- delivery dates;

3. The rapid aging of world prices, reflecting, shifts in the commodity markets. Thus, the moving commodity prices during the day sometimes fluctuate between 100% and more.

Taking into account the specific features of the world price, one can identify the main features of the organization of the price. Thus, pricing the work should be carried out on the basis of research relevant market conditions. Price work to do on a daily basis because of the strong variability of prices.

The main stages of the calculation of foreign trade prices:

1. Operational analysis of prices and quality characteristics of goods similar to those which the company wishes to sell / buy;

2. Commercial introduction of amendments, bring all involve to calculate the price of competitive materials to the common commercial terms of sale / purchase of goods and completion of relevant documents.

3. Selection of the most affordable prices as a basis for negotiations (base price).

Pricing is the most effective profit lever. Pricing can be approached at three levels: the industry, market, and transaction level.

Pricing at the industry level focuses on the overall economics of the industry, including supplier price changes and customer demand changes. Pricing at the market level focuses on the competitive position of the price in comparison to the value differential of the product to that of comparative competing products. Pricing at the transaction level focuses on managing the implementation of discounts away from the reference, or list price, which occur both on and off the invoice or receipt. There are numerous terms and strategies specific to pricing:

- *Line pricing* is the use of a limited number of prices for all product offerings of a vendor.

- *Loss leader* is a product that has a price set below the operating margin.

- *Price/quality relationship* refers to the perception by most consumers that a relatively high price is a sign of good quality.

- *Premium pricing* (also called prestige pricing) is the strategy of consistently pricing at, or near, the high end of the possible price range to help attract status-conscious consumers.

- *Demand-based pricing* is any pricing method that uses consumer demand - based on perceived value - as the central element. These include: price skimming, price discrimination and yield management, price points, psychological pricing, bundle pricing, penetration pricing, price lining, value-based pricing, geo and premium pricing.

- *Multidimensional pricing* is the pricing of a product or service using multiple numbers.

3. Price dynamics and ratio.

Grade level of prices is the first step in a statistical study of prices. The level of prices is indicator of the state of prices for a certain period of time, in a certain territory, the combined products and product types with similar consumer characteristics.

Individual level of products is an absolute value, the amount of money to be paid in the market for a commodity item.

Average chronological prices:

$$\bar{P} = \frac{(P_1/2 + P_2 + P_3 + \dots + P_t/2)}{t - 1} \quad (2.4)$$

where, t - the number of months in a period.

Average chronological weighted prices:

$$\bar{P} = \frac{\sum(P_i t_j)}{\sum t_j} \quad (2.5)$$

where, P_i - average price for a period; t_j - the number of months in a period.

Average arithmetic weighted prices:

$$\bar{P} = \frac{\sum(PQ)}{\sum Q} \quad (2.6)$$

where, Q - the number of sold goods in natural units of measure (meters, liters, kilograms, etc.).

Average harmonic weighted prices:

$$\bar{P} = \frac{\sum(PQ)}{\sum PQ/P} \quad (2.7)$$

where, PQ - goods turnover in tenge.

Calculation of average price is only valid for groups of similar goods, if the same group of homogeneous products, then to assess the dynamics of price indices used.

Comparison of prices of one commodity by means of individual prices indexed.

Individual price ratio:

$$I_p = \frac{P_{i1}}{P_{i0}} \quad (2.8)$$

where, P_{i0} - price of i commodity in a based period, P_{i1} - price of i commodity in an even period.

The basic form of price index for the set of heterogeneous goods is aggregate index.

Aggregate, arithmetic and harmonic forms of ratio:

Ratio type	Aggregate form	Arithmetic form	Harmonic form
I_p^I	$\frac{\sum(P_1 Q_0)}{\sum(P_0 Q_0)}$	$\frac{\sum I_p(P_0 Q_0)}{\sum(P_0 Q_0)}$	$\frac{\sum(P_1 Q_0)}{\sum 1/I_p(P_1 Q_0)}$
I_p^P	$\frac{\sum(P_1 Q_1)}{\sum(P_0 Q_1)}$	$\frac{\sum I_p(P_0 Q_1)}{\sum(P_0 Q_1)}$	$\frac{\sum(P_1 Q_1)}{\sum 1/I_p(P_1 Q_1)}$

Price indices are used to monitor changes in prices levels over time. This is useful when separating real income from nominal income, as inflation is a drain on purchasing power. The two most basic indices are the Laspeyres index (named after Etienne Laspeyres) and the Paasche index (named after Hermann Paasche).

Both indices are very similar:

Laspeyres index:

$$P_L = \frac{\sum(p_{c,t_n}) * (q_{c,t_0})}{\sum(p_{c,t_0}) * (q_{c,t_0})}$$

(2.9)

A *Laspeyres price index* is a measurement tool that compares the price of certain goods or commodities in a base period to a current period. This helps determine the purchasing power of a particular currency, and may also be used to judge a standard of living for certain people. The Laspeyres price index is one of the key tools used by economists for determining the overall health of an economy.

Paasche index:

$$P_P = \frac{\sum(p_{c,t_n}) * (q_{c,t_n})}{\sum(p_{c,t_0}) * (q_{c,t_n})}$$

(2.10)

The *Paasche price index* is an index formula used in price statistics for measuring the price development of the basket of goods and services that is consumed in the current period. The question it answers is how much a basket that consumers buy in the current period would have cost in the base period. So it is also defined as a fixed-weight, or fixed-basket, index, because it uses the basket of goods and services and their weights from the current period. It is therefore also known as a “current weighted index.”

$$P_F = \sqrt{P_P \cdot P_L}$$

(2.11)

The *Fisher price index* is an index formula used in price statistics for measuring the price development of goods and services, on the basis of the baskets from both the base and the current period. It is defined as the geometric average of the Laspeyres price index (which only uses the base period basket) and the Paasche price index (which only uses the current period basket). For this reason, the Fisher price index (named after American economist Irving Fisher) is also known as the "ideal" price index.

The choice of a price index formula (Laspeyres, Paasche or Fisher) in a particular case is partly determined by the data available. The Fisher price index requires more data than both others and as a result may often be impracticable.

Questions for Discussion:

- What is the Price Discrimination and its effect on economies?
- What Is A Price-Taker?
- Are Price and Cost the Same Thing?
- Should prices change in various geographical areas, referred to as zone pricing?
 - Do you use a price skimming strategy or a penetration pricing strategy?
 - What image do you want the price to convey?
 - How important are customer price sensitivity (e.g. "sticker shock") and elasticity issues?
 - Are there legal restrictions on retail price maintenance, price collusion, or price discrimination?
 - Are there transfer pricing considerations?
 - What is the chance of getting involved in a price war?
 - Are there joint product pricing considerations?

THEME 3. COMMODITY EXCHANGES AND AUCTIONS IN INTERNATIONAL TRADE

1. Concept, essence, features and mechanism of commodity exchange. Exchange goods. Organization of exchange stock trading. Exchange's operations.

2. Concept, essence, features and mechanism of auctions. Auction goods. Organization of auction trades. Methods of the biddings at auctions.

3. International commodity exchanges: New York Mercantile Exchange, London Metal Exchange, Chicago Mercantile Exchange and Shanghai Metals Exchange. International auctions: Sotheby's and Christy's.

1. Concept, essence, features and mechanism of commodity exchange. Exchange goods. Organization of exchange stock trading. Exchange's operations.

Stock and commodity exchanges are exchange markets that are open platforms allowing sales and purchases of stocks and other financial products such as commodities and futures. This is a complex platform including derivatives and futures transactions. The stock and commodity exchanges provide many people and organizations investment tools to build wealth. These platforms also provide a worldwide marketplace for those selling stocks and commodities such as agriculture and precious metals.

Commodities exchange is an exchange where various commodities and derivatives products are traded. Most commodity markets across the world trade in agricultural products and other raw materials (like wheat, barley, sugar, maize, cotton, cocoa, coffee, milk products, pork bellies, oil, metals, etc.) and contracts based on them. These contracts can include spot prices, forwards, futures and options on futures. Other sophisticated products may include interest rates, environmental instruments, swaps, or ocean freight contracts.

Commodities exchanges are for investors and commodity buyers go to purchase futures, derivatives and commodities for trading or profit. There are a wide variety of raw materials, such as coffee, cotton, and oil, across the world's commodity exchanges. Commodities

exchanges have been in existence as far back as history can tell. Contracts for these exchanges are what sets the modern exchange apart from the historical exchanges.

During the early 12th century merchants began making contracts for futures similar to what is available on the commodity exchanges today. The purchases were made by the buyers before the goods were delivered, thus ensuring a sale when traveling with large loads of commodities along dangerous routes. This would lower the risk of traveling the dangerous route by ensuring the sale. Before the futures contract were implemented, the risk was oftentimes much too high.

- Ancient Sumerian Trade Contracts: During the early Bronze Age, Sumerians would trade sheep, pigs, and other commodities. This was their currency, and oftentimes these early traders would create contracts for future trades.

- Trading Rice Tickets in Japan during 17th Century: Many Japanese landlords would send the surplus of rice shipments to storage facilities in the city. They would issue rice tickets on the open market near Osaka which were good for future purchases of rice.

- Chicago Mercantile Market: A brief history on the Chicago Mercantile Market, which was originally called The Chicago Butter and Egg Group.

- Regulators of Commodity Exchange Market: Established organization in 1974 that regulates the Commodities Exchange in the US to protect the public from fraud.

Commodities are essential products that are natural substances the earth produces. They consist primarily of raw materials. Particular commodities are traded or sold when there is a demand for them. The demand is typically what drives the price for a particular commodity.
Exchange goods:

1) energy raw materials – oil, diesel fuel, gasoline, fuel oil, propane;

2) non-ferrous and precious metals – copper, aluminum, lead, zinc, tin, nickel, gold, silver, platinum, etc.;

3) the grain – wheat, corn, oats, rye, barley, rice;

4) oil seeds and products of their conversion – a linen and cotton seed, soy, beans, soy oil, soy meal;

5) live animals and meat – cattle, live pigs, bacon;

6) food and flavoring goods – raw sugar, sugar refined coffee, cocoa beans, potatoes, vegetable oils, spices, eggs, a concentrate of orange juice, a peanut;

7) textile raw materials – cotton, jute, natural and rayon, the washed wool, etc.

8) industrial raw materials – rubber, timber, plywood.

Main commodity exchanges worldwide (table 3.1):

Table 3.1

Commodities exchanges across the world

Exchange	Abbreviation	Location	Product Types
1	2	3	4
Africa			
Africa Mercantile Exchange	AfMX	Nairobi, Kenya	Agricultural, Energy
Nairobi Coffee Exchange	NCE	Nairobi, Kenya	Coffee
Ethiopia Commodity Exchange	ECX	Addis Ababa, Ethiopia	Agricultural
South African Futures Exchange (part of JSE Limited)	JSE	Sandton, South Africa	Agricultural
Abuja Securities and Commodity Exchange	ASCE	Abuja, Nigeria	Agricultural products
Americas			
Brazilian Mercantile and Futures Exchange	BMF	São Paulo, Brazil	Agricultural, Bio-fuels, Precious Metals
Chicago Board of Trade (CME Group)	CBOT	Chicago, United States	Grains, Ethanol, Treasuries, Equity Index, Metals
Chicago Mercantile Exchange (CME Group)	CME	Chicago, United States	Meats, Currencies, Eurodollars, Equity Index
New York Mercantile Exchange (CME Group)	NYMEX	New York, United States	Energy, Precious Metals, Industrial Metals
Asia			
International Commodity Exchange Kazakhstan		Almaty, Kazakhstan	Industrial and Mineral Products, Oil By-products and Petrochemicals, Agricultural

Table 3.1 continuation

1	2	3	4
Dubai Mercantile Exchange	DME	Dubai, UAE	Energy
Hong Kong Mercantile Exchange	HKMEX	Hong Kong	Gold, Silver
Indonesia Commodity and Derivatives Exchange	ICDX	Jakarta, Indonesia	Agricultural Products, Base Metals, Financial Products
Indian Commodity Exchange Limited	ICEX	India	Energy, Precious Metals, Base Metals, Agricultural
Shanghai Futures Exchange		Shanghai, China	Industrial metals, Gold, Petrochemicals, Rubber
Tokyo Commodity Exchange	TOCOM	Tokyo, Japan	Energy, Precious Metals, Industrial Metals, Agricultural
Europe			
APX-ENDEX	APX-ENDEX	Amsterdam, Netherlands	Energy
London Commodity Exchange	LCE	London, UK	Agricultural
London Metal Exchange	LME	London, UK	Industrial Metals, Plastics
European Energy Exchange	EEX	Leipzig, Germany	Power, Natural Gas, Emissions, Coal
Oceania			
Australian Securities Exchange	ASX	Sydney, Australia	Agricultural, Energy, Interest Rate Future
ABX Global	ABX	Brisbane, Australia	Precious Metals

2. Concept, essence, features and mechanism of auctions. Auction goods. Organization of auction trades. Methods of the biddings at auctions.

The generally accepted first auction occurred in Babylon in 500 B.C.E. according to ancient Greek scribes.

In the Roman Empire, following military victory, Roman soldiers would often spear the ground to mark the location of spoils in which goods and property were seized. Roman business agents were said to have accompanied warriors into battle to help facilitate expected sales. The Romans also used the auction to liquidate their own property. For example, Marcus Aurelius is said to have auctioned off prized heirlooms and furniture (an auction that, as legend has it, lasted over two months). The most outstanding auction occurred in the year 193 C.E. when the entire Roman Empire was put on the auction block by the Praetorian Guard (a special force of bodyguards used by the Roman Emperors). On March 23, the Praetorian Guard first killed Pertinax the emperor, and then announced that the highest bidder could claim the entire empire. Didius Julianus outbid everyone for the price of 6,250 drachmas per guard, an act that initiated a brief civil war. Didius was then beheaded two months later when Septimus Severus conquered Rome.

The global chattel slave trade was also conducted via auction. Auctions were held in major port cities that imported slaves from around the world (mainly Africa). These slaves were sold at auction both to wholesalers and to individuals. Prices were based on the perceived physical fitness, age, gender, and skills of the slaves.

During the seventeenth century and emerging soon after the French Revolution, auctions came to be held in taverns and coffeehouses to sell art. Such auctions were held daily, and catalogs were printed to announce available items.

The oldest auction house in the world is Stockholm Auction House. It was established in Sweden in 1674.

Large auction houses such as Christie's and Sotheby's arose in the mid-1700s and provided an organized forum for the buying and selling of disparate goods at auction. Sotheby's was founded in 1744 in England and Christie's was founded in 1766. The two took advantage of London's status at that time as the economic center of the modern world.

The word "auction" is derived from the Latin *augeō* which means "I increase" or "I augment".

An *auction* is a process of buying and selling goods or services by offering them up for bid, taking bids, and then selling the item to the

highest bidder. In economic theory, an auction may refer to any mechanism or set of trading rules for exchange.

Auctions are publicly and privately seen in several contexts and almost anything can be sold at auction. Some typical auction arenas include the following:

- the antique business, where besides being an opportunity for trade they also serve as social occasions and entertainment;
- in the sale of collectibles such as stamps, coins, classic cars, fine art, and luxury real estate;
- the wine auction business, where serious collectors can gain access to rare bottles and mature vintages, not typically available through retail channels;
- in the sale of all types of real property including residential and commercial real estate, farms, vacant lots, and land;
- for the sale of secondhand goods of all kinds, particularly house clearances and online auctions;
- in commodities auctions, like the fish wholesale auctions;
- in thoroughbred horseracing, where yearling horses are commonly auctioned off; and in legal contexts where forced auctions occur, as when one's farm or house is sold at auction on the courthouse steps.

Although less publicly visible, the most economically important auctions are the commodities auctions in which the bidders are businesses even up to corporation level. Examples of this type of auction include:

- sales of businesses;
- spectrum auctions, in which companies purchase licenses to use portions of the electromagnetic spectrum for communications (for cell phone networks, for example);
- timber auctions, in which companies purchase licenses to log on government land;
- electricity auctions, in which large-scale generators and consumers of electricity bid on generating contracts;
- environmental auctions, in which companies bid for licenses to avoid being required to decrease their environmental impact;
- debt auctions, in which governments sell debt instruments, such as bonds, to investors.

The auction is usually sealed and the uniform price paid by the investors is typically the best non-winning bid. In most cases, investors can also place so called "non-competitive bids" that indicate an interest to purchase the debt instrument at the resulting price, whatever it may be; and automobile auctions, in which car dealers purchase used vehicles to retail to the public.

Auction catalogs are frequently printed and distributed before auctions of rare and/or collectible items; these catalogs may be very elaborate works, with considerable details about the items being auctioned.

William Vickrey (1961) modeled four different types of single unit auctions (table 3.2).

Table 3.2

William Vickrey's model of auction's types

Types of auctions	Essence of auctions
1	2
English auction	This is the most familiar form of an auction; it is also known as an open outcry or an ascending price auction. The type of auction is commonly used to sell wine, art, antiques, cattle, tobacco, and many other goods.
Dutch auction	In the Netherlands, this form is used to sell produce and flowers, and hence the name. This is also known as a descending price auction. The bidding starts at an a very high price and is progressively lowered until a buyer claims the item.
First-price sealed-bid auction	The main distinguishing feature of this auction as the name suggests is that the bids of individual bidders are sealed and not known to all, and thus hidden from all except the bidder and the seller. In a buyer-bid auction, the highest bidder buys the item and pays the amount of his bid. In a seller-bid auction, the lowest bidder sells the item and is paid the amount of her bid.
Second-price sealed-bid auction (Vickrey auction)	Also known as the single-unit Vickrey auction. In a buyer-bid auction, the highest bidder buys the item and pays the amount of the second highest bid. In a seller-bid auction, the lowest bidder sells the item and is paid the amount of the second lowest bid.

Auction professionals suggest the kind of auction suitable for a particular item so that maximum profit can be derived out of it. There are different types of auctions, each having their own unique format. Discussed below (table 3.3) are the various kinds of auction a seller can choose from.

Table 3.3

Secondary types of auctions

Characteristics	Types of auctions
1	2
In terms of security and privacy	Private auction
	Public auction
In terms of auctioneers and auction items	Exchange auction
	Sale auction
	Dealer auction
If more than one identical item is sold	Uniform-price auction
	Vickrey auction
Depending on the Method of Conduction	Multi-par Auction
	Commodity Auction
	No-reserve Auction
	Reserve Auction
	Multi-seller Auction
	Minimum Bid Auction
	All-pay auction
	Auction by the candle
	Bidding fee auction
	Buyout auction
	Combinatorial auction
	Generalized second-price auction
	Japanese auction
	Lloyd's syndicate auction
	Mystery auction
	Senior auction
	Silent auction
	Top-up auction
	Walrasian auction
	Simultaneous Ascending Auction
Anglo-Dutch auction	
Private value auction	
Common value auction	

Table 3.3 continuation

Depending on the Venue	Ballroom Auction
	Online Auction
	Webcast Auction
	Catalog Auction
	Caravan Auction
	On-site Auction
Depending on Number of participants	Supply Auction
	Demand Auction
	Double Auction
Depending on procedure for bidding	Open Auction
	Closed Auction

Auctions can differ in the number of:

- In a supply (or reverse) auction, m sellers offer a good that a buyer requests
- In a demand auction, n buyers bid for a good being sold
- In a double auction n buyers bid to buy goods from m sellers (figure 3.1).

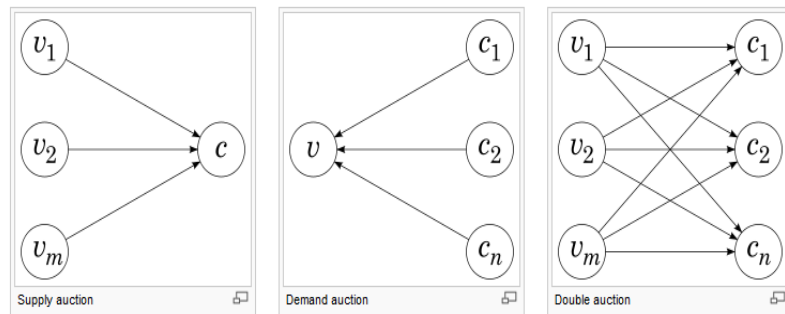


Figure 3.1 The technology of auctions types depending on procedure for bidding

The auction houses Christie's and Sotheby's continue to be two of the primary locations for world class auctions. These two companies have offices around the world for the sake of bringing timely, convenient services to a global audience.

Online auction sites such as eBay have grown increasingly popular with the spread of the internet. EBay brings users from all over the world together in one common forum, listing and selling millions of items each day. These items range in size and value from cornflakes to houses.

3. International commodity exchanges: New York Mercantile Exchange, London Metal Exchange, Chicago Mercantile Exchange and Shanghai Metals Exchange. International auctions: Sotheby's and Christy's.

Commodity exchanges began as paper contract transactions. Modern day commodities exchange markets have developed into a complex market. The world's largest commodities exchanges deal in trillions of dollars of exchange commodities. The highest performing and largest worldwide commodities are listed below:

- *New York Mercantile Exchange:* The world's largest physical commodities exchange dealing in futures.

The New York Mercantile Exchange (NYMEX) is a commodity futures exchange owned and operated by CME Group of Chicago. NYMEX is located at One North End Avenue in Brookfield Place in the Battery Park City section of Manhattan, New York City. Additional offices are located in Boston, Washington, Atlanta, San Francisco, Dubai, London, and Tokyo.

The New York Mercantile Exchange handles billions of dollars' worth of energy carriers, metals, and other commodities being bought and sold on the trading floor and the overnight electronic trading computer systems for future delivery. The prices quoted for transactions on the exchange are the basis for prices that people pay for various commodities throughout the world.

- *London Metal Exchange:* Offers an exchange platform for metals such as gold, silver, aluminum and copper.

The London Metal Exchange (LME) is the futures exchange with the world's largest market in options and futures contracts on base and other metals. As the LME offers contracts with daily expiry dates of up to three months from trade date, weekly contracts to six months, and monthly contracts up to 123 months, it also allows for cash trading. It offers hedging, worldwide reference pricing, and the option

of physical delivery to settle contracts. In July 2012, LME's shareholders voted to sell the exchange to Hong Kong Exchanges and Clearing for £1.4 billion.

It is located at 56 Leadenhall Street in the City of London.

The LME offers futures and options contracts for aluminium, aluminium alloy, NASAAC (North American Special Aluminium Alloy), cobalt, copper, lead, molybdenum, nickel, steel billet, tin and zinc.

- *Chicago Mercantile Exchange*: The first US commodities exchange market. The Chicago Mercantile Exchange is still one of the world's largest commodities platforms.

The Chicago Mercantile Exchange (CME) (often called "the Chicago Merc", or "the Merc") is an American financial and commodity derivative exchange based in Chicago and located at 20 S. Wacker Drive. The CME was founded in 1898 as the Chicago Butter and Egg Board, an agricultural commodities exchange. Originally, the exchange was a non-profit organization. The Merc demutualized in November 2000, went public in December 2002, and merged with the Chicago Board of Trade in July 2007 to become a designated contract market of the CME Group Inc., which operates both markets.

Today, the Merc trades several types of financial instruments: interest rates, equities, currencies, and commodities. It also offers trading in alternative investments, such as weather and real estate derivatives, and has the largest options and futures contracts open interest (number of contracts outstanding) of any futures exchange in the world. Agricultural Commodity Contracts include: Live Cattle, Lean Hogs, Feeder Cattle, Class IV Milk, Class III Milk, Frozen Pork Bellies, International Skimmed Milk Powder (ISM), Nonfat Dry Milk, Deliverable Nonfat Dry Milk, Dry Whey, Cash-Settled Butter, Butter, Random Length Lumber, Softwood Pulp, Hardwood Pulp.

- *Chicago Board of Trade*: Founded in 1973 as the first US options exchange, Chicago Board of Trade has a complex trading system and is still a world leader in options trading.

The Chicago Board of Trade (CBOT), established in 1848, is the world's oldest futures and options exchange. More than 50 different options and futures contracts are traded by over 3,600 CBOT members through open outcry and electronic trading. Volumes at the exchange in 2003 were a record breaking 454 million contracts. On 12 July

2007, the CBOT merged with the Chicago Mercantile Exchange (CME) to form the CME Group, a CME/Chicago Board of Trade Company. CBOT and three other exchanges (CME, NYMEX, and COMEX) now operate as designated contract markets (DCM) of the CME Group.

- *Shanghai Metals Exchange*: This is the largest metal exchange in China and one of the largest in the world.

The Shanghai Futures Exchange (SHFE) was formed from the amalgamation of the Shanghai Metal Exchange, Shanghai Foodstuffs Commodity Exchange, and the Shanghai Commodity Exchange in December 1999. It is a non-profit-seeking incorporated body regulated by the China Securities Regulatory Commission.

The trading floor is located in Lujiazui, in the Pudong district of Shanghai. It currently trades futures contracts in copper, aluminium, zinc, natural rubber, fuel oil, and gold.

The auction houses Christie's and Sotheby's continue to be two of the primary locations for world class auctions. These two companies have offices around the world for the sake of bringing timely, convenient services to a global audience.

Christie's is a world-famous auction house and the informal name for the London firm of Christie, Manson & Woods, the oldest fine-art auctioneers in the world (figure 3.2).

CHRISTIE'S

Figure 3.2 The trade mark of Christie's

Founded in 1766, Christie's offers more than 600 sales each year in more than 80 categories including fine art, jewelry, photographs, antiques, collectibles, wine, automobiles and more. The firm maintains 85 offices in 43 different countries, and has showrooms in locations worldwide including London, New York City, Los Angeles, Paris, Milan, and Hong Kong.

Christie's has held the greater market share against its longtime rival, Sotheby's, for several years, netting global sales of \$5.1 billion in 2014. Despite the scandal that involved both auction houses at the be-

ginning of the twenty-first century, Christie's prides itself on the exemplary client service and extensive experience that have been its two most important assets as it continues to serve the public the world over by facilitating their buying and selling items of the highest value.

Sotheby's is the world's second oldest international auction house in continuous operation (figure 3.3).

The logo for Sotheby's, featuring the word "Sotheby's" in a blue, serif font with a small apostrophe over the 'y'.

Figure 3.3 The trade mark of Sotheby's

It was founded in London, England on March 11, 1744 when English explorer Samuel Baker presided over the disposal of "several hundred scarce and valuable" books from the library of Sir John Stanley, a British politician. Today, the firm has an annual turnover of approximately US \$5.15 billion in 2014, maintains offices on London's New Bond Street and Manhattan's York Avenue, and has more than 1,900 employees. The auction house deals mainly in fine art, antiques and collectibles, and holds hundreds of sales each year at its auction centers around the world. The organization also maintains an historic rivalry with Christie's auction house of London. Despite financial difficulties, and falling prey to the temptation of illegal price-fixing in collusion with Christie's at the beginning of the twenty-first century, Sotheby's serves human society by facilitating the buying and selling of significant items of the highest value.

Questions for discussion:

- What is the commodity exchange? Name specifics of the commodity exchange.
- What are the mechanisms of commodity exchange?
- Name the exchange goods.
- Name the auction goods.
- What methods of auctions do you know?
- Describe the specifics of stock exchange and auction trading by agricultural goods. Give the examples.

- Describe the specifics of stock exchange and auction trading by agricultural goods in Kazakhstan and Commonwealth of Independent States.

- What are the differences between Sotheby's auction and Christie's auction?

THEME 4. INTERNATIONAL TRADE IN SERVICES

- 1. The essence and tasks of international trade in services: globalization and growth.
- 2. The classification of services in international trade. Features of services. State regulation of international trade in services.
- 3. World markets of services. World export and world import of services.
- 4. Development of services in Kazakhstan.

1. The essence and tasks of international trade in services: globalization and growth.

In economics, a service is an intangible commodity (table 4.1). Trade in services records the value of services exchanged between residents and non-residents of an economy, including services provided through foreign affiliates established abroad. This indicator is measured in million USD and percentage of GDP for exports, imports and net trade. Services include transport (both freight and passengers), travel, communications services (postal, telephone, satellite, etc.), construction services, insurance and financial services, computer and information services, royalties and license fees, other business services (merchandising, operational leasing, technical and professional services, etc.), cultural and recreational services, and government services not included in the list above. Trade in services drives the exchange of ideas, know-how and technology, although it is often restricted by barriers such as domestic regulations.

Table 4.1

<i>Service characteristics</i>	
1. Intangibility	Services are intangible and insubstantial: they cannot be touched, gripped, handled, looked at, smelled, tasted or heard. Thus, there is neither potential nor need for transport, storage or stocking of services. Service cannot be (re)sold or owned by somebody, neither can it be turned over from the service provider to the service consumer nor returned from the service consumer to the service provider. Solely, the service delivery can be com-

Table 4.1 continuation

	misioned to a service provider who must generate and render the service at the distinct request of an authorized service consumer.
2. Perishability	Services are perishable in two regards The service relevant resources, processes and systems are assigned for service delivery during a definite period in time. If the designated or scheduled service consumer does not request and consume the service during this period, the service cannot be performed for him. From the perspective of the service provider, this is a lostbusiness opportunity as he cannot charge any service delivery; potentially, he can assign the resources, processes and systems to another service consumer who requests a service. When the service has been completely rendered to the requesting service consumer, this particular service irreversibly vanishes as it has been consumed by the service consumer.
3. In-separability	The service provider is indispensable for service delivery as he must promptly generate and render the service to the requesting service consumer. In many cases the service delivery is executed automatically but the service provider must preparatorily assign resources and systems and actively keep up appropriate service delivery readiness and capabilities. Additionally, the service consumer is inseparable from service delivery because he is involved in it from requesting it up to consuming the rendered benefits.
4. Simultaneity	Services are rendered and consumed during the same period of time. As soon as the service consumer has requested the service (delivery), the particular service must be generated from scratch without any delay and friction and the service consumer instantaneously consumes the rendered benefits for executing his upcoming activity or task.
5. Variability	Each service is unique. It is one-time generated, rendered and consumed and can never be exactly repeated as the point in time, location, circumstances, conditions, current configurations and/or assigned resources are different for the next delivery, even if the same service consumer re -

Table 4.1 continuation

	quests the same service. Many services are regarded as heterogeneous or lacking homogeneity and are typically modified for each service consumer or each new situation (consumerised).
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In this regard, international trade in services in comparison with trade in goods has the following features:

- Trade is mainly carried out on direct contacts between producers of services and their consumers;
- Its regulation is carried out not on border, and within the country by the relevant provisions of the domestic legislation;
- A large dependence of the volume of services and their cost from the complexity and knowledge-intensity of products;
- Big security state of production and realization of services, than spheres of production of goods and trade;
- Services, coming to personal consumption (tourism, education, culture, etc.), can't be involved in economic circulation.

Specificity of services as goods and the general features of trade in services cause features of trade in separate services. There are at least four reasons why we would expect to see a rising trend in international trade in services - rising in absolute terms, rising relative to world GDP, and rising relative to trade in goods.

2. The classification of services in international trade. Features of services. State regulation of international trade in services.

The term services covers a wide range of intangible and heterogeneous products and activities that are difficult to encapsulate within a simple definition. Services are either the result of a production activity that changes the conditions of the consuming units (transformation services), or facilitate the exchange of products or financial assets (margin services). They can cover transport, telecommunication and computer services, construction, financial services, wholesale and retail distribution, hotel and catering, insurance, real estate, health and education, professional, marketing and other business support, government, community, audiovisual, recreational, and domestic services.

Services have a significant impact on growth and efficiency across a wide range of industries and overall economic performance. For instance, sectors such as transport, telecommunications and financial services are key determinants of the conditions in which persons, merchandise, services and capital flow. Another illustration of the services major role is environmental services, which contribute to sustainable development by alleviating negative impacts of economic activities.

Ranging from architecture to voice-mail telecommunications and to space transport, services are the largest and most dynamic component of both developed and developing country economies. Important in their own right, they also serve as crucial inputs into the production of most goods. Their inclusion in the Uruguay Round of trade negotiations led to the General Agreement on Trade in Services (GATS). Since January 2000, they have become the subject of multilateral trade negotiations. The General Agreement on Trade in Services (GATS) is the first multilateral trade agreement to cover trade in services. Its creation was one of the major achievements of the Uruguay Round of trade negotiations, from 1986 to 1993. This was almost half a century after the entry into force of the General Agreement on Tariffs and Trade (GATT) of 1947, the GATS' counterpart in merchandise trade.

The need for a trade agreement in services has long been questioned. Large segments of the services economy, from hotels and restaurants to personal services, have traditionally been considered as domestic activities that do not lend themselves to the application of trade policy concepts and instruments. Other sectors, from rail transport to telecommunications, have been viewed as classical domains of government ownership and control, given their infrastructural importance and the perceived existence, in some cases, of natural monopoly situations. A third important group of sectors, including health, education and basic insurance services, are considered in many countries as governmental responsibilities, given their importance for social integration and regional cohesion, which should be tightly regulated and not be left to the rough and tumble of markets.

In order to achieve a pragmatic solution to the definition issue, the WTO Secretariat has drawn up a list of the service sectors covered by the GATS. Whilst it is neither binding nor final, it is used by most

of the WTO countries. The list contains 12 major service sectors which are in turn subdivided into numerous subsections:

- Business services and professional services: Accountancy services; Advertising services; Architectural and engineering services; Computer and related services; Legal services;
- Communication services: Audiovisual services; Postal and courier, express mail services; Telecommunications
- Construction and related services;
- Distribution services;
- Education services;
- Energy services;
- Environmental services;
- Financial services;
- Health and social services;
- Tourism services;
- Transport services: Air transport services; Land transport services; Maritime transport services; Services auxiliary to all modes of transport;
- Movement of natural persons.

These sectors are further subdivided into a total of some 160 sub-sectors. Under this classification system, any service sector may be included in a Member's schedule of commitments with specific market access and national treatment obligations. The GATS expressly confirms the right of the member states to regulate the provision of services and in so doing to pursue national policy objectives. The fundamental recognition of national sovereign rights, however, is qualified and restricted in view of the goal of liberalization.

3. World markets of services. World export and world import of services.

One of the most important achievements of the Uruguay Round trade negotiations (1986-1993) is to have brought international trade in services under common multilateral rules. Entering into force on 1 January 1995, the WTO General Agreement on Trade in Services (GATS) is the first set of multilaterally negotiated and legally enforceable rules covering international trade in commercial services (i.e. excluding government services). As stressed in GATS,

international trade in services can take place through four modes (table 4.2) of supply:

Table 4.2

The methods of organization of international trade in services

Mode 1	Cross - border supply	Only the service crosses the border. The delivery of the service can take place, for example, through telecommunications (telephone, fax, television, Internet, etc.), or the sending of documents, disks, tapes, etc;
Mode 2	Consumption abroad	Occurs when consumers consume services while outside their country. Visits to museums in a foreign country as well as medical treatment and language courses taken abroad are typical examples;
Mode 3	Commercial presence	The service supplier establishes its commercial presence in another country through e.g. branches or subsidiaries. Examples are medical services provided by a foreign-owned hospital, and banking services supplied by a subsidiary of a foreign bank.
Mode 4	Presence of natural persons,	Occurs when an individual has moved temporarily into the territory of the consumer in the context of the service supply, whether self-employed or as an employee of a foreign supplier. For instance, architects moving abroad to supervise construction work are providing services under this mode of supply.

These four ways of trade in services were recorded in the General agreement on trade in services (GATS), which entered into force in 1995 and created the international legal framework regulating this area.

The international market for services is the transaction for the sale of services in the global capital market. International trade in services has a great impact on world financial markets.

The most important pattern is the evolution of the service sector - its relationship with the sphere of production, their integration. In the industry changes the content of the process expressed in the form of

services, increasing the number of engineering-technical, administrative and other personnel and the extent of his involvement in the production of proprietary product. With the growth of production of goods and services become more complex inter-industry linkages of these sectors: in services increase the level and quality of material equipment and components.

The rate of growth and importance in total world exports of services the main and the fastest growing was services financial, insurance, audit, consulting services. Most services, except transport and communication, for a long time developed independently of the technological progress, relying mainly on the use of labor resources and simple technologies. A new wave of scientific and technical progress captured in the sphere of service and services have become a wide field for its application of the latest advances, primarily in electronics and information and communication technologies (ICT).

New technologies make it possible to transmit services at any distance and at any time, collect and store in encrypted form on physical media or in electronic form. This significantly improves the quality of the: consumers get access to a huge array of information and services in real-time (on-line), benefit from a wider choice of services.

Over the last decades there is a trend of increasing role of services in the economies of the world (figure 4.1).

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
World(*)	1,335.9	1,586.7 b	1,783.3	1,949.1	2,047.8	1,929.5	2,234.9	2,380.3	2,712.7	2,752.5	2,924.7 e
Argentina	4.3	5.2 b	6.2	7.4	8.1	7.7	10.2	11.1	11.7	11.0	10.3
Australia	22.9	24.5 b	26.3	29.5	29.3	28.6	35.2	37.8	42.0	40.3	40.8
Brazil	10.1	12.4 b	14.7	17.5	20.7	19.9	23.8	27.4	31.0	29.5	30.2
Canada	40.4	48.4 b	52.8	51.6	51.0	49.2	58.0	61.2	70.1	67.7	65.0 e
China	52.2	71.7 b	90.7	107.6	112.9	103.4	129.4	132.7	168.2	156.6	175.8 p
India	30.8	41.9 b	55.3	63.2	72.1	66.6	88.3	99.5	113.3	111.9	117.6
Indonesia	9.7	10.9 b	9.2	9.2	10.5	9.5	12.7	15.7	18.4	17.3	17.7 e
Japan	78.4	82.0 b	87.1	88.7	95.9	86.7	98.9	98.8	104.4	101.8	122.3 e
Mexico	11.0	12.6 b	12.7	12.6	12.0	10.6	11.5	11.2	12.6	15.1	15.8
Russia	16.6	23.2 b	28.4	32.0	38.8	32.8	37.1	41.7	48.5	52.8	49.5 e
Saudi Arabia	4.7	9.2 b	11.3	12.0	6.4 b	7.0	8.1	8.3	8.6	8.9	9.2
South Africa	7.9	9.5 b	10.4	10.8	9.5	9.5	12.1	12.5	13.7	12.7	12.7
South Korea	35.8	40.8 b	45.6	52.3	62.1	52.2	62.8	65.3	80.6	78.1	80.4
Turkey	18.8	22.4 b	20.8	21.9	25.2	25.7	27.6	29.7	34.0	35.5	38.1 e
United States	276.1	299.8 b	331.9	356.4	362.3	367.6	424.9	451.0	509.7	517.6	534.0 e

Figure 4.1 Global exports of services (billion EUR), 2004-2014

Thus, in the period from 2004-2014 export of services to India increased from 30.8 billion EUR to 117,8 billion EUR , i.e. 3.8. Also

in Brazil increased by 3, in China-3,3, in Argentina - 2.4.

Indicators of import of the countries had growth during the period with 2004 to 2014. For example, in China import of services increased by 5, in India by 4,9 and in Russia by 3,9 (figure 4.2).

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
World(*)	1,306.0	1,550.4 b	1,736.9	1,867.6	2,007.0	1,878.5	2,206.0	2,345.2	2,668.0	2,714.2	2,901.8 e
Argentina	5.3	6.0 b	6.7	7.8	9.0	8.7	11.0	12.7	14.1	13.9	12.6
Australia	22.5	25.0 b	26.5	30.6	33.3	30.3	38.9	45.0	51.9	51.3	47.8
Brazil	13.9	18.9 b	22.4	27.1	32.1	33.7	47.1	54.7	63.0	64.9	66.6
Canada	47.3	52.4 b	58.1	60.0	60.7	59.4	74.1	77.1	87.8	84.5	80.6 e
China	58.5	67.7 b	80.5	95.1	108.1	114.2	146.3	171.6	219.5	249.7	288.8 p
India	28.7	37.9 b	46.6	51.2	59.7	57.6	86.5	89.8	100.9	95.1	111.3
Indonesia	16.8	18.3 b	19.1	19.1	20.4	17.5	20.0	22.8	26.6	26.4	25.2 e
Japan	106.0	111.8 b	112.6	115.7	121.6	111.7	124.2	126.2	143.8	128.7	144.5 e
Mexico	15.5	18.3 b	18.8	18.2	17.4	18.0	19.5	21.8	23.9	24.2	26.3
Russia	26.8	32.5 b	36.9	44.2	52.7	45.5	56.8	65.7	84.8	96.7	91.1 e
Saudi Arabia	20.7	26.6 b	39.5	46.0	51.1 b	53.8	57.9	56.0	57.1	57.7	73.0
South Africa	8.3	9.8 b	11.3	11.9	11.6	11.0	14.8	15.0	14.7	13.6	12.8
South Korea	40.6	48.1 b	56.1	61.9	66.5	59.0	73.5	74.1	84.6	83.0	86.6
Turkey	8.3	9.6 b	9.8	11.7	12.5	12.4	15.0	15.2	16.5	18.3	19.1 e
United States	226.7	244.7 b	271.7	271.9	278.1	277.3	308.8	313.0	350.5	348.0	358.2 e

Figure 4.2 Global imports of services (billion EUR), 2004-2014

Causes, stimulating the rapid growth of the world market of services the following: a high standard of living, increasing demand for services; development of all modes of transport, stimulating international mobility of traders and the public; new forms of communication, allowing to replace personal contacts of buyers and sellers; because of the process of broadening and deepening international division of labour, leading to the formation of new activities, primarily in the non-manufacturing sector.

4. Development of services in Kazakhstan.

With the growth of the welfare of the country's service economy begins to play a key role in ensuring economic growth and employment. In recent times service industries have a decisive influence on the economic dynamics of both developed and developing countries. The contribution of services to economic growth outpaces the contribution of the real sector.

In the service sector creates more high-skilled jobs than in other sectors of the economy. A significant portion of small and medium business operates in the service sector. The service sector has a

compensating role in the decline of employment in traditional industries and agriculture. In Kazakhstan in the past 20 years, the services sector outpaced industry growth of about 3 % and at the moment is 54.2 % of GDP (in the first half of 2014, an increase of 0.6 %).

In the structure of Kazakhstan's GDP – the production of services is at 53.3% with the concentration in the wholesale and retail trade, repair of motor vehicles, real estate operations, transport and warehousing etc (figure 4.3).

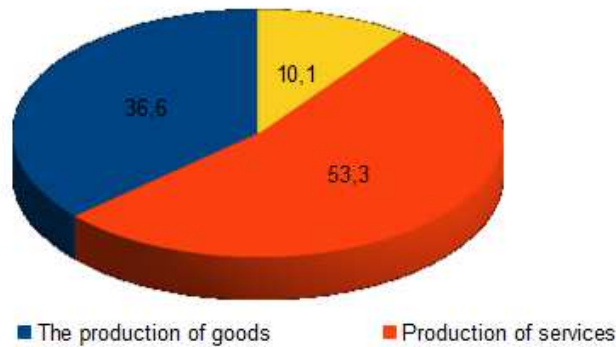


Figure 4.3 The structure of Kazakhstan's GDP in 2014, (%)

The service sector provides the largest share in Kazakhstan's GDP and will become the leading growth factor in the short term. Now, services account for a large share of GDP. However, in order to enter the top 30 most developed countries by 2050, the service sector is expected to grow by 1.7 times by 2020 and make a major contribution to GDP growth. Thus, it is expected that by 2020 the GDP growth of the country to 369,9 billion. USA, the volume of the sphere of services will be of 231.9 billion. USA.

Total volume of services rendered on their views of the Republic of Kazakhstan for the years 2007-2011 increased about 2.6. The majority consists of services in the field of public administration and defence services compulsory social security Services in the field of architecture, engineering, technical testing and analysis; Services

relating to property; rental Services; Services of head offices; consultancy on the issues of the departments (figure 4.4).

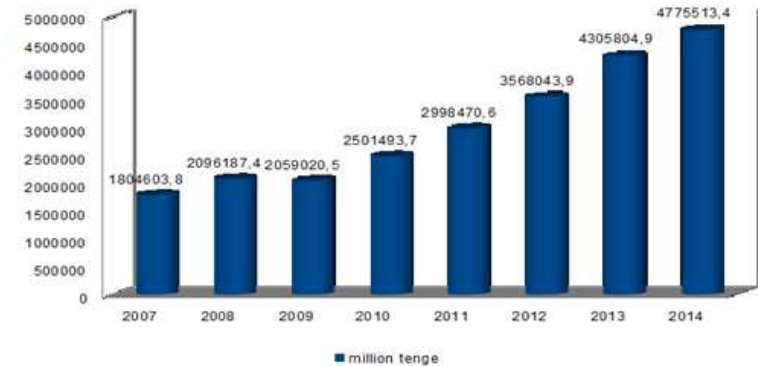


Figure 4.4 Total volume of rendered services by type for 2007-2014

The fastest growing in terms of services regions of the Republic of Kazakhstan are Almaty, Astana and Atyrau region. For the analyzed period total volume of services rendered has increased, in Almaty 1.3, in the capital Astana on 1.8, and also in Atyrau oblast by 1.5 (table 4.3)

Table 4.3

Total volume of services rendered in regions for 2012-2014 (million tenge)

	2012	2013	2014	2014/2012
1	2	3	4	5
The Republic of Kazakhstan	3 568 043,9	4 305 804,9	4 775 513,4	1,3
Akmola region	42 736,5	57 553,0	64 095,3	1,5
Aktobe region	82 596,0	84 650,9	97 027,5	1,2
Almaty region	81 132,6	120 089,7	128 437,8	1,6
Atyrau region	282 065,6	347 368,0	414 751,9	1,5
West Kazakhstan region	70 003,5	88 800,8	92 406,6	1,3
Zhambyl region	41 468,8	39 713,1	43 671,7	1,1

Table 4.3 continuation

1	2	3	4	5
Karaganda region	118 764,7	139 010,9	173 661,6	1,5
Kostanay region	52 831,5	62 212,8	64 286,6	1,2
Kyzylorda region	63 641,3	74 250,2	90 634,3	1,4
Mangistau region	147 288,9	162 628,0	166 057,9	1,1
South Kazakhstan region	87 935,3	95 170,5	110 701,9	1,3
Pavlodar region	59 960,7	64 394,4	70 950,5	1,2
North Kazakhstan region	28 146,2	31 130,6	35 797,6	1,3
East Kazakhstan region	114 342,3	116 792,4	126 204,1	1,1
Astana	454 507,3	664 049,1	797 949,4	1,8
Almaty	823 897,9	1 001 671,2	1 037 574,3	1,3

With the aim of promoting competitive services sector by improving the quality, availability, increase performance and exports of service sector approved the Program on development of service sector in the Republic of Kazakhstan until 2020. Objectives of the program:

1. The development of trading sector services.
2. The development of services in the transport and logistics sector.
3. The development of the market of tourist services.
4. The development of services in the sector of real estate transactions.
5. Development of professional services.
6. The development of the services sector of information and communications.
7. The development of financial services.

8. The development of services in the education sector.

9. The development of services in the health sector.

10. Improving the institutional framework for regulating services.

It is expected that by 2020, the contribution of services to GDP of Kazakhstan will amount to more than \$200 billion Increase in the contribution of services will be comparable to today's contribution to GDP from the industry, including the extraction and processing of all minerals, engineering, agriculture.

The program is allocated 9 main sectors, which today form more than half of GDP: trade, transport and logistics, tourism, professional services, information and communication, financial services, real estate operations, education and health. The largest contribution to the growth of the economy will make the trade sector, which will grow on average by 8% annually. Significant acceleration relative to its current trajectory we should expect from the financial sector, tourism, professional services, real estate sectors, education and health.

Questions for discussion:

- What are the services and how it differs from the goods?
- What is the structure of the world market of services (IMF classification)?
- What are the types of tourism?
- What is the structure of world goods turnover of transport?
- How transport expenses influence on international trade?
- What is the franchise?
- What instruments of a trade policy is more preferable for using access restriction of the foreign producer of services on domestic market: import quota, import tariff, internal subsidy?
- Give the examples of traded and not traded services.

THEME 5. INTERNATIONAL TRADE OF TECHNOLOGIES AND KNOW-HOW

1. The essence and tasks of technologies and know-how. Scientific, technical and production cooperation in the technologies and know-how.

2. World exchange of specialists. The role of information technologies in the world trade.

3. World market of the knowledge-intensive products. World market of patents and licenses. Globalization of scientific and technical communications.

4. Market of technologies and know-how in Kazakhstan.

1. The essence and tasks of technologies and know-how. Scientific, technical and production cooperation in the technologies and know-how.

The market of technologies is the most important factor of modern international economy. The modern market environment is characterized by that technologies, continuously developing, change the market, forming new requirements and altering the connected technological chains.

According to the theory of evolutionary economy, economic, social and technological development are closely interconnected and influence at each other. Therefore technological development is considered as one of the major driving forces defining a trajectory of transformational processes in economy.

Information (science) has become one of the most important production resources along with raw materials, capital, means of production and personnel. The company is having only one stock of raw materials, will not be able to produce, if not a well-known technology. The word "technology" comes from the Greek "techne" - an art, skill, ability, etc. Usually, when you have to use this word, we mean the totality of methods of processing, manufacture, change of state properties, form of raw material or semi-finished product, implemented in the production process. The term "technology" is widely used in domestic and foreign practice, however, different experts and writers put in his concept a different meaning. Most often

the term "technology" means systematic knowledge for the manufacture of products, the technological process, etc. Thus, the technology is the interconnecting link between science, equipment and production, it is in essence process of application of the saved-up experiences and knowledge for effective implementation of connection of science with production and making productions among themselves without which knowledge industrial production at the level of the last achievements of world science and equipment becomes impossible.

Allocate the following segments of the world market of technologies:

- market of patents and licenses;
- market of the knowledge-intensive technological production;
- market of the hi-tech capital;
- market of scientific and technical experts.

The main form of the international exchange of scientific and technical achievements – license trade which subject are patent and unlicensed (know-how) licenses for transfer of inventions, technological experience, industrial secrets and commercial knowledge, for use of trademarks, etc.

The license is permission of the seller (licensor) to use by other person buyer of the license (licensee) – the invention, technology, technological knowledge, a know-how, a trademark which are necessary for production of commercial and other information, during a certain term for the caused remuneration.

Know-how - knowledge and practical experience of technical, commercial, administrative, financial and other character which are of commercial value, are applicable in production and professional practice and aren't provided with patent protection.

Subjects of the license are:

- the patented inventions;
- industrial samples;
- trademarks;
- know-how.

In the world practice most often are used in the license agreement for the integrated transmission of several patents and related know-how. A patent is a document issued by a governmental authority to the inventor proving his authorship and the exclusive right to use the invention.

International industrial and technical cooperation is characterized by the fact that the international exchange of goods and services is complemented by the scientific and technical cooperation at the stage of product development, production cooperation and cooperation directly in the production process, provision of technical services during installation and start-up commissioning, technical service during the period of its operation. The industrial cooperation is the international cooperation of production – coordinated, often long-term production-economic and scientific-technical activities of partners from different countries, based on the separation of production and sales programmes, equal and mutually beneficial cooperation.

Increase of a role of scientific-technical progress in production conducts to that the center of gravity of competitive fight moves to the sphere of science and technology more and more. As a result value of a scientific and technical factor in the international economic relations that conducts to growth of scales of the world exchange of scientific and technical achievements and to its isolation to the independent, specific sphere of economic activity - transfer of technologies increases. International trade in technologies plays the main role in the course of the international integration, specialization and decentralization of production.

2. World exchange of specialists. The role of information technologies in the world trade.

For the development of human society the necessary material, tools, energy and other resources, including information. Currently characterized by unprecedented growth of information flows. This applies to almost any field of human activity. The greatest growth of information is observed in industry, Commerce, Finance and banking and educational fields. For example, in industry the growth of the information volume caused by the increase of production, complexity of products, used materials, technological equipment, expansion of internal and external relations of economic objects as a result of concentration and specialization of production.

The use of modern information technology provides almost instant connection to any electronic information arrays (such as databases, electronic reference books and encyclopedias, various

operational reports, analytical overviews, laws and regulations, etc.) coming from international, regional and national information systems and their use in the interests of a successful business.

Due to the rapid development of new information technologies, now not only was open access to the global flow of political, financial, scientific and technical information, but also became a real opportunity to build a global business in the Internet.

In modern conditions of information technology are essential for the development of society as a whole. This is due to the following provisions:

1. IT allow to activate and effectively use information resources of society, which today are the most important strategic factor for its development;

2. IT allow to optimize and in many cases to automate information processes which take the increasing place in activity of human society in recent years;

3. Information processes are important elements of other more difficult production or social processes;

4. IT play an extremely important role in providing information exchange between people today, and also in systems of preparation and distribution of mass information;

5. IT take the central place in the course of intellectualization of society, development of its education system and culture today;

6. IT play a key role as well in processes of receiving and accumulation of new knowledge now;

7. Value of development of IT, essentially important for the present stage of development of society, is that their use can render essential assistance in the solution of global problems of mankind.

The high role of IT in economic development of society promotes increase of opportunities of the national enterprises in ensuring effective public reproduction, in growth of participation of the country in the international division of labor. The conducted research shows close connection of level of competitiveness of the country in world economy with a level of development in the country of information technologies. IT provide to the country more effective use available financial, production and a manpower, allow to provide the solution of problems for shorter terms and with smaller expenses. Information and communication technologies - one of the main resources of

development this century. Production of computer facilities, means of digital communication, production of the software and information services is its part. The contribution of this sector to GDP gain in industrialized countries makes about 30%, and the share of the information and communication technologies occupied in sector in the developed countries exceeds this indicator.

Information technologies (goods and services) represent one of the most dynamic segments of international trade for the last decade. The major exporters are industrially developed states which practically all are included into the OECD international organization. Information and communication technologies are one of the most important factors of economic development and the international competitiveness, therefore topical issue about strategy of regulation and stimulation of development of the IT market in each country. Thus efficiency of state regulation of this branch can be increased at the accounting of some peculiar features inherent in it (in particular, a big role of network outer effects and a scale effect, value of industry standards, etc.).

New technology, improved Internet access, and electronic pay and delivery systems have created a new means of trade – e-commerce (figure 5.1) – which has helped to reduce trade costs. An indicator of increasing cross-border trade – partly resulting from e-commerce – is the volume of small parcels passing through Customs. Trade volume in this area increased by 48 per cent between 2011 and 2014 according to the Universal Postal Union. Given the difficulties in encapsulating international e-commerce transactions, it is not possible to accurately measure the size of this market using official sources. Private sector estimates, however, indicate that the Asia-Pacific region was the largest e-commerce market in 2014 while the Middle East and Africa were the smallest markets. But there is huge potential for these regions if the technological means can be developed. E-commerce could also become an important source of job creation.



Figure 5.1 The major segments of IT-trade

It is necessary to distinguish a condition of development and use of high technologies from the new factors determining the potential of competitiveness of the country in general. In many states the essential attention is paid to this direction of economic policy. If to analyze factors on elements, we will note that in an arsenal of instruments of formation and increase of competitiveness of economy information technologies get importance now. With their help, formed the main competitive advantages. During the modern period of the fierce international competition of corporation often have to make basic changes to strategy, use in the markets new tools to support or increase the market share, and also profitability of the activity. In this situation modern information technologies with their promptly growing potential and quickly decreasing expenses open great opportunities for new firms, and economies in general.

3. World market of the knowledge-intensive products. World market of patents and licenses. Globalization of scientific and technical communications.

The world market of technologies represents system of the economic relations in the sphere of an exchange of scientific and technical knowledge which can be presented as in substantiated, not in the substantiated look.

As subjects of the world market of technologies government institutions, research institutes and educational institutions, the industrial companies and small innovative firms, and also natural persons – scientists and experts act. International trade, the

international movement of the capitals, the international migration of labor and the international exchange of information is 4 sources of process, transformation of the world economic market into a uniform commodity market, the services, the capital and knowledge circulating within one operation. Such process received the name - globalization.

The major component of the formed economic space and the national industry of any country are technologies therefore progress in technological development of the country directly influences acceleration of rates of its economic development.

The global technology market has a specific normative-legal base of its functioning – the international code of conduct for technology transfer; as well as such international regulatory bodies as the world trade organization The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), Committee on technology transfer, United Nations Conference on trade and development (UNCTAD). The WTO’s Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), negotiated in the 1986-94 Uruguay Round, introduced intellectual property rules into the multilateral trading system for the first time.

The international exchange of scientific and technical experience and knowledge occurs in the most various forms, including traditional purchase and sale of final goods and the equipment for their production, employment of highly skilled foreign scientists and experts, acquisition of licenses for front lines equipment and technology.

The role of hi-tech productions steadily grows in economic development of the countries and regions. According to numerous researches the most powerful scientific and technical and technological potential at the present stage of development such countries as the USA, Japan, Germany, Great Britain and France have. Though some Asian countries and territories (South Korea, Malaysia, Singapore, Hong Kong, Taiwan, etc.) periodically escape in the certain directions forward. Since the second half of the XX century branches of the high and high technologies as which main distinctive characteristics act became the engine of economic development: high investment appeal, high level of investment risk, use of the advanced scientific technologies and knowledge, high potential of growth and the expected high income.

According to data of the rating of the innovative countries published by Bloomberg Rankings international agency, for the beginning of 2015 South Korea was recognized as the most innovative country of the world (the index of innovations is calculated by means of the analysis of seven elements of economy in which innovative activity is embodied: intensity of carrying out research and development, labor productivity level, concentration of high technologies, number of researchers as a percentage on 1 million people, productivity of the industry, education level and patent activity). On the second line there was Japan. The three of leaders is closed Germany. Ten the most innovative countries (in decreasing order) also included Finland, Israel, the USA, Sweden, Singapore, France and the United Kingdom.

In this rating in the five of the most profitable hightech of corporations – American Apple (\$625b), Microsoft (\$377b), Google (\$342 b) and Facebook (\$210 b) and Oracle (\$189 b). Besides, the rating included 9 companies of the USA and one company Tencent of China.

The largest global hi-tech companies of a rating are concentrated on macroregions of the world as follows: The Pacific Rim – 41 companies (the largest company Samsung Electronics, South Korea), North America – 46 (the largest company Apple, USA) and 11 companies are located in Europe (the largest company Nokia, Finland) (table 5.1).

T a b l e 5.1

Ten largest tech companies by Bloomberg Rankings international agency

Rank	The hi-tech company brand	The name of hi-tech company	The budget
1	2	3	4
1		Apple	\$625b

Table 5.1 continuation

1	2	3	4
2		Microsoft	\$377b
3		Google	\$342b
4		Facebook	\$210b
5		Oracle	\$189b
6		Intel	\$175b
7		IBM	\$154b
8		Tencent	\$147b
9		Cisco	\$141b
10		Qualcomm	\$118b

The steady tendency of growth of a share of the knowledge-intensive goods in world production is caused by high profitability and possibility of monopolization of the world market of a separate type of new goods and technology the producer the first on it entered. The advancing growth of international trade in hi-tech and knowledge-

intensive production and reduction of specific weight of raw materials in world export already led to considerable decrease in a role of transport at implementation of the international commercial operations. In the last decade in the world growth of labor productivity owing to improvement of quality of labor is observed. It became the defining factor of decrease in product cost.

Continuous expansion of the world market of technologies and high speed of updating of technologies increases the cost of production realized in the world market in comparison with the commodity market and the market of services that is caused by high profitability of new technologies and the defining role in production.

4. Market of technologies and know-how in Kazakhstan.

In Kazakhstan the main emphasis was placed only on one of components of information society - on formation and development of the electronic government which was successfully realized to what high international ratings testify. However, the problem of formation of information society is certainly wider, than development only of the electronic government and branch of telecommunications.

Therefore, the State program "Information Kazakhstan – 2020" is developed for creation of all necessary conditions which will promote transition to information society. Program aim - making condition for conversion to pass to information society. Tasks of programme:

1. Providing efficiency of system of state management.
2. Providing access of information and communications infrastructure.
3. Building if informational medium for social-economical and cultural development of society.
4. Development of domestic informational medium.

The sphere of the information and communication technologies (ICT) - an important component of economic and social infrastructure of the Republic of Kazakhstan. ICT play an important role in transformation of economy, in increase of competitiveness of our republic in the world community.

During the period with 2011 on 2013 general costs of information and communication technologies in Kazakhstan increased by 3%, from 214179,7 million tenge to 220 847,7 million tenge. The main costs for

this period were: purchase of hardware, payment for communicational services, outsourcing payments (for the service of other organizations and specialists in the area of informational technologies), other expenditures on informational technologies and purchase of software (table 5.2).

T a b l e 5.2

The total cost of information and communication technologies (taking into account the organization of public administration), mln. tenge

	2011	2012	2013
Total	214 179,7	309 821,2	220 847,7
of which for:			
purchase of hardware	85 087,3	111 108,7	64 237,5
purchase of software	23 736,1	34 551,7	21 371,1
independent development of software within enterprise	2 040,0	3 781,3	5 485,1
payment for communicational services	56 906,5	83 378,1	55 116,5
training for personnel	1 397,0	2 216,8	3 431,8
outsourcing payments	25 040,7	51 762,1	35 318,3
advertising on the Internet	805,3	1 881,6	1 822,5
establishment and maintenance of Internet resources	1 249,0	1 758,9	2 173,4
hire of computer equipment	3 591,2	7 830,5	9 875,9
other expenditures on informational technologies	14 326,6	11 551,5	22 015,5

In 2014 the general costs of information and communication technologies made 229811,8 million tenge. Costs of purchase of hardware – 31,6%, outsourcing payments (for the service of other organizations and specialists in the area of informational technologies) - 20,2% and on payment for communicational services – 19,2% were the main articles of costs of ICT (table 5.3).

T a b l e 5.3

The total cost of information and communication technologies (taking into account the organization of public administration), 2014 (mln. tenge)

	2014
Total	229 811,8
of which for:	
purchase of hardware	72 529,5
purchase of software	32 505,7
create their own information systems	5 242,3
service their own information systems	11 507,5
independent development of software within enterprise	2 360,8
payment for communicational services	44 348,3
training for personnel	1 672,9
outsourcing payments (for the service of other organizations and specialists in the area of informational technologies)	46 471,9
advertising on the Internet	2 000,4
establishment and maintenance of Internet resources	2 441,4
hire of computer equipment	8 731,1

The main part of export of ICT of Kazakhstan occupies products of telecommunications equipment of 37,7%. On the second place on the volume of export is computers and accompanying equipment (21%). In structure of import prevails also products of telecommunications equipment (63,7%). On the second place on the volume of import is audio and video equipment (16,4) (figure 5.2).

Structure of Export and Import sector products in 2014

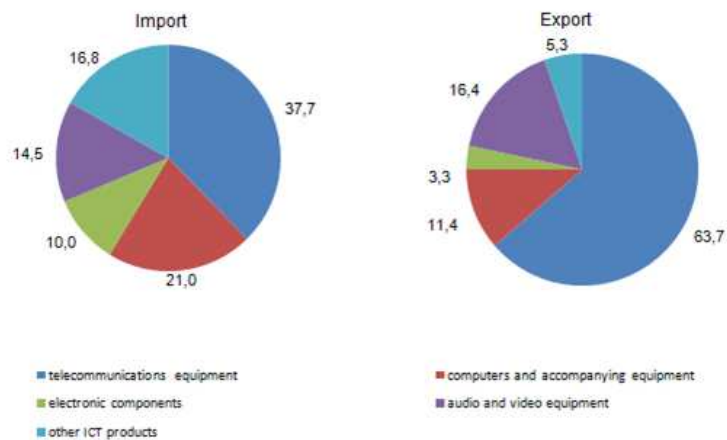


Figure 5.2 The structure of exports and imports of IT-products in 2014, %

For activation of foreign economic relations, the accelerated development of the region, support of branches of economy and the solution of social problems, attraction of investments, technologies and modern management, creation of highly effective and competitive productions, in the Republic of Kazakhstan are created 10 special economic zones. One of special economic zones is the Park of innovative technologies. The special economic zone "Park of Information Technologies" is created according to the Decree No. 1166 of the President of the Republic of Kazakhstan and will work till 2028. The territory which is taken away for special economic zones of PIT makes 163,02 hectares. The park was created for the purpose of creation of a basis for prompt development of IT business in Kazakhstan. It is a special economic zone with preferential tax and customs regulations for all information and telecommunication companies working at the park territory.

Questions for discussion:

- How does scientific and production cooperation influence on a commercial basis?
- How do knowledge-intensive market products develop in the world economy?
- Name the differences of patents from licenses.
- What is the exchange of specialists?
- What is the brain drain?
- Give determination of information technologies and examples of the enterprises with straight lines of investments.

THEME 6. FOREIGN TRADE OF KAZAKHSTAN

1. Foreign trade policy of the Republic of Kazakhstan. Problems and tendencies of development of foreign trade of Kazakhstan.

2. Main country and regional priorities of development of foreign trade of the Republic of Kazakhstan.

3. Trading balance of the Republic of Kazakhstan. Paying balance of the country. Commodity and geographical structure of export and import of the Republic of Kazakhstan.

1. Foreign trade policy of the Republic of Kazakhstan. Problems and tendencies of development of foreign trade of Kazakhstan.

The Republic of Kazakhstan is a unitary state with the presidential system of government. Under the Constitution, Kazakhstan is a democratic, secular, legal and social state which recognizes the man, his life, rights and freedoms as the supreme values of the country. Kazakhstan is the largest landlocked country in the world. There are more than 5,000 deposits of mineral resources in the country, the estimated cost of which is said to be tens of trillions of dollars. The country is ranked first in the world on explored reserves of zinc, tungsten and barite, second – on silver, lead and chromites, third – on copper and fluorite, fourth - on molybdenum, and sixth - on gold.

Kazakhstan also has significant oil and gas resources and holds the 9th place in the world in proven oil reserves, most of which are located in the western regions. In addition, the country's uranium and coal deposits are the 2nd and the 8th largest in the world respectively.

Kazakhstan is among the world's top ten exporters of grain and is one of the leaders in flour export. Nearly 70% of arable land in the north of the country is occupied by grain and industrial crops - wheat, barley, millet. Rice, cotton, and tobacco are cultivated in the south of the country. Kazakhstan is also famous for its gardens, vineyards and melons. Livestock farming is another leading area of agriculture in the country.

Since independence in 1991, per capita GDP has increased 20-fold – from US \$700 to US \$14,000. According to the British experts, out of 25 of the most dynamic economies of the first decade of the

21st century Kazakhstan is ranked third, leaving behind China and Qatar. According to the World Bank, the country has joined the group of countries with above-average income.

Over the years of independence, Kazakhstan attracted US\$ 200 billion of foreign investment, accounting for nearly 70% of the total volume of foreign investments in Central Asia. Foreign exchange reserves of the country at the beginning of June 2015 amounted to about US\$98 billion, of which more than US\$ 69 billion are a part of the National Fund.

In the World Bank and IFC's Doing Business 2015 survey, Kazakhstan was ranked the 53th (figure 6.1, figure 6.2). In the ranking of global competitiveness of the International Institute for Management Development (IMD) in 2015 the country took the 34th place, ahead of Spain, Turkey, Italy and many other countries.

ECONOMY OVERVIEW

REGION	Europe & Central Asia	DOING BUSINESS 2016 RANK	DOING BUSINESS 2015 RANK	CHANGE IN RANK
INCOME CATEGORY	Upper middle income	41	53	↑ 12
POPULATION	17,289,111	DOING BUSINESS 2016 DTF (% POINTS)	DOING BUSINESS 2015 DTF (% POINTS)	CHANGE IN DTF (% POINTS)
GNI PER CAPITA (US\$)	11,670	72.68	69.34	↑ 3.34
CITY COVERED	Almaty			

Figure 6.1 Kazakhstan economy overview in the context of Doing Business

Kazakhstan exports mining products, fuel, energy, the products of metallurgical and chemical industries, along with grain. The main trade partners of the country are Russia, China, Europe and the CIS states.

To diversify its economy, the country has successfully implemented a Programme of Accelerated Industrial and Innovative development, stipulating the modernization of the old enterprises and opening of the new ones.

At the moment, Kazakhstan is implementing a large-scale project titled "New Silk Road" that envisions the revival of the country's historical role as the major bridge between the two continents. It is also planned to transform the country into the largest business and transit

hub of the region. By the year 2020, the volume of transit traffic through Kazakhstan is expected to increase almost twice.

Rankings

Topics	DB 2016 Rank	DB 2015 Rank	Change in Rank
Starting a Business ✓	21	53	↑ 32
Dealing with Construction Permits ✓	92	100	↑ 8
Getting Electricity	71	68	↑ -3
Registering Property ✓	19	25	↑ 6
Getting Credit ✓	70	71	↑ 1
Protecting Minority Investors ✓	25	64	↑ 39
Paying Taxes	18	17	↑ -1
Trading Across Borders	122	121	↑ -1
Enforcing Contracts ✓	9	14	↑ 5
Resolving Insolvency ✓	47	63	↑ 16

✓=Doing Business reform making it easier to do business. X=Change making it more difficult to do business.

Figure 6.2 Kazakhstan economy overview in the context of Doing Business

In 2014, the Head of State announced the implementation of the new economic policy “Nurly Zhol”, designed to connect the transit routes in different regions of Kazakhstan, improve and modernize logistics, social and industrial infrastructure.

Kazakhstan has started to implement the Plan of the Nation “100 concrete steps” that involves radical changes aimed at the implementation of the Five institutional reforms. In particular, the programme envisions the formation of a professional state apparatus, ensuring the rule of law, industrialization and economic growth, identity and unity and the formation of accountable government.

At the same time, a large-scale social modernization programme is being carried out in the country implying the construction of new schools, vocational colleges and universities, opening of modern medical clinics and hospitals, improvement of the system of social support.

Kazakhstan is a member state of the Eurasian Economic Union.

Kazakhstan has entered the third decade of its independence as an established and stable state with a dynamically developing economy and clearly set foreign policy priorities.

The increased participation of Kazakhstan in world affairs can be seen by the rising role and strengthening international reputation of the state, its increased regional weight and importance for the world financial institutions and global economy.

Facing the current realities, the foreign policy of the Republic of Kazakhstan requires modernization and promotion of the national interests on the basis of principles of pragmatism. This process is influenced by a range of internal and external factors.

Among the important internal factors are cardinal changes in the political and socio-economic development of Kazakhstan, completion of our transformational stage and turning towards a new strategy of long-term sustainable development until 2050.

External factors include the need to overcome the world financial-economic crisis, intensified conflicts and current problems of humanity, emergence of qualitatively new geopolitical and geo-economic situation on regional and global scale.

Vision for the development of the foreign policy of the Republic of Kazakhstan

Kazakhstan has entered the third decade of its independence as an established and stable state with a dynamically developing economy and clearly set foreign policy priorities.

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External factors include the need to overcome the world financial-economic crisis, intensified conflicts and current problems of humanity, emergence of qualitatively new geopolitical and geo-economic situation on regional and global scale.

Goals of Kazakhstan's foreign policy

With due account of Kazakhstan's national interests, our main foreign policy efforts will be focused on achieving the following goals:

- 1) Measures that will ensure national security, defense capacity, sovereignty and territorial unity of the country;
- 2) strengthening peace through regional and global security;
- 3) sustainable international position and positive global image of Kazakhstan;
- 4) establishment of fair and democratic world order under the guiding and coordinating role of the United Nations Organization (UN);
- 5) further integration into the system of regional and global trade-economic relations;
- 6) creation of favorable external conditions for successful implementation of the Strategy 2050; providing high living standards for the population; strengthening unity of the multi-national society; reinforcing rule of law and democratic institutions; protection of human rights and freedoms;
- 7) diversification, industrial-technological development and increased competitiveness of the national economy;
- 8) focusing the country onto the "green" development path and bringing it to the list of the 30 top-developed nations of the world;
- 9) saving the national-cultural uniqueness and following own original way of the state development;
- 10) protection of the rights of personal, family and business interests of citizens and legal entities of the Republic of Kazakhstan;
- 11) support to Kazakh diaspora and Kazakh language overseas.

Priorities and tasks of the Kazakhstan foreign policy:

1. Kazakhstan is interested in a politically stable, economically sustainable and safe development of Central Asia.

Acknowledging its responsibility and the role in the region, Kazakhstan will exert every effort to provide regional stability and security and take action against new challenges and threats, including those originating from neighboring territories.

Kazakhstan will strive to develop intra-regional integration in Central Asia with the purpose of diminishing conflict potential, solving social-economic problems, and tackling water-energy issues and other considerations.

As a final goal, transformation of the region into a unique area of the international politics and economy is envisioned.

2. Viewing Eurasian economic integration as an effective tool for promotion of a sustainable position in the modern world, Kazakhstan will strengthen the Customs Union and the Common Economic Space in order to build the Eurasian Economic Union on its basis.

During the course of implementing the process the following principles will be observed: inviolability of the political sovereignty, economic rationalization of the decisions, gradual approach, pragmatism and mutual benefit, equal representativeness of parties in all integration organs and consensus at all levels of collaboration.

3. Kazakhstan will continue the work leading to completion of the international legal formalization of the state borders, as well as defining of the legal status of the Caspian Sea and establishment of stable and amiable relations between the littoral states, based on the universally accepted principles and norms of the international law.

4. Kazakhstan, being a responsible UN member, a member of Commonwealth of Independent States, Conference on Interaction and Confidence-Building Measures in Asia, Collective Security Organization, Shanghai Cooperation Organization, Organization of Security and Cooperation in Europe, Organization of Islamic Cooperation, Council Cooperation of Turkic speaking States, and other international organizations and forums, envisions the following tasks within those organizations:

- 1) ensuring protection of national interests in the process of development and making decisions of regional and global character in various spheres;
- 2) constructive participation and contribution to regional and global security;
- 3) promotion of Kazakhstan's foreign policy initiatives;

4) establishment of optimal and mutually acceptable ways of co-operation between regional and international organizations and forums in order to provide stability and security in the region;

5) advancement of political – legal and organizational – administrative functions of regional and global organizations in order to increase effectiveness of their work.

Kazakhstan participates solely in those regional and international organizations, whose activities respond to its national interests and bring practical benefit.

5. In the process of fulfillment the task on strengthening regional and global security, Kazakhstan:

1) develops amiable and predictable relations with all countries in the world and the alliances they forge;

2) is committed to aims and tasks of the UN Charter and accepts the fundamental meaning of the principle of supremacy of law for the political dialogue and cooperation between the states;

3) acts towards resolution of regional and international conflicts according to existing internationally-accepted negotiating formats. Kazakhstan's position is based on fundamental UN principles on defending sovereignty and territorial unity of states within their internationally-accepted borders, search for peaceful resolution of contradictory issues on the basis of observing the terms of the documents on crises resolution and most importantly, in the resolutions of the United Nations Security Council;

4) puts all efforts to achieving the world order free of nuclear weapons and other weapons of mass destruction; participates in development of multilateral mechanisms for a comprehensive ban and destruction of such weapons, as well as in creation of zones free of nuclear weapons;

5) consistently opposes any arms race, creation and deployment of new weapons, including in space;

6) supports international efforts to combat illicit arms trafficking;

7) in cooperation with other countries on a bilateral and multilateral basis, takes resolute measures to counter terrorism, extremism, illicit narcotics trafficking, psychotropic substances and their precursors, human trafficking and illegal migration, organized crime and corruption;

8) will continue working on ensuring international information security and combating cyber-terrorism.

6. In order to implement the priorities of the foreign economic policy, Kazakhstan:

1) participates in regional and global integration processes in order to exploit the economic and resource, transit - transport and export potential of the country, as well as to create conditions for the safe development of the national economy and its attractiveness for investment. In this context, an important priority is to join the World Trade Organization on favorable terms;

2) within the course of industrial-innovative development, expands international cooperation in order to attract investments and advanced technologies to the priority sectors of the national economy, and promote its diversification and technological modernization, and rising its competitiveness;

3) ensures full-scale participation of the country in international economic organizations and financial institutions and promotes Kazakhstan's national interests within them;

4) develops economic and trade diplomacy, provides diplomatic means to promote and protect Kazakhstan's governmental interests and its citizens abroad, creates favorable conditions for the expansion of Kazakhstan's business and export products to traditional and new global markets;

5) participates in formation of a fair global financial system, which would create equal opportunities for development of all countries;

6) actively works towards promotion of the Astana Economic Forum and international initiatives created on its basis;

7) contributes to international efforts to ensure regional and global food security;

8) continues to contribute to regional and global energy security. Promotes protection of the balance of interests of producers, transit countries and consumers of energy resources, and creation of diversified, stable and secure export routes;

9) intends to contribute to the efforts of the international community to provide official assistance to international development and establishes a respective national institution.

7. Putting a priority on environmental protection and the protection of global climate, Kazakhstan will:

1) pursue efforts to implement the concept on transition of the country to a "green economy" in order to improve management and efficient use of resources (water, land, biological and other), as well as to raise environmental quality and the population's welfare. The transition to the "green economy", including the exhibition EXPO 2017, is an important step in achieving Kazakhstan's goal to become one of the world's top 30 most developed countries;

2) implement the Astana initiative "Green Bridge", aimed at strengthening the partnership between public and private sectors in Europe, Asia and the Pacific, civil and international organizations to implement programs and plans to promote "green growth";

3) promote initiatives for development and introduction of modern services to create an environmentally sustainable energy supply, including the Global energy and environmental strategy, aimed at finding solutions to the problems of a post-industrial society;

4) continue to improve the legal framework with neighboring countries on the usage and protection of trans-boundary water resources to enhance water security;

5) will continue to cooperate with international organizations and donors to assist in the rehabilitation of the former Semipalatinsk nuclear test site and the Aral Sea, including cooperation within the framework of the International Fund for Saving the Aral Sea;

6) will continue collaboration with the Caspian Sea's littoral states on the adoption of the Framework Convention for Protection of the Marine Environment of the Caspian Sea;

7) will strengthen bilateral and multilateral cooperation on prevention and response to natural and man-made emergency situations.

8. The Republic of Kazakhstan puts a priority on development of the humanitarian dimension of foreign policy. In this regard, Kazakhstan:

1) will strengthen efforts to protect the rights and legitimate interests of Kazakhstan citizens abroad, as well as of the children adopted from Kazakhstan and living abroad;

2) will continue to join multilateral conventions and conclude bilateral agreements aimed at protecting the rights and interests of its

citizens abroad, the liberalization of visa procedures and regimes, and combating illegal migration;

3) will continue to sign bilateral agreements on mutual legal assistance in criminal and civil cases and the extradition and transfer of sentenced people;

4) maintain international cooperation and continue work to enter multilateral conventions and bilateral agreements in the field of education, science and culture, tourism and sport, youth policy, and implementation of common research and development projects;

5) will expand international cooperation on development of historical and contemporary information about Kazakhstan;

6) will support development of the Kazakh language and culture in localities with a high density of Kazakh diaspora abroad, and work to promote ties with their historical homeland;

7) interacts with Kazakhstan's civil society organizations and non-governmental sector in the areas of socio-economic, legal and international cultural and humanitarian development, attracts them to participate in relevant international events;

8) prevents criminal acts of hatred, racial discrimination, Islamophobia, extremism and nationalism;

9) contributes to further development of international, inter-cultural and inter-religious dialogue between the East and the West, the North and the South;

10) strengthens and promotes the international role of the Congress of leaders of world and traditional religions as a major platform for inter-faith dialogue. Participates in activities of the Alliance of Civilizations under the auspices of the UN, as well as in other initiatives and forums;

11) will continue efforts to promote diversity in the name of peace and sustainable development within the framework of the International Decade for the Rapprochement of Cultures 2013 - 2022, an initiative announced by the United Nations General Assembly based on a proposal of Kazakhstan.

9. Kazakhstan will continue utilizing the potential of parliamentary diplomacy both within multilateral and bilateral inter-parliamentary associations in order to develop political, trade-economic and cultural-humanitarian ties with the world's inter-parliamentary associations.

10. Kazakhstan will set out its position on major global issues, its own foreign policy initiatives, as well as political, socio-economic, cultural and human development issues in Kazakhstan in a timely and complete manner.

As part of these measures, Kazakhstan uses modern information and communication technologies to complement traditional tools of public diplomacy.

It is important to disclose and communicate Kazakhstan's goals, priorities, objectives and results of foreign policy activities, as well as international initiatives promoting Kazakhstan in the global arena, within the country.

Kazakhstan's presentation and communication with international media and audiences is implemented in accordance with the national program "Information Kazakhstan – 2020".

The basis of Kazakhstan's prosperity is the stable growth in all sectors of its economy, international recognition and political stability. Kazakhstan is a country looking into the future, which retains its culture, traditions and successfully realizes its huge creative potential in the nowadays dynamic world.

2. Main country and regional priorities of development of foreign trade of the Republic of Kazakhstan.

The Republic of Kazakhstan will continue to strengthen relations with *Russia* in all spheres of political, economic, trade and cultural cooperation on the basis of The Treaty on Good-Neighborliness and Alliance in the XXI century.

The Republic of Kazakhstan will deepen the comprehensive strategic partnership with *China* within the framework of high level political dialogue to develop energy, investment, technology, trade and economic, cultural and humanitarian cooperation, and promote interaction in transit and agricultural sectors, as well as on ecological and environmental issues, including the common use of trans-boundary water resources.

The development of multifaceted relations of the Republic of Kazakhstan with the *Central Asian states* – the Kyrgyz Republic, Tajikistan, Uzbekistan and Turkmenistan – will focus on strengthening regional efforts to jointly counter internal and external challenges and

threats, enhancing political, economic and cultural cooperation on a mutually beneficial and parity basis.

The Republic of Kazakhstan will continue to strengthen strategic partnership with the *United States*, aimed at development of political, trade and economic, investment, energy, science and technology, and humanitarian cooperation, and addressing urgent issues on the international agenda.

The Republic of Kazakhstan will strengthen strategic partnerships with *European countries*, based on the signed treaties or the treaties under negotiation, as well as relations with European institutions and associations.

Kazakhstan will continue efforts to develop full-scale relations with the *European Union* – the largest economic, trade and investment partner of Kazakhstan. In addition, Kazakhstan will work towards achieving a new Enhanced Partnership and Cooperation Agreement, as well as liberalization of visa regime with the prospect of a gradual transition to a visa-free regime for the citizens of the Republic of Kazakhstan and the European Union.

The Republic of Kazakhstan will continue its established and mutually beneficial cooperation with the *Republic of Belarus, Ukraine and Moldova*, as well as the South Caucasus states – Azerbaijan, Armenia and Georgia, which have an important role in the political, economic and transit interests of our country.

The Republic of Kazakhstan attaches great importance to strengthening comprehensive cooperation with the *Republic of Turkey*, which is based on the common historical roots and cultural values of the two nations.

The Republic of Kazakhstan intends to strengthen the Asian vector of its foreign policy. Efforts will be focused on enhancing cooperation in trade, investment, economic and technology with the countries of East, South, Southeast Asia, the Asia-Pacific region and their regional associations.

With *Japan and South Korea*, interaction will focus on attraction of innovative technologies, introduction of energy- and water-saving technologies to Kazakhstan, promoting development of Kazakhstan's education system in various fields, and strengthening the dialogues "Central Asia plus Japan" and "Central Asia and the Republic of Korea".

Kazakhstan will continue to support common efforts of the international community towards the national reconciliation and political settlement in *Afghanistan*, participate in the socio-economic development of *Afghanistan*, and in the process of eliminating related regional and global security threats.

Cooperation with *the Republic of India and the Islamic Republic of Pakistan* will be aimed at promoting political, economic and trade relations and cooperation within international organizations.

Kazakhstan will continue pursuing development of long-term, mutually beneficial economic and trade relations with the *Socialist Republic of Vietnam, the Republic of Indonesia, Malaysia, the Republic of Singapore, and the Kingdom of Thailand*.

The Republic of Kazakhstan, having close historical and spiritual ties with the states of the *Middle East*, is interested in stable and sustainable development of this region. Kazakhstan will pursue partnership relations with the states in all areas of mutual interest. We will continue the practice of coordinating common activities and mutual support within the framework of the UN, OIC, CICA and other international organizations.

The Republic of Kazakhstan lays great importance to cooperation with countries of *North, Central and South America*. In this paper, priority is given to development of trade - economic, investment and humanitarian ties and promotion of common interests in the UN and other international organizations.

The Republic of Kazakhstan will pay attention to expansion of relations with the *African continent*, to developing political and economic cooperation with African nations and bodies, including the African Union.

3. Trading balance of the Republic of Kazakhstan. Paying balance of the country. Commodity and geographical structure of export and import of the Republic of Kazakhstan.

Kazakhstan gains a considerable share of profit from the export of oil and other mineral resources, moreover, economic policy of Kazakhstan is focused on shifting away from increasing mined deposits, extraction volumes, and the export of raw materials and to more output of finished products with high value added.

Economic geography Kazakhstan consists of five large economic regions:

- North Kazakhstan — efficient grain economy, extraction of iron ore and coal, mechanical engineering, production of oil products and ferroalloys, and energy.
- East Kazakhstan – efficient nonferrous industry, energy, mechanical engineering and forestry products.
- West Kazakhstan is one of the largest oil and gas extraction regions.
- Central Kazakhstan – efficient ferrous and nonferrous industries, mechanical engineering, and cattle breeding.
- South Kazakhstan – cotton, rice, wool, grain, fruits, vegetables, grapes; efficient nonferrous industry, instrument manufacturing, light manufacturing, food production, fish farming, and forestry products.

As a result of a sharp reduction of trade surplus due to the rapid fall in world energy prices, the high current account surplus of the 1st quarter of 2014, 6.4 billion dollars, changed to a small deficit of 0.2 billion dollars in the end of the 1st quarter of 2015. However, the negative imbalance in the current account decreased 4 times compared to the preceding four quarters of the last year (figure 6.3).

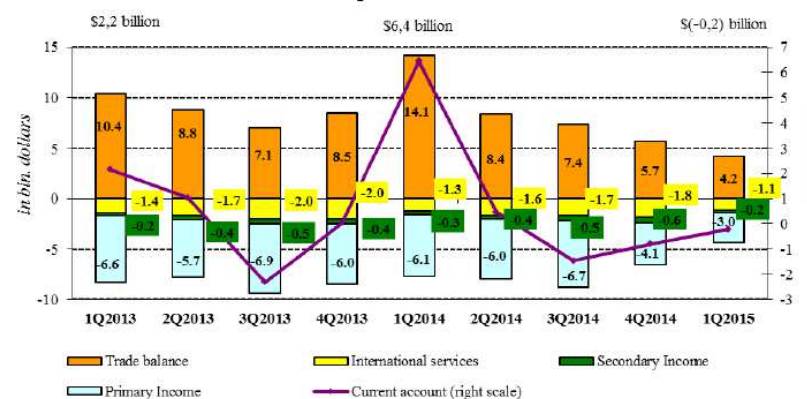


Figure 6.3 Current account of the Republic of Kazakhstan

The average Brent crude oil price for the reporting period amounted to 53.9 dollars per barrel in comparison with 107.9 dollars per barrel in the base period. Two-fold drop of oil price has led to a similar decrease in exports of goods and, in conjunction with the reduction of imports of goods, trade surplus has declined relative to the base period by 3.4 times to 4.2 billion dollars. Despite a significant drop in trade surplus, reduction of negative imbalances on other components of the current account decreased pressure on the current account towards deficit reduction. The largest decline of the negative balance was recorded for transactions with primary income, while revenues from export of goods due to foreign direct investors fell by more than 2 times. Taking into account the results of the reporting period and ongoing dynamics of the world prices for commodities from the beginning of 2015, negative current account balance is expected to remain at the end of 2015.

External trade turnover according to balance of payments classification (including revisions of the official statistical data) for the reporting period amounted to 20 billion dollars, which decreased by 11.5 billion dollars in comparison with the base period. Export of goods decreased to 12.1 billion dollars and import of goods decreased to 7.9 billion dollars (in the base period 22.8 billion dollars and 8.7 billion dollars, respectively).

Exports of goods registered by authorized bodies totaled 11.9 billion dollars in the reporting period, which is 47.4% below the official export of the base period.

In the reporting period, the share of mineral products in total exports of goods decreased by 6.4% to 78.5%; as a result, coefficient of commodity concentration in export fell to 79.4% against 85.2% in the base period. The second place in the total volume of exports belongs to products of non-ferrous metals with a share of 7.2%. With the growth of share in the value of exports by 1.4%, the third place is taken by products of ferrous metals – 4.6%. The share of grain products remained at the level of the base period – 1.5% (Table 6.1).

Table 6.1

Commodity structure of exports of the Republic of Kazakhstan

Commodity group	1Q 2014	1Q 2015
<i>Value (in mln. dollars)</i>		
All commodities	22 676,0	11 937,9
Main nomenclature, including	21 986,7	11 511,8
Mineral commodities	19 239,9	9 365,8
<i>including oil and natural gas</i>	16 690,1	7 723,8
Ferrous metals	733,0	551,3
Nonferrous metals	1 023,0	854,3
Grain	351,2	181,3
Other commodities	689,3	426,1
<i>Share (in %)</i>		
All commodities	100	100
Main nomenclature, including	97.0	96.4
Mineral commodities	84.8	78.5
<i>including oil and natural gas</i>	73.6	64.7
Ferrous metals	3.2	4.6
Nonferrous metals	4.5	7.2
Grain	1.5	1.5
Other commodities	3.0	3.6

In the reporting period, average contract price of Kazakhstani export of oil decreased to 480.6 dollars per ton in comparison with 820.3 dollars per ton in the base period. Physical deliveries of the main export products decreased by 4.2 million ton, the volume of oil shipped abroad for the reporting period amounted to 15.7 million ton, to the sum of 7.5 billion dollars.

In geographical structure of Kazakhstani exports, the European countries accounted for 65.3% of official registered exports, the Asian region – 19.9% and the CIS countries – 13.8%. In export distribution by countries among main consumers of domestic products, the first place is still occupied by Italy (20.8%), second place by the Netherlands (11.9%), followed by China (10.7%), Russia (7.5%) and France (5.7%).

According to the official statistics, *imports of goods* for the reporting period amounted to about 7.2 billion dollars, which is 15.2% below the level of the base period.

The value of imports declined primarily due to reduction of consumer non-food import, total import of which decreased by 29.7% (more than 0.5 billion dollars) in comparison with base period. In the reporting quarter, import of non-food goods amounted to 1.2 billion dollars with a share of 17.6% in total imports. The largest reduction of import in considered group was recorded in automobiles – by 253.2 million dollars to 233.1 million dollars and medicine – by 33.4 million dollars to 206.9 million dollars. Import of intermediate goods decreased by 11.5%, food goods – by 13.4% (Table 6.2).

Table 6.2

Commodity structure of imports of the Republic of Kazakhstan

Commodity group	1Q 2014	1Q 2015
<i>Value (in mln. dollars)</i>		
All commodities	8 469,9	7 184,5
Consumer goods	2 563,7	1 928,0
Food goods	767,3	664,8
Nonfood goods	1 796,4	1 263,3
Intermediate goods	2 596,0	2 297,0
Investments goods	3 015,0	2 801,1
Other goods	295,2	158,3
<i>Share (in %)</i>		
All commodities	100	100
Consumer goods	30.3	26.8
Food goods	9.1	9.3
Nonfood goods	21.2	17.6
Intermediate goods	30.6	32.0
Investments goods	35.6	39.0
Other goods	3.5	2.2

In geographical structure of Kazakhstani imports, the CIS countries retain the first place – 41.8% of total imports, the Europe and Asia countries – 20.5% and 29.3%, respectively. In terms of individual countries, the leading position, with a reduction in the share of total imports from 34.1% to 33.7%, is occupied by the Russian Federation, the second place – by China (18%), followed by the USA (5.9%), Italy (4.2%) and Germany (3.9%).

The trade turnover with the countries of the European Monetary Union (EMU), which are the main consumers of the Kazakhstan's raw materials, reduced by 45.2% relative to the base period, where exports

decreased by 47.8%, whereas import – by 22.3%. As a result, trade surplus with the countries of EMU decreased by more than 2 times compared to the base period and was valued at 5.1 billion dollars.

With the reduction of export flows to Russia by 30.7% and decrease of import deliveries by 16.2%, trade turnover with Russia amounted to 3.3 billion dollars, which is by 20.6% lower than that in the base period. The negative imbalance of trade transactions decreased by 4.2% to 1.5 billion dollars.

The deficit in international services for the reporting period in comparison with the base period decreased by 10.7% and amounted to 1.1 billion dollars. With a slight decrease in imports of services (by 0.7%), the reduction of negative imbalance of services was fully ensured by the increase in exports of services (by 8.9%) (Table 6.3).

Table 6.3

Components of the international services balance of the Republic of Kazakhstan

	Export		Change (increase (+), decrease (-))	Import		Change (increase (+), decrease (-))
	1Q 2014	1Q 2015		1Q 2014	1Q 2015	
TOTAL	1 334,3	1 453,0	8,9%	2 610,8	2 594,1	-0,6%
Manufacturing services on physical inputs	1,30	2,92	124%	8,24	4,97	-40%
Maintenance and repair services	6,97	10,17	46%	34,89	43,49	25%
Transport	873,71	912,84	4%	521,90	416,60	-20%
Tourism (travel)	212,36	300,06	41%	280,61	462,14	65%
Construction	15,61	8,12	-48%	385,21	266,54	-31%
Insurance and pension services	15,33	12,93	-16%	10,01	12,54	25%
Financial services	3,82	3,94	3%	19,32	18,82	-3%
Telecommunications, computer and information services	31,72	33,49	6%	72,41	85,25	18%
Charges for the use of intellectual property	0,10	0,17	68%	34,58	30,61	-11%
Other business services	123,14	111,40	-10%	1171,24	1166,11	-0,4%

Table 6.3 continuation

Personal, cultural, and recreational services	0,37	0,09	-76%	17,46	17,53	0,4%
Government services	49,86	56,87	14%	54,92	69,47	26%

In the reporting period, *export of services* amounted to about 1.5 billion dollars; its increase relative to the base period was largely due to the growth of services provided to nonresidents in item “Transport: freight”. Revenues of domestic transport companies increased by 7.8% to 815.4 million dollars, including incomes from nonresidents for pipeline transit of gas and oil through the territory of the country increasing by 15.9% to 597 million dollars.

Import of services remained almost at the level of the base period and amounted to about 2.6 billion dollars. The prevailing in the volume of imports *other business services* (45% of total imports of services or 1.2 billion dollars) were mainly related to nonresidents’ participation in realization of major infrastructure projects in the country. In the structure of this item, significant share falls on imports of architectural and engineering services - 39.8% or 0.5 billion dollars, as well as consulting services on business and management - 19.7% or 0.2 billion dollars.

In the geographical structure of international trade in services of Kazakhstan, foreign trade turnover in services for the reporting period to the member states of the Eurasian Economic Union accounted for 23.8%, the share of European and Asian countries equaled 25% and 18.4%, respectively.

The main consumers of Kazakhstani services are the Russian Federation - 33.9% of total exports, Uzbekistan (6.5%) and China (5.2%). In import of services by country structure Russian Federation leads – 17.4% of total value of imports, followed by the UK (9.3%), Turkey (8.4%) and China (4.1%).

From 10 countries, the big share of a goods turnover belongs only to three-four of them. For example, in 2014 are such countries as Russia - 15.7%, Italy - 14.7%, China – 14.7%, the Netherlands — 7.8%, i.e. 52.1% of a foreign trade turnover of the country depends on four partner countries. That, of course, isn't equitable to interests of diversification of external relations of the country, i.e. any changes of

policy and economy of these countries can have essential influence on easing of economic independence of the republic (Table 6.4).

Table 6.4

Ranging of the main 10 partner countries depending on their specific weight in export of Kazakhstan for 1997-2014

Place	1997		Specific weight, %	2014		Specific weight, %
	Country	Export, mln. dollar		Country	Export, mln. dollar	
1 place	Russia	2365,8	45,1	Italy	13 832,2	20,4
2 place	Netherlands	511,5	9,7	China	8 579,6	12,7
3 place	China	297,0	5,7	Netherlands	7 612,5	11,2
4 place	Switzerland	188,6	3,6	Russia	4 396,8	6,5
5 place	Germany	171,1	3,3	Switzerland	4 175,5	6,2
6 place	Italy	142,5	2,7	France	4 144,0	6,1
7 place	Ukraine	121,5	2,3	Romania	2 666,9	3,9
8 place	Turkey	70,4	1,3	Austria	2 506,2	3,7
9 place	Iran	49,2	0,9	Spain	2 127,9	3,1
10 place	Japan	45,2	0,8	Turkey	1 893,9	2,8

Table 14.3 demonstrates changes and shifts in the level of presence of these countries at export of Kazakhstan, so if in 1997 Russia, the Netherlands, China were in the top three, in 2014 this deal became the following: Italy (13 832,2 mln. dollars of the USA), China (8 579,6 mln. dollars of the USA) and Netherlands (7 612,5 mln. dollars of the USA).

Also in import of Kazakhstan the essential share is occupied in 2014 by the following countries: Russia (the share in import decreased from 49,9% to 33,4%), China (the share grew from 0,9% to 18%), Germany (from 5,2% to 5,5%), Ukraine (from 2,3% to 2,9%), Italy and France - shares grew from 0,8% to 2,6% and from 0,7% to 2,7% respectively, import from Turkey was reduced from 3,2% to 2,5%, the USA, South Korea and Uzbekistan occupy in import of the country 4,8%, 2,6% and 2,6% respectively that is result of the multipolar foreign policy pursued many years in the Republic of Kazakhstan (Table 6.5).

Table 6.5

Ranging of the main 10 partner countries depending on their specific weight in import of Kazakhstan for 1997-2014

Place	1997		Specific weight, %	2014		Specific weight, %
	Country	Import, mln. dollar		Country	Import, mln. dollar	
1 place	Russia	1889,7	49,9	Russia	11 349,6	33,4
2 place	Germany	196,7	5,2	China	6 116,2	18,0
3 place	Turkey	123,5	3,2	Germany	1 852,3	5,5
4 place	Ukraine	85,7	2,3	USA	1 625,2	4,8
5 place	Switzerland	55,2	1,5	Ukraine	998,7	2,9
6 place	China	34,7	0,9	France	930,5	2,7
7 place	Italy	30,2	0,8	South Korea	885,5	2,6
8 place	Netherlands	29,5	0,8	Uzbekistan	883,1	2,6
9 place	France	26,1	0,7	Italy	866,4	2,6
10 place	Iran	13,8	0,4	Turkey	855,5	2,5

Thus, for import of 10 countries of the main trading partners of Kazakhstan 72,6%, and are the share of other countries of 27,4%. From 10 countries more than 33% of import are the share only of one country — Russia.

Questions for discussion:

- What is the role of Kazakhstan in a world gross product, export of oil, gas, coal and other goods?
- Describe the major results of foreign trade liberalization of Republic of Kazakhstan.
- What are the competitive advantages of economy of Republic of Kazakhstan?
- What is source potential of Republic of Kazakhstan?
- How is energy resources of Kazakhstan used?

II SECTION. REGULATION OF INTERNATIONAL TRADE AND INTEGRATION ASSOCIATIONS

THEME 7. INTERNATIONAL TRADE POLICY AND ITS REGULATION

1. Concept, purposes and tasks of the international trade policy.
2. Integration, liberalization and removal of barriers in international trade.
3. Tariff methods (measures) of regulation of international trade.
4. Non tariff methods (measures) of regulation of international trade.

1. Concept, purposes and tasks of the international trade policy.

International (or global) trade policy is a policy of many countries-participants of international economic relations, embodied in the established international trade rules, customs and traditions, and also regulations of those international institutions authorised for such activity by the community of States of the world. The main subjects of international trade policy are: the UN, the WTO (through the decisions made during rounds of GATT-WTO), as well as a number of other institutions (including the IMF) within the framework of their competencies.

At the present stage of international trade is the most developed form of international economic relations. The need is due to the following factors:

- first, the formation of the world market as one of the historical prerequisites of the capitalist mode of production;
- secondly, the uneven development of individual sectors in different countries; production is the most dynamically developing branches, which is impossible to realize in the domestic market, exported abroad;
- thirdly, the trend that emerged at the current stage of development of economy for unlimited expansion of the size of production, while the domestic market capacity is limited solvent demand of the population. Therefore, the production inevitably

outgrows the bounds of domestic demand, and entrepreneurs in each country are in a bitter struggle for foreign markets.

Therefore, the interest of individual countries in enhancing their international relations due to the needs of sales in foreign markets, the need to obtain certain goods from abroad and, finally, the desire to extract higher profits in connection with the use of cheap labor and raw materials of developing countries.

The peculiarity of the development of international trade after the Second world war lies in its dynamic development. This was primarily attributed to the technological revolution, which stimulated the renewal and expansion of fixed capital, which was caused both by creation of new industries and radical technical reconstruction of old factories.

An important factor of the high economic growth in the postwar period was the state regulation of economy with the purpose of intensification of the processes of accumulation of capital and prevent economic crises. In addition, economic growth largely contributed to the increased power of the industrial enterprises within their production systems, Components and sometimes whole industries of national, and sometimes international production, introduced elements of planning and forecasting.

Significant role in the economic growth of the postwar period played and the workers struggles of the Western countries for improving their financial situation that forced industrial companies to follow the path of technical progress.

Immediate causes of world trade growth are important shifts in production in the scientific and technological revolution, which demanded the specialization and cooperation on an international scale. These processes served as the main factor in the rapid growth of trade between countries, and this growth occurred mainly at the expense of manufactures. The intensity of trade between countries was influenced by the increased export of capital and the strengthening of transnational companies at the expense of the specialization and cooperation of the enterprises located in different countries. In addition, in the structure of international trade has changed under the influence of scientific-technical revolution, the accelerated process of international division of labor and contributed to the growth in the exchange of high-tech products, manufactured goods and services.

An important factor in the development of international trade in the conditions of highly developed market economy is the export of capital, which stimulates the growth of foreign trade. The export of capital in the form of business entails the export of goods, as it is associated with the supply of means of production for enterprises established abroad.

The world market should be distinguished from national markets of individual countries. The global market covers the trading in a significant portion of the world, and has the following distinctive features. First, if in the national market the movement of goods is conditioned by such factors as production ties between enterprises and regions, the global market is strongly influenced by the boundaries of interstate and foreign trade policy of individual countries. Secondly, a distinctive feature of global market is the existence of special system - the system of world prices. Thirdly, the world market of goods is complemented by market services, in particular trafficking in licenses. Fourth, the structure and direction of trade of individual countries on the world market are determined by changing the competitiveness of their products. And finally, fifthly, global trade inherent to the uneven growth of trade of individual countries and world trade.

Thus the global market is developing in the conditions of sharp competitive struggle. Active role in it is played by those States that not only carry out activities for the protection of national market from imports of goods from abroad, but also pursue a policy aimed at speeding up the export of its products.

A feature of the world market currently is the development of inter-state forms of regulation. This emerged as a General trading organization (such as GATT, now the WTO) and regional economic integration organizations: EU, European free trade Association (EFTA), Latin American integration Association, the Association of South-East Asia, etc.

2. Integration, liberalization and removal of barriers in international trade.

Economic integration is the unification of economic policies between different states through the partial or full abolition of tariff and

non-tariff restrictions on trade taking place among them prior to their integration.

This is meant in turn to lead to lower prices for distributors and consumers with the goal of increasing the combined economic productivity of the states.

The degree of economic integration can be categorized into five stages:

1. Free trade area
2. Customs union
3. Single market
4. Economic and monetary union
5. Complete integration (political union)

These differ in the degree of unification of economic policies, with the highest one being the political union.

A *free trade area (FTA)* is formed when at least two states partially or fully abolish custom tariffs on their inner border. Free trade area is a type of trade bloc, a designated group of countries that have agreed to eliminate tariffs, quotas on most (if not all) goods traded between them. To exclude regional exploitation of zero tariffs within the FTA there is a rule of certificate of origin for the goods originating from the territory of a member state of an FTA. Unlike a customs union, members of a free trade area do not have a common external tariff (with respect to non-members), meaning different quotas and customs. To avoid evasion (through re-exportation) the countries use the system of certification of origin most commonly called rules of origin, where there is a requirement for the minimum extent of local material inputs and local transformations adding value to the goods. Goods that don't cover these minimum requirements are not entitled for the special treatment envisioned in the free trade area provisions. Examples of FTA: Central European Free Trade Agreement (CEFTA) North American Free Trade Agreement (NAFTA).

A *customs union* introduces unified tariffs on the exterior borders of the union (common external tariffs). A customs union is a type of trade bloc which is composed of a free trade area with a common external tariff. The participant countries set up common external trade policy.

A *common market* adds the unification of economic policies (tax, social welfare benefits etc.). A common market is a type of trade bloc

which is composed of a customs union with common policies on product regulation, and freedom of movement of the factors of production (capital and labour) and of enterprise. The goal is that the movement of capital, labour, goods, and services between the members is as easy as within them. A single market has many benefits. With full freedom of movement for all the factors of production between the member countries, the factors of production become more efficiently allocated, further increasing productivity. For both business within the market and consumers, a single market is a very competitive environment, making the existence of monopolies more difficult. This means that inefficient companies will suffer a loss of market share and may have to close down. However, efficient firms can benefit from economies of scale, increased competitiveness and lower costs, as well as expect profitability to be a result. Consumers are benefited by the single market in the sense that the competitive environment brings them cheaper products, more efficient providers of products and also increased choice of products. What is more, businesses in competition will innovate to create new products; another benefit for consumers.

An *economic and monetary union* is a type of trade bloc which is composed of a single market with a common currency. Example: Economic and Monetary Union of the European Union.

Complete economic integration is the final stage of economic integration. After complete economic integration, the integrated units have no or negligible control of economic policy, including full monetary union and complete or near-complete fiscal policy harmonisation.

Trade liberalization refers to a significant reduction or removal of trade barriers that restrict a country's international trade. These trade barriers include tariffs, non-tariff barriers (such as quotas and other government-imposed regulations), subsidies (such as those on production and exports), and other restrictive trade instruments.

Trade liberalization involves removing barriers to trade between different countries and encouraging free trade. Trade liberalization involves:

- Reducing tariffs;
- Reducing / eliminating quotas;
- Reducing non-tariff barriers.

Non-tariff barriers are factors that make trade difficult and expensive. For example, having specific regulations on making goods can

give an unfair advantage to domestic producers. Harmonising environmental and safety legislation makes it easier for international trade.

Advantages of Trade Liberalization

- Trade liberalization allows countries to specialize in producing the goods and services where they have a comparative advantage (produce at lowest opportunity cost). This enables a net gain in economic welfare.

- Lower prices. The removal of tariff barriers can lead to lower prices for consumers. E.g. removing food tariffs in West would help reduce the global price of agricultural commodities. This would be particularly a benefit for countries who are importers of food.

- Increased competition. Trade liberalization means firms will face greater competition from abroad. This should act as a spur to increase efficiency and cut costs or it may act as an incentive for an economy to shift resources into new industries where they can maintain a competitive advantage. For example, trade liberalization has been a factor in encouraging the UK to concentrate less on manufacturing and more on the service sector.

- Economies of scale. Trade liberalization enables greater specialization. Economies concentrate on producing particular goods. This can enable big efficiency savings from economies of scale.

Trade liberalization can give substantial economic benefits. However, these benefits may not be distributed equally. Also the success of trade liberalization depends on how flexible an economy is. If workers are highly educated and flexible, then it is easier for an economy to switch the nature of production. But, if there is inflexible, then structural unemployment may persist for quite a while.

The other issue for trade liberalization is that it often benefits developed countries more than developing economies. There is strong reasons to allow some tariff protectionism if developing economies are seeking to diversify out of low income growth agricultural industries. One function of the WTO is to support trade liberalization.

3. Tariff methods (measures) of regulation of international trade.

International trade increases the number of goods that domestic consumers can choose from, decreases the cost of those goods through

increased competition, and allows domestic industries to ship their products abroad. While all of these seem beneficial, free trade isn't widely accepted as completely beneficial to all parties.

Tariff is a tax levied on goods traded internationally, that is on imports. As a result, the price level of imported products rises and the demand for them decrease, thus imports are less.

Tariffs are often created to protect infant industries and developing economies, but are also used by more advanced economies with developed industries.

Here are five of the top reasons tariffs are used:

- Protecting Domestic Employment. The levying of tariffs is often highly politicized. The possibility of increased competition from imported goods can threaten domestic industries. These domestic companies may fire workers or shift production abroad to cut costs, which means higher unemployment and a less happy electorate. The unemployment argument often shifts to domestic industries complaining about cheap foreign labor, and how poor working conditions and lack of regulation allow foreign companies to produce goods more cheaply. In economics, however, countries will continue to produce goods until they no longer have a comparative advantage (not to be confused with an absolute advantage).

- Protecting Consumers. A government may levy a tariff on products that it feels could endanger its population. For example, South Korea may place a tariff on imported beef from the United States if it thinks that the goods could be tainted with disease.

- Infant Industries. The use of tariffs to protect infant industries can be seen by the Import Substitution Industrialization (ISI) strategy employed by many developing nations. The government of a developing economy will levy tariffs on imported goods in industries in which it wants to foster growth. This increases the prices of imported goods and creates a domestic market for domestically produced goods, while protecting those industries from being forced out by more competitive pricing. It decreases unemployment and allows developing countries to shift from agricultural products to finished goods.

- National Security. Barriers are also employed by developed countries to protect certain industries that are deemed strategically important, such as those supporting national security. Defense industries are often viewed as vital to state interests, and often enjoy significant

levels of protection. For example, while both Western Europe and the United States are industrialized, both are very protective of defense-oriented companies.

- Retaliation. Countries may also set tariffs as a retaliation technique if they think that a trading partner has not played by the rules. For example, if France believes that the United States has allowed its wine producers to call its domestically produced sparkling wines "Champagne" (a name specific to the Champagne region of France) for too long, it may levy a tariff on imported meat from the United States. If the U.S. agrees to crack down on the improper labeling, France is likely to stop its retaliation. Retaliation can also be employed if a trading partner goes against the government's foreign policy objectives.

There are several types of tariffs and barriers that a government can employ:

- Specific tariffs;
- Ad valorem tariffs;
- Licenses;
- Import quotas;
- Voluntary export restraints;
- Local content requirements.

Specific Tariffs: A fixed fee levied on one unit of an imported good is referred to as a specific tariff. This tariff can vary according to the type of good imported. For example, a country could levy a \$15 tariff on each pair of shoes imported, but levy a \$300 tariff on each computer imported.

Ad Valorem Tariffs: The phrase ad valorem is Latin for "according to value", and this type of tariff is levied on a good based on a percentage of that good's value. An example of an ad valorem tariff would be a 15% tariff levied by Japan on U.S. automobiles. The 15% is a price increase on the value of the automobile, so a \$10,000 vehicle now costs \$11,500 to Japanese consumers. This price increase protects domestic producers from being undercut, but also keeps prices artificially high for Japanese car shoppers.

4. Non tariff methods (measures) of regulation of international trade.

Non-tariff measures are generally defined as policy measures other than ordinary customs tariffs that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both. Since this definition is broad, a detailed classification is of critical importance so as to better identify and distinguish among the various forms of non-tariff measures.

The classification of non-tariff measures presented here is a taxonomy of all those measures considered relevant in today's situation in international trade. It was extensively discussed and agreed upon by several international organizations forming what was called the MAST group (Multi-Agency Support Team) to support the Group of Eminent Persons on Non-tariff Barriers established by the Secretary General of UNCTAD in 2006. Its work ranged from 2007 to 2012, during which time the classification was tested in the field for data collection. This version is presented as the 2012 version, the outcome of that discussion and testing. The classification is seen as evolving and should adapt to the reality of international trade and data collection needs.

This classification comprises technical measures, such as sanitary or environmental protection measures, as well as others traditionally used as instruments of commercial policy, e.g. quotas, price control, exports restrictions, or contingent trade protective measures, and also other behind-the-border measures, such as competition, trade-related investment measures, government procurement or distribution restrictions.

This classification acknowledges existence of measures and does not judge on legitimacy, adequacy, necessity or discrimination of any form of policy intervention used in international trade. It helps exporters worldwide to access transparent, reliable and comparable information and enables understanding of NTMs.

The classification of non-tariff measures encompasses 16 chapters (A to P), and each individual chapter is divided into groupings with depth up to three levels (figure 7.1).

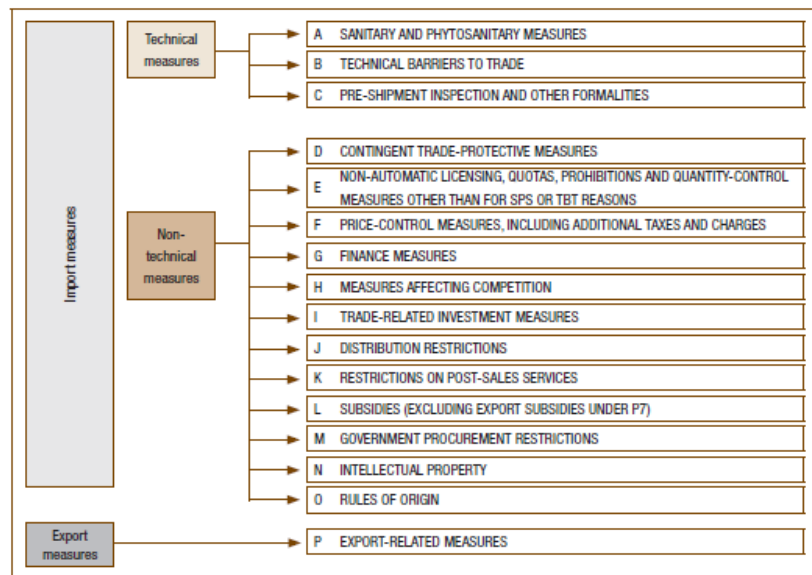


Figure 7.1 Non tariff measures classification

Chapter A deals with sanitary and phytosanitary measures, which are generally referred to as SPS. It gathers measures such as restriction for substances and ensuring food safety, and those for preventing dissemination of disease or pests. Chapter A also includes all conformity-assessment measures related to food safety, such as certification, testing and inspection, and quarantine.

Chapter B collects technical measures, also called TBT. It refers to measures such as labelling, standards on technical specifications and quality requirements, and other measures protecting the environment. As in the case for SPS, chapter B also includes all conformity-assessment measures related to technical requirements, such as certification, testing and inspection. The last chapter in the technical measures section is chapter C, which classifies the measures related to pre-shipment inspections and other customs formalities.

Chapter D groups the contingent measures, i.e. those measures implemented to counteract particular adverse effects of imports in the market of the importing country, including measures aimed at unfair

foreign trade practices. They include antidumping, countervailing, and safeguard measures.

Chapters E and F are the “hard” group of measures, traditionally used in trade policy. Chapter E includes licensing, quotas and other quantity control measures, including Tariff rate quotas. Chapter F lists price-control measures implemented to control or affect the prices of imported goods. Among the examples are those to support the domestic price of certain products when the import prices of these goods are lower; to establish the domestic price of certain products because of price fluctuation in domestic markets, or price instability in a foreign market; or to increase or preserve tax revenue. This category also includes measures other than tariffs measures that increase the cost of imports in a similar manner (para-tariff measures).

Chapter G lists the finance measures. It refers to measures restricting the payments of imports, for example when the access and cost of foreign exchange is regulated. It also includes measures imposing restrictions on the terms of payment.

Chapter H includes those measures affecting competition – those that grant exclusive or special preferences or privileges to one or more limited group of economic operators. They refer mainly to monopolistic measures, such as State trading, sole importing agencies or compulsory national insurance or transport.

Chapter I deals with trade-related investment measures, and groups the measures that restrict investment by requiring local content or requesting that investment be related to export in order to balance imports.

Chapters J and K relate to the way products, or services connected to the products, are marketed after imports. They are considered non-tariff measures because they could affect the decision of being imported. Chapter J, on distribution restrictions, refers to restrictive measures related to the internal distribution of imported products. Chapter K deals with restrictions on post-sales services, for example, restrictions on the provision of accessory services.

Chapters L, M, N and O relate to behind-the-border policies. Chapter L contains measures that relate to the subsidies that affect trade. Chapter M, on government procurement restriction measures, refers to the restrictions bidders may find when trying to sell their products to a foreign government. Chapter N gathers restrictions re-

lated to intellectual property measures and intellectual property rights. Chapter O, on rules of origin, groups the measures that restrict the origin of products or its inputs.

The last chapter, chapter P, is on export measures. It groups the measures a country applies to its exports. It includes export taxes, export quotas and export prohibitions.

Some measures include State trading enterprises, tariff rate quotas, rules of origin, export taxes and anti-dumping.

State trading enterprises (STEs) are enterprises authorized to engage in trade (exporting and/or importing) that is owned, sanctioned or otherwise supported by Government. They are legitimate trading entities, subject to WTO definition and rules.

Tariff rate quotas (TRQs) combine two policy instruments: quotas and tariffs. Imports entering under the quota portion are usually subject to a lower (sometimes zero), tariff rate. Imports above the quantitative threshold of the quota face a much higher tariff. In theory, TRQs are not quantitative restrictions, as the import quantity is not limited and above-quota imports are permitted at the higher tariff. In practice, above-quota tariffs are often prohibitive, thus the effect of a TRQ is often equal to a simple quota.

Rules of origin (RoO) are the criteria needed to determine the country of origin of a product. Their importance is derived from the fact that duties and import restrictions may depend upon the origin of imports. RoO are categorized as preferential and non-preferential. They serve different purposes. Nonpreferential RoO are generally used to determine the country of origin in regard to allocation of quotas and the effect of contingency protection measures. Preferential RoO determine which products can benefit from preferential access and are deemed necessary to enforce preferential schemes.

Local Content Requirement. Instead of placing a quota on the number of goods that can be imported, the government can require that a certain percentage of a good be made domestically. The restriction can be a percentage of the good itself, or a percentage of the value of the good. For example, a restriction on the import of computers might say that 25% of the pieces used to make the computer are made domestically, or can say that 15% of the value of the good must come from domestically produced components.

Export restrictions come in a variety of forms. They include quantitative restrictions or taxes imposed by the exporting country, charges, mandatory minimum export prices, strict export licensing and domestic sales requirements.¹⁹ Export restrictions are often considered domestic policies and are generally not notified to any international body. However, export restrictions have an important effect on international markets.

Voluntary Export Restraints (VER). This type of trade barrier is "voluntary" in that it is created by the exporting country rather than the importing one. A voluntary export restraint is usually levied at the behest of the importing country, and could be accompanied by a reciprocal VER. For example, Brazil could place a VER on the exportation of sugar to Canada, based on a request by Canada. Canada could then place a VER on the exportation of coal to Brazil. This increases the price of both coal and sugar, but protects the domestic industries.

Dumping. A firm is considered to be dumping if it exports a product at a lower price than the value of the product on its own domestic market. In a worst-case scenario, dumping can even act as a predatory price practice, forcing established domestic producers out of a market and leading to monopolistic positions by the exporting firm. Domestic firms may counteract dumping practices by filing anti-dumping petitions. The anti-dumping procedure is complex and regulated by a specific WTO agreement.

Subsidy is A benefit given by the government to groups or individuals usually in the form of a cash payment or tax reduction. The subsidy is usually given to remove some type of burden and is often considered to be in the interest of the public.

Embargo is a particular type of quotas prohibiting the trade, in other words, when imports from a specific country are totally banned. It is mostly put in place due to political reasons. For example, the United Nations imposed an embargo on trade with Iraq as a part of economic sanctions in 1990.

Licenses. A license is granted to a business by the government, and allows the business to import a certain type of good into the country. For example, there could be a restriction on imported cheese, and licenses would be granted to certain companies allowing them to act as importers. This creates a restriction on competition, and increases prices faced by consumers.

Import Quotas. An import quota is a restriction placed on the amount of a particular good that can be imported. This sort of barrier is often associated with the issuance of licenses. For example, a country may place a quota on the volume of imported citrus fruit that is allowed.

Questions for discussion:

- What are the differences between the international trade and foreign trade?
- What main directions of a trade policy do you know?
- Characterize the main methods of the foreign trade regulation.
- Characterize tariff and non-tariff methods of foreign trade regulation.
- What are consequences of introduction of customs tariffs for national producers, importers and consumers?
- What is strategic trade policy?
- What are Trade Barriers?

THEME 8. WORLD TRADE ORGANIZATION

1. Purposes, functions and activities of WTO. Legal and organizational structure of the WTO. Role of WTO in regulation of world trade.
2. The WTO and the Sustainable Development Goals.
3. WTO and Republic of Kazakhstan.

1. Purposes, functions and activities of WTO. Legal and organizational structure of the WTO. Role of WTO in regulation of world trade.

The World Trade Organization (WTO) (figure 8.1) is the only global international organization dealing with the rules of trade between nations. At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments. The goal is to help producers of goods and services, exporters, and importers conduct their business.



Figure 8.1 Emblem of WTO

The WTO was born out of negotiations, and everything the WTO does is the result of negotiations. The bulk of the WTO's current work comes from the 1986–94 negotiations called the Uruguay Round and earlier negotiations under the General Agreement on Tariffs and Trade (GATT). The WTO is currently the host to new negotiations, under the 'Doha Development Agenda' launched in 2001 (table 8.1).

Table 8.1

GATT and WTO trade rounds

Name	Start	Duration	Countries	Subjects covered	Achievements
1	2	3	4	5	6
Geneva	April 1947	7 months	23	Tariffs	Signing of GATT, 45,000 tariff concessions affecting \$10 billion of trade
Annecy	April 1949	5 months	13	Tariffs	Countries exchanged some 5,000 tariff concessions
Torquay	September 1950	8 months	38	Tariffs	Countries exchanged some 8,700 tariff concessions, cutting the 1948 tariff levels by 25%
Geneva II	January 1956	5 months	26	Tariffs, admission of Japan	\$2.5 billion in tariff reductions
Dillon	September 1960	11 months	26	Tariffs	Tariff concessions worth \$4.9 billion of world trade
Kennedy	May 1964	37 months	62	Tariffs, Anti-dumping	Tariff concessions worth \$40 billion of world trade
Tokyo	September 1973	74 months	102	Tariffs, non-tariff measures, "framework" agreements	Tariff reductions worth more than \$300 billion dollars achieved
Uruguay	September 1986	87 months	123	Tariffs, non-tariff measures, rules,	The round led to the creation of WTO, and extended the range

Table 8.1 continuation

1	2	3	4	5	6
				services, intellectual property, dispute settlement, textiles, agriculture, creation of WTO, etc	of trade negotiations, leading to major reductions in tariffs (about 40%) and agricultural subsidies, an agreement to allow full access for textiles and clothing from developing countries, and an extension of intellectual property rights.
Doha	November 2001	-	141	Tariffs, non-tariff measures, agriculture, labor standards, environment, competition, investment, transparency, patents etc	The round is not yet concluded.

Where countries have faced trade barriers and wanted them lowered, the negotiations have helped to open markets for trade. But the WTO is not just about opening markets, and in some circumstances its rules support maintaining trade barriers - for example, to protect consumers or prevent the spread of disease.

At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading nations. These documents provide the

legal ground rules for international commerce. They are essentially contracts, binding governments to keep their trade policies within agreed limits. Although negotiated and signed by governments, the goal is to help producers of goods and services, exporters, and importers conduct their business, while allowing governments to meet social and environmental objectives.

The system's overriding purpose is to help trade flow as freely as possible - so long as there are no undesirable side effects - because this is important for economic development and well-being. That partly means removing obstacles. It also means ensuring that individuals, companies and governments know what the trade rules are around the world, and giving them the confidence that there will be no sudden changes of policy. In other words, the rules have to be 'transparent' and predictable.

Trade relations often involve conflicting interests. Agreements, including those painstakingly negotiated in the WTO system, often need interpreting. The most harmonious way to settle these differences is through some neutral procedure based on an agreed legal foundation. That is the purpose behind the dispute settlement process written into the WTO agreements.

The World Trade Organization - the WTO - is the international organization whose primary purpose is to open trade for the benefit of all.

The WTO provides a forum for negotiating agreements aimed at reducing obstacles to international trade and ensuring a level playing field for all, thus contributing to economic growth and development. The WTO also provides a legal and institutional framework for the implementation and monitoring of these agreements, as well as for settling disputes arising from their interpretation and application. The current body of trade agreements comprising the WTO consists of 16 different multilateral agreements (to which all WTO members are parties) and two different plurilateral agreements (to which only some WTO members are parties).

Over the past 60 years, the WTO, which was established in 1995, and its predecessor organization the GATT have helped to create a strong and prosperous international trading system, thereby contributing to unprecedented global economic growth. The WTO currently has 162 members, of which 117 are developing countries or separate

customs territories. WTO activities are supported by a Secretariat of some 700 staff, led by the WTO Director-General. The Secretariat is located in Geneva, Switzerland, and has an annual budget of approximately CHF 200 million (\$180 million, €130 million). The three official languages of the WTO are English, French and Spanish.

Decisions in the WTO are generally taken by consensus of the entire membership. The highest institutional body is the Ministerial Conference, which meets roughly every two years (figure 8.2). A General Council conducts the organization's business in the intervals between Ministerial Conferences. Both of these bodies comprise all members. Specialised subsidiary bodies (Councils, Committees, Subcommittees), also comprising all members, administer and monitor the implementation by members of the various WTO agreements.

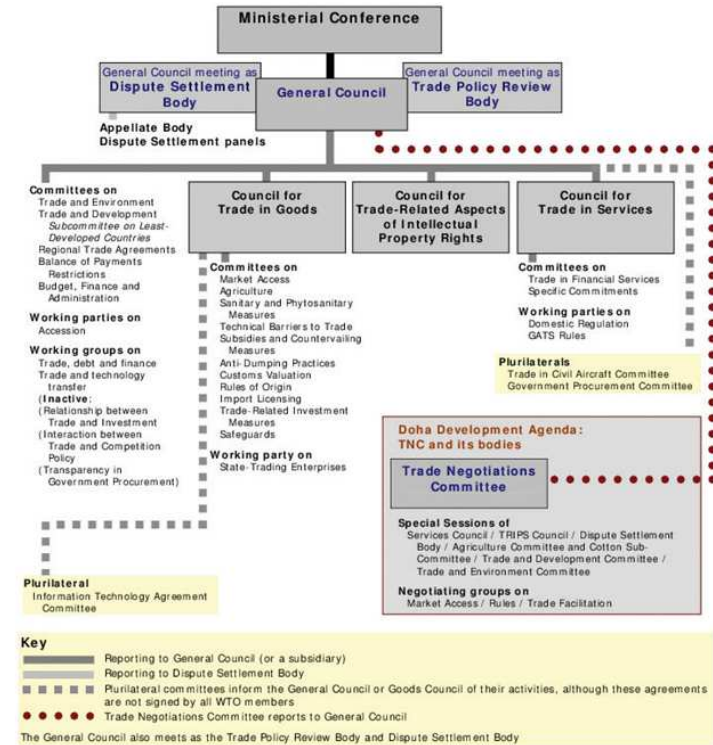


Figure 8.2 Structure of WTO

More specifically, the WTO's main activities are:

- negotiating the reduction or elimination of obstacles to trade (import tariffs, other barriers to trade) and agreeing on rules governing the conduct of international trade (e.g. antidumping, subsidies, product standards; etc.
- administering and monitoring the application of the WTO's agreed rules for trade in goods, trade in services, and trade-related intellectual property rights;
- monitoring and reviewing the trade policies of our members, as well as ensuring transparency of regional and bilateral trade agreements;
- settling disputes among our members regarding the interpretation and application of the agreements;
- building capacity of developing country government officials in international trade matters;
- assisting the process of accession of some 30 countries who are not yet members of the organization;
- conducting economic research and collecting and disseminating trade data in support of the WTO's other main activities;
- explaining to and educating the public about the WTO, its mission and its activities.

The WTO's founding and guiding principles remain the pursuit of open borders, the guarantee of most-favoured-nation principle and non-discriminatory treatment by and among members, and a commitment to transparency in the conduct of its activities. The opening of national markets to international trade, with justifiable exceptions or with adequate flexibilities, will encourage and contribute to sustainable development, raise people's welfare, reduce poverty, and foster peace and stability. At the same time, such market opening must be accompanied by sound domestic and international policies that contribute to economic growth and development according to each member's needs and aspirations.

2. The WTO and the Sustainable Development Goals.

The Sustainable Development Goals (SDGs) are a set of 17 goals and 169 targets that members of the United Nations have endorsed as part of the 2030 Agenda for Sustainable Development. The purpose of

the SDGs is to mobilize action over the next 15 years towards ending poverty and hunger, protecting the world from environmental degradation, and fostering prosperous, peaceful, just and inclusive societies. The SDGs take the place of the Millennium Development Goals, a set of eight goals that UN members agreed to achieve by 2015.

The SDGs put significant emphasis on the role that trade can play in promoting sustainable development. There are direct references to WTO activities in many of the SDGs, including:

- 1) SDG 2 on hunger, food security, nutrition and sustainable agriculture
- 2) SDG 3 on healthy lives and wellbeing
- 3) SDG 8 on economic growth, employment and work
 - Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries;
 - Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors;
 - Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services;
 - Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead;
 - By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value;
 - By 2020, substantially reduce the proportion of youth not in employment, education or training;
 - Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms;

- Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment;

- By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products;

- Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all;

- Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries;

- By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization.

4) SDG 10 on inequalities within and among countries

5) SDG 14 on oceans, seas, and marine resources.

6) SDG 17 on strengthening the global partnership for sustainable development contains a separate section on trade, including a commitment to promoting a “universal, rules-based, open, non-discriminatory and equitable multilateral trading system” under the WTO.

3. WTO and Republic of Kazakhstan.

Kazakhstan completed its accession negotiations and the Working Party adopted the accession package and referendum at the 20th and final meeting of the Working Party on 22 June 2015. The General Council approved the accession on 27 July 2015. On 30 November 2015, Kazakhstan joins the WTO as its 162nd Member (table 8.2).

The process of the introduction of Kazakhstan in the World Trade Organization has begun on January, 26th, 1996 with giving in Secretary of the WTO of an official statement about the introduction of Kazakhstan into the WTO.

In February of 1996 Kazakhstan was assigned the status of the observer-country within WTO.

At the same time the Working group under the introduction of Kazakhstan into the WTO (further Working group) which structure

includes now 40 member countries of the WTO is created. All basic trading partners of Kazakhstan which has expressed desire to discuss a condition and the obligation of republic at an accession to WTO, were included into Working group. The chairman of the Working group is Vesa Himanen, the Ambassador of Finland in the United Nations and other international organizations in Geneva.

With a view of perfection of a customs-tariff policy, working out of the co-ordinated trunk-call position of Kazakhstan in the course of an accession to WTO on concrete questions of economic policy, including conditions and stages of joining of Kazakhstan to the WTO, and also to its separate agreements concluded during bilateral and multilateral trading negotiations in 1996 in republic the Interdepartmental commission concerning the WTO which has been transformed subsequently to the Interdepartmental commission of Republic Kazakhstan concerning a commercial policy and participation in the international economic organizations has been created.

From 1996 through 2003 great volume of information materials and obligatory documents had been directed to WTO Secretary according to accession to WTO conditions.

In 2003 Kazakhstan had finished the information period of process of joining to the WTO and has entered an active phase of negotiating process with member countries of the Working group by definition of conditions of a WTO membership.

At the same time, it is necessary to notice that important the moments in the course of the introduction of Kazakhstan into the WTO working out and the subsequent consideration of the project of the Report of Working group under the introduction of Kazakhstan into the WTO also is. The project of the Report of the Working group (further – project WGR) is the basic document reflecting the rights and the obligations which Kazakhstan should accept following the results of all negotiations. Project WTR is the basic document which describes a trade and economic mode and fixes conditions and obligations of the country within the limits of a WTO membership. The specified Working group includes all interested members of the WTO.

Table 8.2

The stages of Kazakhstan's accession to the WTO

1	The process of the introduction of Kazakhstan in the World Trade Organization	29 January 1996
2	Kazakhstan was assigned the status of the observer-country within WTO	February of 1996
3	Great volume of information materials and obligatory documents had been directed to WTO Secretary according to accession to WTO conditions	From 1996 through 2003
4	Kazakhstan had finished the information period of process of joining to the WTO and has entered an active phase of negotiating process with member countries of the Working group by definition of conditions of a WTO membership.	2003
5	Kazakhstan became the 162 members of the WTO	2015

Purposes and objectives of accession:

- Strengthening of process of integration into economic;
- Decrease in tariff and not tariff barriers in trade in the industrial and agricultural goods, the further liberalization of international trade and creation of conditions for a free and fair competition in the world markets;
 - Regulation of international trade by services on the basis of the developed principles and rules, its further expansion and gradual liberalization by negotiation;
 - Creation of the mechanism of effective protection in the field of trading aspects of the rights to intellectual property taking into account distinctions in national legal systems;
 - Creation of the effective multilateral mechanism of settlement of trading disputes;
 - Realization of monitoring of a national commercial policy of member countries of the WTO;
 - Availability of the world markets to export of the Kazakhstan goods and services;
 - Reduction of the trading legislation of the country in conformity with the international norms and standards;

- Formation in the country of the predicted trading-investment environment;

- Maintenance of functions of "a trunk-call platform» for periodic carrying out of multilateral trading negotiations.

Kazakhstan as a country with market economy, committed to achieving a strong position in the international community is seeking to improve its foreign trade potential. WTO membership is seen as a key factor to increase access of local products to world markets, its competitiveness, development of domestic business, increase of investments and stabilization of economic growth. It is natural that Kazakhstan will seek and should seek to resolve their trade relations with the countries-members of WTO on acceptable and favorable terms.

Important questions in the field of economic and trade policy of the country as the rules and practice of pricing regulation, state ownership and privatization, taxation system and the application of taxes to imported goods, subsidies in individual economic sectors, the foreign investment regime, the system of currency exchange and payments of the import customs tariff, including any existing tariff preferences, customs duties, protective measures and other protection measures for domestic producers (anti-dumping and countervailing measures), import licensing, export controls, state trading enterprises, the system of standardization and certification of imported goods, Sanitary and phytosanitary measures, the protection of intellectual property rights, etc.

Accession to the WTO is one of the major priorities of the Government's policy aimed at full integration into the world economy through enhancing competitiveness and diversification of the national economy and making fair contribution to the world economic welfare.

Questions for discussion:

- What are purposes of creation and basic principles of the WTO (GATT)?
- What are rounds of negotiations within the WTO and what are their results?
- What are the tasks and structures of WTO?
- What are the benefits, problems and losses from the accession of Republic of Kazakhstan to the WTO?

- Do you know about regional trading agreements in Central Asia? What are they?

- What is an essence of disagreements of the developed and developing member countries of the WTO?

- What is an essence of the main collected problems within the WTO?

- What is the advantage for Republic of Kazakhstan from a rule of conference of the WTO in Cancun (Mexico)?

- What is the advantage for Republic of Kazakhstan from a rule of conference of the WTO in Kuala-Lumpur (Malaysia)?

THEME 9. TRADE AND ECONOMIC COOPERATION IN EUROPE

1. Historical bases of integration processes in Europe: Customs union – 1946, EOUST-1952, Euroatom - 1957.

2. Roman Agreements and European Economic Community (EEC) creation. Maastricht agreement and European Union (EU) creation. European Free Trade Association (EFTA).

3. Foreign trade of EU. Commodity and geographical structure of international trade of the EU.

1. Historical bases of integration processes in Europe: Customs union – 1946, EOUST-1952, Euroatom - 1957.

European Union (EU), international organization comprising 28 European countries and governing common economic, social, and security policies. Originally confined to western Europe, the EU undertook a robust expansion into central and eastern Europe in the early 21st century. The EU's members are Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom. The EU was created by the Maastricht Treaty, which entered into force on November 1, 1993. The treaty was designed to enhance European political and economic integration by creating a single currency (the euro), a unified foreign and security policy, and common citizenship rights and by advancing cooperation in the areas of immigration, asylum, and judicial affairs.

Moreover, in that (after II World War) time the world witnessed the beginning of Cold War. The United States, applying the denominated Truman Doctrine to curb the expansion of communism and of the Soviet Union, launched the Marshall Plan to alleviate the difficulties of European countries. It was to foster economic development in a destroyed Europe with the political objective of impeding the extension of the communism.

The USA promoted the foundation of a centralised European organization that administered and organised the delivery of the massive

economic help of the Plan Marshall. In 1948, the Organization for European Economic Cooperation (OEEC) was established with this aim. This was one of the first institutions that involved a great part of Western European countries. OEEC helped to liberalise the trade among the member States, introduced ideas in favour of monetary agreements and enhanced economic cooperation.

One year before, in 1948, the Benelux (Customs Union between Belgium, the Netherlands and Luxembourg) had started working by introducing a common external tariff. This Union had been created in 1944, before the end of the Second World War.

Benelux is a union of states comprising three neighboring countries in northwestern Europe: Belgium, the Netherlands and Luxembourg. The union's name is formed from joining the first two or three letters of each country's name – BELgium NETHERlands LUXembourg – and was first used to name the customs agreement that initiated the union (signed in 1944). It is now used in a more general way to refer to the geographic, economic and cultural grouping of the three countries (figure 9.1).

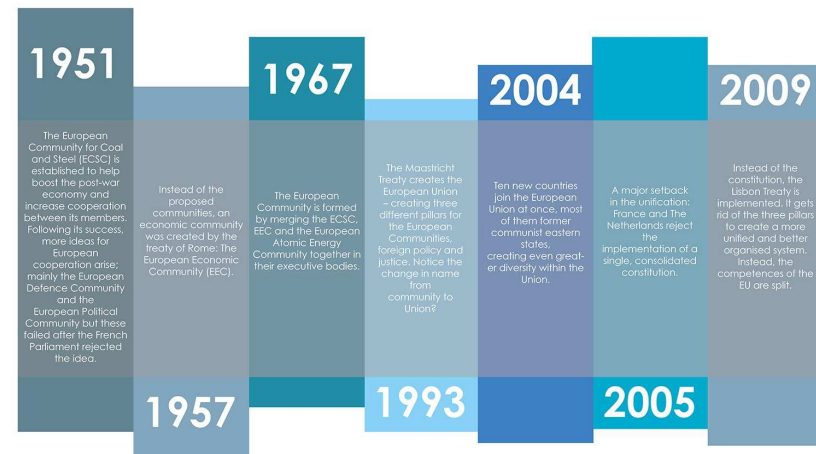


Figure 9.1 Treaties of the European Union

From Schuman Declaration to the Treaty of Rome (1950-1957)

The first step in the process of foundation of the European Community was given by the French Foreign Minister, Robert Schuman.

In a speech inspired by Jean Monnet, Schuman proposed that France and Germany and any other European country wishing to join them pool their coal and steel resources. This plan of economic integration looked for developing the approach between France and Germany, moving definitively away the haunt of war in Europe.

The EU represents one in a series of efforts to integrate Europe since World War II. At the end of the war, several western European countries sought closer economic, social, and political ties to achieve economic growth and military security and to promote a lasting reconciliation between France and Germany. To this end, in 1951 the leaders of six countries —Belgium, France, Italy, Luxembourg, the Netherlands, and West Germany—signed the Treaty of Paris, thereby, when it took effect in 1952, founding the European Coal and Steel Community (ECSC) (The United Kingdom had been invited to join the ECSC and in 1955 sent a representative to observe discussions about its ongoing development, but the Labour government of Clement Attlee declined membership, owing perhaps to a variety of factors, including the illness of key ministers, a desire to maintain economic independence, and a failure to grasp the community's impending significance). The common High Authority common was presided by Jean Monnet. The ECSC created a free-trade area for several key economic and military resources: coal, coke, steel, scrap, and iron ore. To manage the ECSC, the treaty established several supranational institutions: a High Authority to administrate, a Council of Ministers to legislate, a Common Assembly to formulate policy, and a Court of Justice to interpret the treaty and to resolve related disputes. A series of further international treaties and treaty revisions based largely on this model led eventually to the creation of the EU.

The foreign ministers of the Six, presided over by the Belgian Paul Henri Spaak, met in a Conference in Messina (Italy) in 1955. The agreements they reached there meant a definitive step in the European construction: the 25th March 1957, the Six signed the Treaties of Rome, establishing the European Economic Community (EEC) and the European Atomic Energy Community (Euratom).

European Atomic Energy Community (Euratom or EAEC), economic organization that came into being as the 3d treaty organization of what has become the European Union; established by the Treaty of Rome (1958). The members pledged themselves to the

common development of Europe's nuclear energy resources by coordinating their nuclear research and development programs and by permitting the free movement of nuclear raw materials, equipment, investment capital, and specialists within the community. Euratom is vested with wide powers, including the right to conclude contracts, obtain raw materials, and establish standards to protect workers and the general population against the dangers of radiation. It is administered by the European Commission, which is advised by the Scientific and Technical Committee and the Economic and Social Committee.

2. Roman Agreements and European Economic Community (EEC) creation. Maastricht agreement and European Union (EU) creation. European Free Trade Association (EFTA).

On the 25th March 1957, two treaties were signed in Rome that gave birth to the European Economic Community (EEC) and to European Atomic Energy Community (Euratom): the Treaties of Rome. The signatories of the historic agreement were Christian Pineau on behalf of France, Joseph Luns from the Netherlands, Paul Henri Spaak from Belgium, Joseph Bech from Luxemburg, Antonio Segni from Italy and Konrad Adenauer from the Federal Republic of Germany. The Treaties were ratified by National Parliaments over the following months and came into force on 1st January 1958.

The Treaty establishing the EEC affirmed in its preamble that signatory States were "determined to lay the foundations of an ever closer union among the peoples of Europe". In this way, the member States specifically affirmed the political objective of a progressive political integration.

In fact, the brand new institution was a customs union. As a consequence, the EEC was colloquially known as "Common Market". The member countries agreed to dismantle all tariff barriers over a 12-year transitional period. In view of the economic success that freer commercial exchanges brought about, the transitory term was shortened and in July 1968 all tariffs among the EEC States were abrogated. At the same time, a common tariff was established for all products coming from third countries.

As a matter of fact, the common market meant exclusively free circulation of goods. Free movement of persons, capitals and services continued to be subject to numerous limitations. It was necessary to wait until the Single European Act, in 1987, when a definitive boost was given to establish a genuine unified market. This brought about the European Union Treaty in 1992.

The other essential agreement included in the Treaty of Rome was the adoption of a Common agricultural policy (CAP). Essentially, the CAP enacted a free market of agricultural products inside the EEC and established protectionist policies that guaranteed sufficient revenues to European farmers, avoiding competition from third countries' products by guaranteeing agricultural prices. With the aim of financing the CAP, the European Agricultural Guidance and Guarantee Fund (EAGGF) was established in 1962. The CAP has continued absorbing most of the community budget, and its reform has been one of the most badly needed in recent years.

The Treaty of Rome also established the prohibition of monopolies, some transport common policies, and the grant of some commercial privileges to the colonial territories of the member States.

The Treaty of Rome signified the triumph of a very realistic and gradualist approach to building the EU. This method was personified by Jean Monnet. The failure of the CED demonstrated that tremendous obstacles lay in the path of the final construction of a political union. Consequently, the new strategy sought to adopt a process of integration that gradually incorporated diverse economic sectors and that established supranational institutions with increasingly political competences.. The EEC from its birth was based on a series of institutions: the European Commission, the European Commission, the European Assembly, later known as European Parliament, the Court of Justice and the Economic and Social Committee, whose competences were enlarged and modified in the diverse agreements and treaties that succeeded the Treaty of Rome.

To sum up, a process put in motion in which progressive economic integration was paving the way to the long term objective, the political union.

The Treaty that instituted the EURATOM tried to create the conditions for developing a strong nuclear industry. It was much less important than the treaty that brought into existence the EEC and, in

fact, when people speak about the treaties of Rome refer, incorrectly, to the one which established the EEC.

The absence of the United Kingdom constituted the main political problem that the EEC had to face in its early years. The British government refused to participate for different reasons:

- The importance of its commercial, political and, even, sentimental bonds with its colonies and former colonies, most of them integrated in the Commonwealth;

- Its refusal to join a customs union. The British government defended the establishment of a free trade area, in which the internal customs rights were abolished, but national governments would maintain their competences of enacting their own tariffs with regard to third countries;

- The fact that Britain was totally opposed to embarking on a project whose long-term aim was to surrender the sovereignty of national states to supranational European institutions. In other words, the British were, and many of them still remain, very far from the objective of an European political union.

After negotiations to integrate Britain in the EEC broke down, the British government proposed the foundation of the European Free Trade Association (EFTA), Sweden, Switzerland, Norway, Denmark, Austria and Portugal joined to that new organisation. It fell far short of any project of political integration, and constituted a mere free trade area.

Shortly, Britain realized its mistake. Whereas the EEC witnessed a spectacular economic growth, with growth rates in the sixties clearly superior to those in America, Great Britain continued its downward trend in relation to the Continent.

Therefore, in August of 1961 the British Prime Minister requested the beginning of negotiations on accession to the EEC. However, after starting negotiations, the French leader, Charles De Gaulle, in 1963 vetoed British accession to the EEC. He was resolved to build up a Europe of the homelands that would become a third superpower between the USA and the USSR, and was suspicious of the Britain's close bonds with Washington. In 1967, when British Labour prime minister, Harold Wilson, again requested to join the EEC, the French general once more banned the accession of the United Kingdom.

In the second half of the 80s, the integration process received an

important political impulse, largely due to Jacques Delors. A French socialist, he was elected president of the European Commission in 1985. The first step was the enacting of the Single European Act in 1986.

The Single European Act, signed in Luxembourg and The Hague and came into force on 1 July 1987, was the first modification of the foundational treaties of the European Communities, that is to say, the Treaty of Paris in 1951 and the Treaties of Rome in 1957.

European Free Trade Association (EFTA), group of four countries—Iceland, Liechtenstein, Norway, and Switzerland—organized to remove barriers to trade in industrial goods among themselves, but with each nation maintaining its own commercial policy toward countries outside the group. Headquarters are in Geneva, Switzerland. The member countries of the Organisation for European Economic Co-operation (OEEC; 1948) originally proposed an OEEC-wide free-trade area to which countries not wishing to join the European Economic Community (EEC; now part of the European Union) could belong and in which the EEC would function as one unit. When negotiations for this broke down in November 1958, the “outside” group, then composed of Austria, Denmark, Norway, Portugal, Sweden, Switzerland, and the United Kingdom (later known as the Outer Seven), decided to join together in the EFTA to strengthen their future bargaining power in establishing the wider free-trade area. The EFTA is based on the Stockholm Convention signed by the seven nations in November 1959 and becoming operative in May 1960. Finland became an associate member in 1961 and a full member in 1986; Iceland was admitted to full membership in 1970; and Liechtenstein (formerly associated through a customs union with Switzerland) became a full member in 1991. In January 1973, however, Britain and Denmark became members of the EEC and left the EFTA. Portugal joined the EEC in 1986. Austria, Finland, and Sweden became members of the European Union in 1995.

The original convention committed the members to a schedule of tariff reductions and quota liberalizations for industrial goods but also included provisions for escape if the burden imposed on domestic economies proved too great. Provisions also were made for bilateral agreements to liberalize trade in agricultural products. By 1967, import duties on most industrial goods had been abolished. In 1977 the EFTA

entered into agreements with the EEC that established industrial free trade between the two organizations' member countries. In October 1991 the members of the EFTA and EEC agreed to establish a free-trade zone among themselves called the European Economic Area (EEA), which came into effect on January 1, 1994. At that time Switzerland (which did not ratify the agreement) and Liechtenstein (bound by its union with Switzerland) did not join the EEA, but the following year Liechtenstein, after a series of negotiations with Switzerland, became a full member.

A minimal administrative structure was set up by the original convention; meetings at the ministerial level usually occur twice yearly, and meetings at the official level take place every other week. Decisions are implemented by the individual governments themselves; EFTA holds no supranational powers.

The Treaty of the European Union (TEU), also known as Treaty of Maastricht for having been signed in that Dutch town, constitutes a turning point in the European integration process. By Modifying the previous treaties -Paris, Rome and Single European Act-, the initial economic objective of the Community, building a common market, was outstripped and, for the first time, a distinctive vocation of political union was claimed.

The Treaty of Maastricht changed the official denomination of the EEC. Henceforth, it will be known as European Union.

The Maastricht Treaty (formally known as the Treaty on European Union), which was signed on February 7, 1992, created the European Union. The treaty consisted of three main pillars: the European Communities, a common foreign and security policy, and enhanced cooperation in home (domestic) affairs and justice. The treaty changed the name of the European Economic Community to the European Community (EC), which became the primary component of the new European Union. The agreement gave the EC broader authority, including formal control of community policies on development, education, public health, and consumer protection and an increased role in environmental protection, social and economic cohesion, and technological research. It also established EU citizenship, which entailed the right of EU citizens to vote and to run for office in local and European Parliament elections in their country of residence, regardless of national citizenship.

The Maastricht Treaty specified an agenda for incorporating monetary policy into the EC and formalized planning that had begun in the late 1980s to replace national currencies with a common currency managed by common monetary institutions. The treaty defined a set of "convergence criteria" that specified the conditions under which a member would qualify for participation in the common currency. Countries were required to have annual budget deficits not exceeding 3 percent of gross domestic product (GDP), public debt under 60 percent of GDP, inflation rates within 1.5 percent of the three lowest inflation rates in the EU, and exchange-rate stability. The members that qualified were to decide whether to proceed to the final stage—the adoption of a single currency. The decision required the establishment of permanent exchange rates and, after a transition period, the replacement of national currencies with the common currency, called the euro.

3. Foreign trade of EU. Commodity and geographical structure of international trade of the EU.

The EU is the largest economy in the world, the biggest exporter and importer, the leading investor and recipient of foreign investment and the biggest aid donor. With just 7 % of the world's population, it accounts for over one quarter of the world's wealth as measured by gross domestic product (GDP) — the total value of goods and services produced.

The Union has built its trade policy on three main areas of activity:

- An active role in the multilateral negotiations conducted under the auspices of the WTO;
- Deeper bilateral trade relations with individual countries and regions and the application of unilateral measures, such as the granting of preferential treatment to developing countries;
- A strategy to target and remove specific barriers in key export markets.

Trade policy is part of the instruments used by the EU to manage its external relations and forms part of the EU's external action. Within this context, trade policy is also a vehicle for promoting

European principles and values. The main priority of trade policy is however internal to the EU, namely boosting growth and jobs in the EU. Trade policy is a tool to link the EU to the new centres of global growth and transmit growth and job creation into Europe.

The European Union is the largest trade Association in the world. From the point of view of trade regulation, the European Union is a customs Union, i.e. the geographical space in which there is free movement of goods and services and in which there are common customs rules in relation to third countries. Remaining individual participants, the EU countries hold common positions in the world trade organization.

The first legal provisions regarding the common trade policy of the EU were laid down in the Treaty of Rome establishing the European Economic Community, signed in 1957.

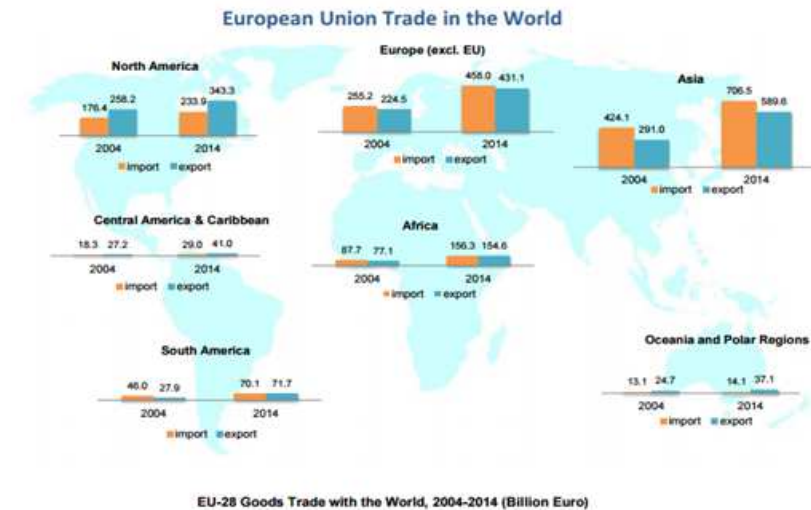


Figure 9.2 European Union Trade in the World, 2004-2014

The figure 9.2 shows the foreign trade turnover of the European Union. Regional structure of foreign trade of the EU in recent years has undergone significant changes. Growing importance of developing Asia. However, the traditional ties with European countries – not

members of the Union and the countries of North America remain important.

EU imports from North America compared to 2004, in 2014 increased by 1.3, with 2014 imports amounted 233,9 billion Euro and in 2004 to 176.4 billion Euro, and exports to these countries increased by 1.3. A significant proportion of EU external trade refers to the countries of Asia, i.e. in the period from 2004-2014 imports increased 1.8 in 2014 458,0 billion Euro and in 2004 - 255,2 billion Euro and export volume in 2014 was 431,1 billion Euro, and in 2004 — 224,5 billion Euro, then increased by 1.9.

External trade the EU is rather diversified from a country perspective. In exports, according to data for 2015, the largest share continue to maintain the USA, in second place – China (9,5%), the third – Switzerland (8,4%), the fourth – Turkey (4,4%). Important buyers of European goods are Russia, Sweden, Norway, South Korea, United Arab Emirates and Saudi Arabia (table 9.1).

Table 9.1

10 major EU export partners in 2015

Rank	EU Exports	Million euro	% world
1	USA	369,549	20,7
2	China	170,399	9,5
3	Switzerland	150,833	8,4
4	Turkey	78,959	4,4
5	Russia	73,905	4,1
6	Japan	56,572	3,2
7	Norway	48,867	2,7
8	United Arab Emirates	48,480	2,7
9	South Korea	47,882	2,7
10	Saudi Arabia	40,248	2,2
	Total	1 085 694	

In import of the EU deliveries from China – 20,3% came out on top, on the second place in 2015 was the USA (14,3%), on the third – Russia (7,9%) (table 9.2).

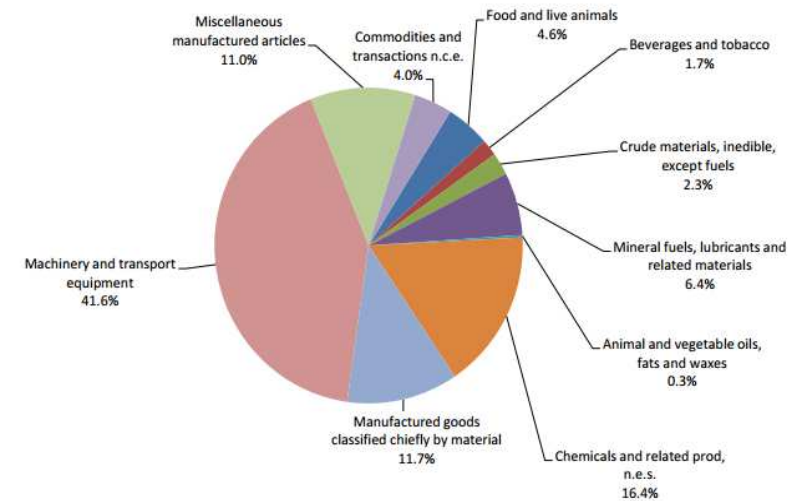
Table 9.2

10 major EU import partners in 2015

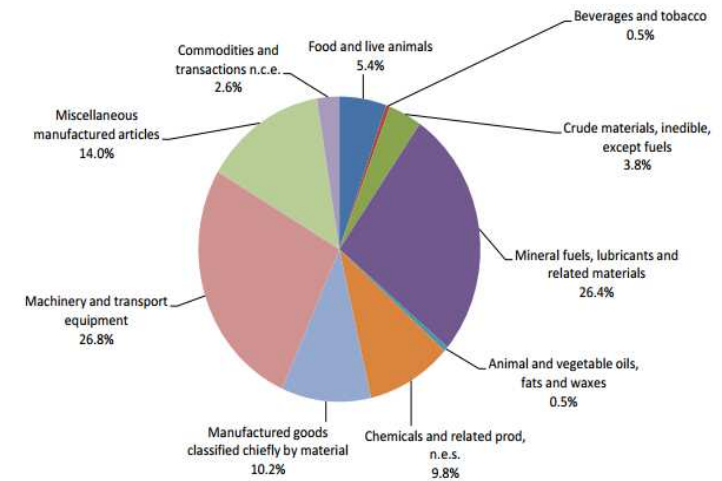
Rank	EU Imports	Million euro	% world
1	China	350,257	20,3
2	USA	246,211	14,3
3	Russia	135,876	7,9
4	Switzerland	102,299	5,9
5	Norway	74,313	4,3
6	Turkey	61,574	3,6
7	Japan	59,726	3,5
8	South Korea	42,327	2,5
9	India	39,449	2,3
10	Brazil	30,879	1,8
	Total	1 142 911	

The basis of the commodity structure of trade, the EU is ready products, which account for about 80% of exports and 60% of imports. In 2015, around 42% of exports were machinery and transport equipment, 16% – chemical goods. In addition, in commodity structure of exports are commodities such as Food and live animals, Beverages and tobacco, Crude materials, inedible, except fuel, Mineral fuels, lubricants and related materials, Animal and vegetable oils, fats and waxes, Manufactured goods classified chiefly by material, and etc.

In recent years significant changes have occurred in the structure of imports. They are primarily related to the increase in the share of primary goods degree of processing, due to increasing world market prices. Ready products account for about 60% of imports, and within this group the largest share belongs to the positions of the "Machinery and transport equipment" (26,8%) and "Mineral fuels, lubricants and related materials"(26,4%) (table 9.3, figure 9.4). For all groups of goods primary processed the European Union acts as one of the world's largest importers. Purchases abroad of raw minerals, metals, textile products, wood, not to mention the fuel, several times higher than their exports.



a) Export of EU



b) Import of EU

Figure 9.3 EU exports and imports of goods by sector, 2014 (%)

As to the trade of machinery and equipment (including vehicles), then, as already mentioned, they are the largest position and exports,

and EU imports. In 2014, exports amounted to 649,6 billion euros compared with 2004 increased by 1.7. also analyzed period it is possible to notice a tendency of growth of volume of export according to all names of goods. So the volume of exports of Chemicals and related production grew by 1.8, Manufactured goods classified chiefly by material — 1,5, Mineral fuels, lubricants and related materials - 3,3, Food and live animals - 2,4.

		Exports												
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
TOTAL	SITC Rev.3	945.2	1,049.2	1,152.0	1,234.5	1,309.1	1,094.0	1,353.2	1,554.2	1,684.2	1,736.3	1,703.1		
SITC 0	Food and live animals	33.2	35.3	38.7	42.1	48.3	44.2	54.3	63.4	70.1	75.4	78.8		
SITC 1	Beverages and tobacco	14.9	16.2	18.5	19.5	19.5	18.1	21.4	25.1	28.9	29.0	28.8		
SITC 2	Crude materials, inedible, except fuels	18.4	21.2	25.8	27.7	29.0	25.4	34.6	41.2	42.9	40.7	39.1		
SITC 3	Mineral fuels, lubricants and related materials	32.9	45.9	58.9	66.7	84.7	58.7	79.0	100.2	125.6	122.2	109.5		
SITC 4	Animal and vegetable oils, fats and waxes	2.4	2.5	2.5	2.4	3.0	2.6	3.0	3.9	4.6	4.8	4.3		
SITC 5	Chemicals and related prod, n.e.s.	151.7	163.8	183.4	196.8	197.6	195.6	232.7	254.9	275.5	273.3	278.8		
SITC 6	Manufactured goods classified chiefly by material	132.3	146.1	162.6	174.5	177.7	138.7	170.1	195.2	203.5	201.0	199.0		
SITC 7	Machinery and transport equipment	427.0	472.2	505.8	546.2	570.9	459.3	570.5	648.4	706.2	708.6	709.2		
SITC 8	Miscellaneous manufactured articles	111.0	117.4	128.1	132.2	135.9	118.8	138.7	156.5	175.9	181.7	187.9		
SITC 9	Commodities and transactions n.c.e.	22.3	28.9	27.9	26.5	42.4	32.9	48.9	65.6	51.1	99.6	67.7		
AMA/NAMA														
AMA	Agricultural Products	55.3	59.8	67.7	69.9	77.6	70.9	86.7	101.1	113.2	119.8	121.7		
NAMA	Non-Agricultural Products	889.9	989.7	1,084.8	1,164.6	1,231.6	1,023.1	1,266.5	1,453.0	1,571.0	1,616.5	1,581.4		

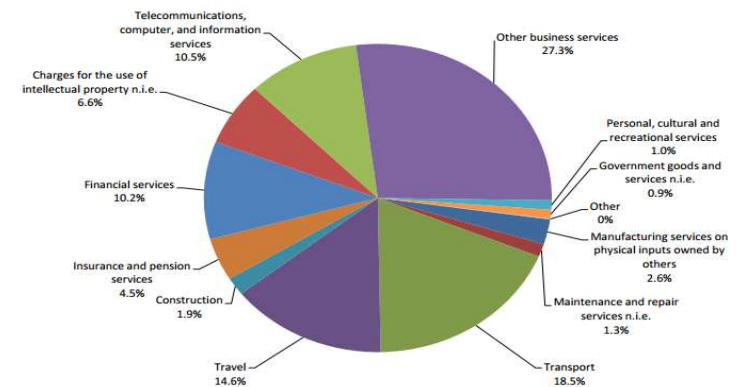
Figure 9.4 EU exports of goods by sector (billion EUR)

In the commodity structure of the EU in the period from 2004 to 2014 was an increase Machinery and transport equipment 1.2, Mineral fuels, lubricants and related materials - 2.4, Chemicals and related prod, n.e.s. - 1.9 (figure 9.5).

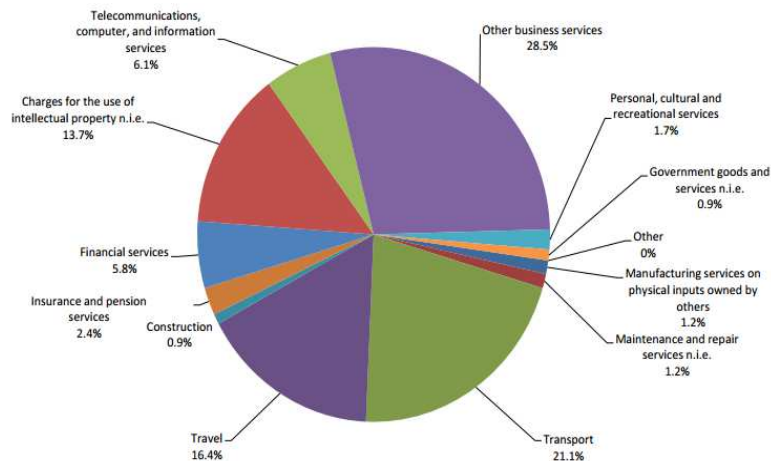
		Imports												
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
TOTAL	SITC Rev.3	1,027.4	1,183.8	1,368.0	1,450.3	1,585.2	1,235.6	1,529.4	1,726.7	1,799.7	1,688.2	1,685.0		
SITC 0	Food and live animals	53.1	57.2	61.7	69.0	74.6	67.4	73.9	84.4	85.5	86.0	90.7		
SITC 1	Beverages and tobacco	5.8	5.8	6.2	6.6	6.3	6.4	6.9	7.1	7.5	7.6	7.7		
SITC 2	Crude materials, inedible, except fuels	44.4	48.2	57.5	64.4	67.4	41.7	64.1	76.8	71.5	67.5	64.5		
SITC 3	Mineral fuels, lubricants and related materials	184.5	274.0	344.9	341.9	460.2	299.9	385.0	494.8	551.6	503.8	445.2		
SITC 4	Animal and vegetable oils, fats and waxes	3.9	4.3	5.4	5.7	8.0	5.6	6.7	8.6	9.2	8.7	8.4		
SITC 5	Chemicals and related prod, n.e.s.	88.4	96.4	109.2	120.7	124.3	112.5	137.3	155.3	163.4	157.9	165.3		
SITC 6	Manufactured goods classified chiefly by material	115.4	128.1	160.5	189.1	178.3	115.5	157.6	184.8	168.2	164.7	172.7		
SITC 7	Machinery and transport equipment	354.3	385.9	412.6	429.0	425.9	352.9	442.2	440.4	448.2	434.5	452.1		
SITC 8	Miscellaneous manufactured articles	146.3	162.2	180.6	193.6	196.9	181.0	206.3	218.2	221.6	217.2	235.4		
SITC 9	Commodities and transactions n.c.e.	31.6	22.0	29.7	30.4	43.5	52.7	49.4	56.2	72.8	40.3	43.0		
AMA/NAMA														
AMA	Agricultural Products	61.8	64.2	68.1	77.6	88.2	76.8	84.3	98.5	101.9	101.8	104.0		
NAMA	Non-Agricultural Products	965.6	1,119.7	1,300.2	1,372.7	1,497.1	1,158.8	1,445.1	1,628.2	1,697.8	1,586.4	1,581.0		

Figure 9.5 EU imports of goods by sector (billion EUR)

In 2014, export of services outside the EU amounted to 734,8 billion euros, imports – 583,4 billion euros. In comparison with 2004 the volume of exports in 2014 increased almost by 2. A large share of exports of services amounted to Transport (18,5%), Trave (14,6%), Telecommunications, computer, and information services (10,5) and Other business services (27,5%). Imports of services also increased by 1.8, in 2004 amounting 321,4 billion EUR and in 2014 — 583.4 billion EUR (figure 9.6).



a) Export



b) Import

Figure 9.6 EU exports and imports of services by type, 2014 (% on total)

In 2014 the major markets of export of goods of the EU are the USA(18,3%), China (9,7%), Switzerland (8,2%), Russia (6,1%) and Tukey (4,4%). The main importers of goods are China (17,9%), USA (12,2%), Russia (10,8%), Switzerland (5,7%) and Norway (5,2%) (table 9.7 and table 9.8).

Table 9.7
EU-28 exports in goods by leading trade partners, 2014
(billion EUR, %)

Rank	Leading clients	Exports	Share in exports	Cumulative share
1	2	3	4	5
1	USA	311.0	18.3%	18.3%
2	China	164.8	9.7%	27.9%
3	Switzerland	140.4	8.2%	36.2%
4	Russia	103.3	6.1%	42.2%
5	Turkey	74.6	4.4%	46.6%
6	Japan	53.3	3.1%	49.8%
7	Norway	50.2	2.9%	52.7%

Table 9.7 continuation

1	2	3	4	5
8	South Korea	43.2	2.5%	55.2%
9	United Arab Emirates	42.8	2.5%	57.8%
10	Brazil	37.0	2.2%	59.9%
11	India	35.5	2.1%	62.0%
12	Saudi Arabia	35.1	2.1%	64.1%
13	Hong Kong	34.7	2.0%	66.1%
14	Canada	31.7	1.9%	68.0%
15	Australia	29.6	1.7%	69.7%
16	Mexico	28.4	1.7%	71.4%
17	Singapore	28.2	1.7%	73.0%
18	Algeria	23.4	1.4%	74.4%
19	South Africa	23.3	1.4%	75.8%
20	Morocco	18.2	1.1%	76.8%
	All countries	1,703.1	100%	100%

For the countries of Western Europe, and primarily those that comprise the "core" of the European Union, characterized by a high degree of state participation and regulation of the economy.

Table 9.8
EU-28 imports in goods by leading trade partners, 2014
(billion EUR, %)

Rank	Leading clients	Imports	Share in imports	Cumulative share
1	2	3	4	5
1	China	302.0	17.9%	17.9%
2	USA	206.1	12.2%	30.2%
3	Russia	181.3	10.8%	40.9%
4	Switzerland	96.6	5.7%	46.7%
5	Norway	86.8	5.2%	51.8%
6	Japan	55.2	3.3%	55.1%
7	Turkey	54.4	3.2%	58.3%
8	South Korea	38.8	2.3%	60.6%
9	India	37.1	2.2%	62.8%
10	Brazil	31.0	1.8%	64.7%
11	Algeria	29.5	1.7%	66.4%
12	Saudi Arabia	28.7	1.7%	68.1%
13	Nigeria	28.2	1.7%	69.8%

Table 9.8 continuation

1	2	3	4	5
14	Canada	27.4	1.6%	71.4%
15	Kazakhstan	23.9	1.4%	72.8%
16	Taiwan	23.2	1.4%	74.2%
17	Vietnam	22.2	1.3%	75.5%
18	Malaysia	19.6	1.2%	76.7%
19	Thailand	18.5	1.1%	77.8%
20	South Africa	18.5	1.1%	78.9%
	All countries	1,703.1	100%	100%

Many EU countries have large amounts of state ownership in key sectors of the economy, they are characterized by a high level of public investment in science, technology, education, high role of procurement of goods and services by the state, funding for the social sector. A special impact on the development of foreign economic sector of the EU countries has a government policy to support exporters, particularly agricultural products.

Questions for discussion:

- What are the principles of integration processes in Europe?
- How trading balance is held in Europe?
- What are the principles and purposes of Customs union – 1946?
- What are the principles and purposes of Euroatom - 1957?
- What are the principles and purposes of Maastricht agreement and EU creation?
- What are the principles and purposes of European Free Trade Association (EFTA)?
- When was the first enlargement of the European Union? What countries are joined?
- What is the European Coal and Steel Community? When was it founded and why?
- Which two other organizations were founded in Rome in 1957?

THEME 10. TRADE AND ECONOMIC COOPERATION IN AMERICA

1. Integration groups of developing countries of the America's continent and their development. The agreement between the USA, Canada and Mexico (NAFTA): purposes, tasks, creation reasons.

2. Commodity and geographical structure of export and import in NAFTA countries.

3. MERCOSUR (Mercado Comun del Sur — MERCOSUR): purposes, tasks, creation reasons. Commodity and geographical structure of export and import in MERCOSUR countries.

1. Integration groups of developing countries of the America's continent and their development. The agreement between the USA, Canada and Mexico (NAFTA): purposes, tasks, creation reasons.

At the present time for the world community characterized by close economic interaction and cooperation of countries at the regional level, the creation of large integration associations, whose purpose is the formation of independent centers of the world economy. This process is now a critical feature of modernity, it became a consequence and a cause of intensification and increase of facilities for the international movement of goods, services, capital and workforce. Because of this between States are more stable trade and economic relations, which helps to eliminate numerous obstacles in international relations, the formation of special zones of influence of individual States or groups of countries, the emergence of new international trade and economic blocks.

The North American Free Trade Agreement (NAFTA) is a comprehensive trade agreement that sets the rules of trade and investment between Canada, the United States, and Mexico.

Since the agreement entered into force on January 1, 1994, NAFTA has systematically eliminated most tariff and non-tariff barriers to free trade and investment between the three NAFTA countries.

The agreement establishing NAFTA is the result of more than a half-century movements of these countries, especially the United

States and Canada, trade and economic and political unification (table 10.1). Throughout the twentieth century gradually eroded the economic borders between the United States and Canada by a relative liberalization of movement of goods, capital and labour. Qualitative change in economic relations between the United States and Canada occurred in 1988, when at the international level concluded USA-canadian free trade agreement (NAFTA), designed to provide canadian goods guaranteed and privileged access to the domestic U.S. market.

T a b l e 10.1

*The stages of development
of trade and economic relations in North America*

Period	The agreement	The basic idea
1959	An agreement on joint military production	The implementation of American standards in canadian military equipment production
1965	The agreement on the liberalization of trade in products of automobile industry (Autopact)	Stimulation of integration of many other branches. Aspiration to liberalization of a commodity market and the capital
End of the 1970th	The line on the organization of trade and political association of the USA, Canada and Mexico	Originally — the power union of three countries. Since 1979, we study the prospects of creating a North American free trade area.
1988	American-Canadian agreement on free trade (FTA)	Formation of a free trade zone between two countries within 10 years
1992 (1994)	The Agreement on creation of the North American free trade zone is signed (came into force) (NAFTA)	Formation of a free trade zone goods between three countries, consideration of questions of trade in services, movements of investments, intellectual property rights

NAFTA’s main provisions called for the gradual reduction of tariffs, customs duties, and other trade barriers between the three members, with some tariffs being removed immediately and others over periods of as long as 15 years. The agreement ensured eventual

duty-free access for a vast range of manufactured goods and commodities traded between the signatories. “National goods” status was provided to products imported from other NAFTA countries, banning any state, local, or provincial government from imposing taxes or tariffs on such goods. NAFTA also contained provisions aimed at securing intellectual-property rights. Participating countries would adhere to rules protecting intellectual property and would adopt strict measures against industrial theft.

The main purpose of NAFTA is to eliminate barriers to trade and investment between the USA, Canada and Mexico. The objectives of NAFTA:

- the elimination of customs and passport barriers and encourage the movement of goods and services between countries-participants of the agreement;
- creating and maintaining conditions for fair competition in the free trade area;
- attracting investments to member countries of the agreement;
- the provision of adequate and effective protection and enforcement of intellectual property rights;
- creation of effective mechanisms of implementation and use Agreements, joint dispute resolution and management;
- creation of a framework for future trilateral, regional and international cooperation to broaden and improve the Agreement;
- the creation of a single continental market.

The Central organizing institution of NAFTA is the Commission on free trade at the level of trade Ministers, which oversees implementation of the agreement and assist the resolution of disputes arising from its interpretation. She supervises the activities of 30 committees and working groups. In forming the scope of authority of the Commission used the following principle: the scope of the jurisdiction of this Commission included the powers which the country usually give trade Ministers.

NAFTA has altered the political landscape in North America by putting free trade and economic cooperation on a firm footing. By making economic transactions transparent and secure in the region, the demand for political institutions has developed to govern these transactions. Compared to the post-World War II period prior to the signing of NAFTA, regional cooperation, especially with Mexico, has grown

exponentially. In addition to financial cooperation, greater cooperation on regional energy, terrorism, health, emergency management, and a competition commission have all been developed since. At present, Central America, Chile, and the Caribbean have signed free trade agreements with NAFTA. This offers poorer countries in Latin America an important path to development and support for national democratization. By gaining access to larger markets and opening economic and political institutions, development is also enhanced.

2. Commodity and geographical structure of export and import in NAFTA countries.

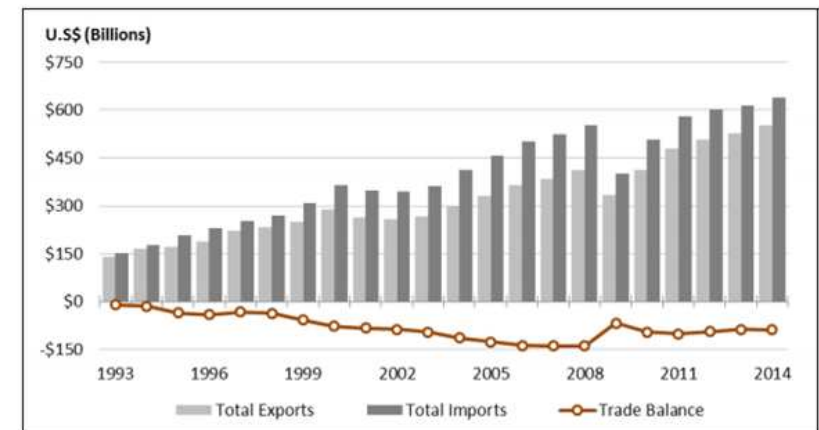
Analysis of foreign economic activity of the countries participating in NAFTA, the economic growth of national economies, the increased occurrence of the States of North America in international relations is of great importance and relevance today. Beginning with January 1994 formation of the North American free trade agreement (NAFTA), which included the USA, Canada and Mexico, opened a new stage in the development of integration processes in the world economy. In North America there has been a rapid growth of trade-economic and investment ties, has created a fundamentally new interests and tendencies of development in world economic relations.

The entry into force of the North American free trade agreement formally meant the emergence of a unified continental system, covering three of the national economy: the USA, Canada and Mexico. In the context of the North American free trade agreement provides for progressive removal of trade and investment barriers in mutual trade, are prerequisites for the smooth movement across the borders of member countries of goods, capital, services, activities on the standardization of technical and sanitary standards, protection of intellectual property.

U.S. trade with its NAFTA partners has more than tripled since the agreement took effect. It has increased more rapidly than trade with the rest of the world. In 2011, trilateral trade among NAFTA partners reached the \$1 trillion threshold. Since 1993, total U.S. trade with Mexico increased more rapidly than total trade with Canada and trade with non-NAFTA countries. In 2014, Canada was the leading

market for U.S. exports, while Mexico ranked second. The two countries accounted for 34% of total U.S. exports in 2014. In imports, Canada and Mexico ranked second and third, respectively, as suppliers of U.S. imports in 2014. The two countries accounted for 27% of U.S. imports.

Most of the trade-related effects of NAFTA may be attributed to changes in trade and investment patterns with Mexico because economic integration between Canada and the United States had already been taking place. As mentioned previously, while NAFTA may have accelerated U.S.- Mexico trade since 1993, other factors, such as economic growth patterns, also affected trade. As trade tends to increase during cycles of economic growth, it tends to decrease as growth declines. The economic downturns in 2001 and 2009, for example, likely played a role in the decline in both U.S. exports to and imports from Canada and Mexico, as shown in Figure 10.1.



Source: Compiled by CRS using trade data from the U.S. International Trade Commission's Interactive Tariff and Trade Data Web, at <http://dataweb.usitc.gov>.

Figure 10.1 U.S. Merchandise Trade with NAFTA Partners: 1993-2014 (billions of nominal U.S. dollars)

The United States is, by far, Mexico's leading partner in merchandise trade. U.S. exports to Mexico increased rapidly since NAFTA, increasing from \$41.6 billion in 1993 to \$240.3 billion in 2014, an increase of 478%. U.S. imports from Mexico increased from

\$39.9 billion in 1993 to \$294.2 billion in 2014, an increase of 637%. The trade balance with Mexico went from a surplus of \$1.7 billion in 1993 to a deficit of \$74.3 billion in 2007. Since then, the trade deficit with Mexico has fallen to \$53.8 billion in 2014.

U.S. trade with Canada more than doubled in the first decade of the FTA/NAFTA (1989-1999) from \$166.5 billion to \$362.2 billion. U.S. exports to Canada increased from \$100.2 billion in 1993 to \$312.1 billion in 2014, an increase of 211%. U.S. imports from Canada increased from \$110.9 billion in 1993 to \$346.1 billion in 2014, an increase of 212%. After falling off during the recession of 2001, total trade with Canada reached a new high of \$596.5 billion in 2008, only to fall victim to the financial crisis in 2009 when it fell to \$429.6 billion. In 2011, total trade had returned to 2008 levels at \$596.6 billion. The United States has run a trade deficit with Canada since the FTA/NAFTA era, increasing from \$9.9 billion in 1989 to \$74.6 billion in 2008, before falling back during the 2009 recession. In 2014, the trade deficit with Canada was \$33.9 billion. While the increase in the trade deficit with Canada has been attributed to the FTA/NAFTA, the increase has been uneven and may also be attributed to other economic factors, such as energy prices.

Thus, for Canada and Mexico economic ties with the United States are extremely significant, since the main exporter and importer in their markets by the United States. The NAFTA agreement has had a constructive influence on the economic relationship between the participating countries. The volume of trade between Mexico and the U.S. increased over the last decade, about 3, and between the United States and Canada – about 2. The U.S. share of the Mexican foreign trade reached nearly 90%, and the interdependence between the United States and Canada continues to grow.

NAFTA has helped to stimulate economic growth and create higher-paying jobs across North America. It has also paved the way for greater market competition and enhanced choice and purchasing power for North American consumers, families, farmers, and businesses.

Furthermore, NAFTA has provided North American businesses with better access to materials, technologies, investment capital, and talent available across North America. This has helped make our

businesses more competitive, both within North America and around the world. With rapidly growing economies in Asia and South America challenging North America's competitiveness, NAFTA remains key to sustained growth and prosperity in the region.

NAFTA has proven that trade liberalization plays an important role in promoting transparency, economic growth, and legal certainty. In the face of increased global competition, Canada, the United States, and Mexico will work to strengthen the competitiveness of the North American region by continuing to pursue trade within the NAFTA region

3. MERCOSUR (Mercado Comun del Sur — MERCOSUR): purposes, tasks, creation reasons. Commodity and geographical structure of export and import in MERCOSUR countries.

Mercosur, or Common Market of the South, South American regional economic organization. Mercosur grew out of earlier efforts to integrate the economies of Latin America through the Latin American Free Trade Association (1960) and its successor, the Latin American Integration Association (1980). In 1985 Argentina and Brazil signed the Declaration of Iguazu, which created a bilateral commission to promote the integration of their economies; by the following year the two countries had negotiated several commercial agreements. The 1988 Treaty for Integration, Cooperation, and Development committed Argentina and Brazil to work toward the establishment of a common market within 10 years, and it invited other Latin American countries to join. Mercosur was created in 1991 by the Treaty of Asunción, which was signed by the heads of state of Argentina, Brazil, Paraguay, and Uruguay. Several other countries were later admitted as associate members, and in 2006 the presidents of the four member countries approved full membership for Venezuela, though its final ascent was blocked for years by the Paraguayan congress. Mercosur is headquartered in Montevideo, Uruguay.

Mercosur's goals include the harmonization of the economic policies of its members and the promotion of economic development. The Ouro Preto Protocol (1994) established Mercosur's present organizational structure and gave it a legal personality under international law, allowing it to negotiate agreements with

countries and other international organizations. On Jan. 1, 1995, following several years of efforts to reduce internal tariffs (tariffs imposed by members on other members), a free-trade zone and a customs union were formally established. Nevertheless, full harmonization eluded Mercosur: some internal goods were still subject to customs duties, and, though members agreed to apply a common tariff on imports from nonmembers, disparities on such duties continued to exist. In 1996 the Joint Parliamentary Commission, which consists of parliamentarians from member countries, declared that all participating members must have functioning democratic institutions. In 2003 Mercosur signed a free-trade agreement with the Andean Community, which went into effect on July 1, 2004. In 2007 a new parliament of the member states was inaugurated in Montevideo. In 2012, following the controversial impeachment of Paraguayan Pres. Fernando Lugo, Brazil, Argentina, and Uruguay voted to suspend Paraguay's membership until 2013. Later at the same summit where that action was taken, leaders from the three active member countries announced the ascent of Venezuela to full membership, effective July 31, 2012.

The institutions of Mercosur include the *Common Market Council*, the organization's primary decision-making organ; the Common Market Group, an executive body that implements policies; the Trade Commission, which oversees commercial policy and may resolve trade disputes; and the Consultative Economic and Social Forum, through which businesses and trade unions may express their views.

- The Common Market Council is Mercosur's highest decision-making body. It conducts Mercosur policy and assesses compliance with the bloc's regulations. The foreign affairs and economy ministers of constituent members make up the council, which meets as often as need arises, but at least once a year. A six-month rotating president leads the council and is determined by the alphabetical order of member countries.

- The *Common Market Group* is controlled by members' ministries of foreign affairs, economy, and central banks' presidents. The group coordinates macroeconomic policy between the members and negotiates trade with non-member countries. It also oversees the implementation of decisions made by the Common Market Council.

The group has four representatives from each constituent member. The Common Market Group can convene as necessary, but must meet at least once each quarter. A number of working subgroups deal with issues such as agricultural policy, energy policy, and labor policy.

- The *Trade Commission* deals with everyday trade matters between constituent countries. It consists of four members and four alternates from each country who meet monthly, and is coordinated by the respective ministries of foreign affairs. The group can propose changes to the common external tariff and other Mercosur guidelines for review by the higher bodies. The group can also refer any trade disputes to the higher bodies for resolution.

- The *Mercosur Parliament*, alternatively known as *Parlasur* or *Parlamento*, was created in 2004 and first convened in Montevideo in 2007 as Mercosur's unicameral, independent, and autonomous legislative body. *Parlasur* is meant to add a dimension of popular representation, based on the number of parliamentarians in each country, but the body has no enforcement powers and its conclusions are only meant to advise Mercosur's decision-making bodies. The chamber currently has 188 members: 76 from Brazil, 43 from Argentina, 33 from Venezuela, 18 from Uruguay, and 18 from Paraguay. By 2020, all member countries are due to institute the popular election of Mercosur parliamentarians. In their August 9 primaries, Argentines voted for their Mercosur representatives for the first time.

- In 2010, the bloc created the *Structural Convergence Fund of Mercosur* (FOCEM). The fund seeks to develop regional infrastructure projects to increase integration between Mercosur member countries. These investments also intend to promote lesser-developed regions and improve competitiveness, with the ultimate goal of strengthening the union. FOCEM is funded by member country contributions—with Brazil providing almost 70 percent—and has more than \$1 billion in available resources. FOCEM was created in 2004 and was supposed to last until 2015, but Mercosur has extended the project until 2025. The 2011 budget allocated 48 percent of resources to Paraguay, 32 percent to Uruguay, and 10 percent each to Argentina and Brazil. In 2013, the most recent year for which a budget is publicly available, those figures were adjusted so that Paraguay now receives 46 percent of funds, Uruguay 31, and Brazil and Argentina 11 each.

Over the past 10 years foreign trade turnover MERCOSUR increased by 2.5, while 2014 was 497,682 Value Mio €, and the figure in 2004 was 200,066 Value Mio €. Exports of goods for the analyzed period increased by 2, but imports of goods also increased more than 3 (table 10.2, figure 10.2).

Total Goods: Trade flows and balance

Period	Imports		Exports		Balance		Total trade	
	Value Mio €	% Growth*	Value Mio €	% Growth*	Value Mio €	% Growth*	Value Mio €	% Growth*
2004	74,025		126,041		52,016		200,066	
2005	90,977	22.9	157,115	24.7	66,138	27.2	248,093	24.0
2006	115,522	27.0	179,689	14.4	64,166	-3.0	295,211	19.0
2007	140,119	21.3	183,163	1.9	43,044	-32.9	323,282	9.5
2008	183,823	31.2	220,980	20.7	37,157	-13.7	404,804	25.2
2009	141,654	-22.9	168,589	-23.7	26,935	-27.5	310,242	-23.4
2010	200,966	41.9	224,589	33.2	23,623	-12.3	425,554	37.2
2011	242,270	20.6	276,551	23.1	34,282	45.1	518,821	21.9
2012	270,127	11.5	293,846	6.3	23,719	-30.8	563,973	8.7
2013	272,483	0.9	275,736	-6.2	3,253	-86.3	548,220	-2.8
2014	248,871	-8.7	248,811	-9.8	-60	-101.8	497,682	-9.2

Figure 10.2 Mercosur 5, Trade with World

The share of trade of small countries of MERCOSUR with countries outside the Union, became more than a few years ago. In this case, the intra-MERCOSUR trade characterized by the fact that some products are competitive only when trading inside the unit, and trade outside the zone are very limited. In as an example the textile industry of Uruguay or energy production in Paraguay, the products of which for certain reasons can be bought and sold only within MERCOSUR. This also applies to the import of some products which by their nature or by reason of their value can only be purchased inside the unit.

External trade the Mercosur is rather diversified from a country perspective. In exports, according to data for 2014, the largest share continue to maintain the USA (17,3%), in second place – European Union (17,1%), the third – China (17,0%). Important buyers of European goods are India, Chile, Japan, Singapore, Russia, Mexico, Cuba.

Table 10.2

10 major Mercosur export partners in 2014

Rank	Partner	Value Mio €	% World
1	USA	43,123	17.3
2	EU	28 42,437	17.1
3	China	42,399	17.0
4	India	13,755	5.5
5	Chile	6,226	2.5
6	Japan	5,819	2.3
7	Singapore	5,361	2.2
8	Russia	4,508	1.8
9	Mexico	3,866	1.6
10	Cuba	3,707	1.5
	World	248,811	100.0

In import of the Mercosur deliveries from European Union – 21% came out on top, on the second place in 2014 was the USA (19,3%), on the third – China (10,8) (table 10.3). The EU is Mercosur's first trading partner, accounting for 20% of Mercosur's total trade in 2013. EU-Mercosur trade in that year was €110 billion.

Table 10.3

10 major Mercosur import partners in 2014

Rank	Partner	Value Mio €	% World
1	EU 28	52,192	21.0
2	USA	47,970	19.3
3	China	44,971	18.1
4	Nigeria	8,251	3.3
5	South Korea	8,043	3.2
6	Mexico	7,003	2.8
7	India	6,176	2.5
8	Japan	6,096	2.5
9	Bolivia	5,247	2.1
10	Chile	4,638	1.9
	World	248,871	100.0

The formation of MERCOSUR marked a turn in foreign economic strategy the largest of the South American countries of Brazil and Argentina, which in the past had not shown much interest in

integration. Their models of development have focused on large national markets, protected by high customs duties. Most consistently pursued this strategy for Brazil, but a profound change in international economic relations, the growing trend to the formation of large trade blocs and leadership in Latin America, to strengthen its position in negotiations with the developed countries forced her to take a course on the creation of an integration Union, where she took the leading position. Other countries expected access to the Brazilian market will allow them to dramatically expand and diversify their exports that will serve as a basis for the development of relations with other parts of the world, improve the conditions of entry into the world economy.

Questions for discussion:

- What are rounds of negotiations within the NAFTA and what are their results?
- What is an essence of disagreements of the developed and developing member countries of the MERCOSUR and the NAFTA?
- What are rounds of negotiations within the MERCOSUR and what are their results?
- What are the prospects for MERCOSUR's future?
- How has MERCOSUR stimulated cooperation among its members?

THEME 11. TRADE AND ECONOMIC COOPERATION IN THE ASIAN-PACIFIC REGION

1. Features of integration processes in the countries of Southeast Asia and the Pacific region. Association of Southeast Asian Nations (ASEAN): purposes, tasks and creation factors. Commodity and geographical structure of export and import of ASEAN.

2. Asia-Pacific Economic Cooperation (APEC): structure, purposes and tasks. Commodity and geographical structure of export and import of APEC.

3. Association of regional cooperation of the Southern Asia (SAARC): structure, purposes, tasks. Commodity and geographical structure of export and import of SAARC.

1. Features of integration processes in the countries of Southeast Asia and the Pacific region. Association of Southeast Asian Nations (ASEAN): purposes, tasks and creation factors. Commodity and geographical structure of export and import of ASEAN.

During the pace of economic development and rapid economic growth in the Asia-Pacific region have led to the need to create effective inter-regional integration groups (APEC, ASEAN, ADB, SAARC, ESCAP, ASEM, ARF). Yet, the operational success of the currently existing organizations could be called into question. The analysis showed that the stated objectives have not been fully achieved by any of the organizations. Moreover, if in the social, political, and cultural spheres there was work to a larger extent, there is still minimal cooperation in the economic sphere.

In recent years integration processes in East Asia have gained strength. For nearly 30 years the Association of Southeast Asian Nations (ASEAN) which includes one of the four Asian “dragons” - Singapore, as well as NIC (the new industrial countries) of “new wave” - Malaysia, Indonesia, Thailand, Brunei and the Philippines most successfully works. The success of the mutual cooperation within this group is closely associated with the rapid economic growth of the majority of the ASEAN countries, a comparable level of development, mutual trade relations well-established and with long historical tradition, and the adjusted form of cooperation.

The attention to the region is defined by the fact that in the last quarter of the century it steadily remained most dynamically developing region of the world. Let's remind that in the late forties experts of the UN met that "Asian stagnation" caused by World War II results will drag on for years. However, in the fifties Japan began to develop rapidly. In the late sixties - the early seventies sharp jump in development rates of Taiwan, Hong Kong, Singapore and South Korea was recorded.

Then two new concepts in relation to these states were appeared: the scientific – "the new industrial countries" (NIC) and publicistic – "Asian tigers". In the 80-s the world witnessed rapid economic growth of the ASEAN countries - Indonesia, the Philippines, Thailand, Malaysia and Brunei, which became known as the "Asian dragons". In the late 80-s a way of rapid economic development were followed by Vietnam. And certainly China. From the middle of the 80-s economists and politicians in this country were looking for ways to reduce the rate of growth of the economy. At the XIV congress of Communist party of China, industrial production grew by 21%, and the total gross national product was more than 9%.

The main features of integration processes in APR:

1) integration processes in the APEC organizations go by the leading role of the multinational corporations creating the soil for interstate cooperation;

2) process of integration covers the countries with significantly different levels of the economic development, different cultures and socio-political systems;

3) integration in APR scales includes the subregional economic unions (ASEAN, NAFTA, the South Pacific Forum, etc.), i.e. it allows different levels of integration, for example by extent of foreign trade liberalization;

4) ideology of Pacific "open regionalism", developed in PECC (Pacific Economic Cooperation Council) and PEC (Pacific Economic Council), considers regional integration as an element of an economic globalism.

The Asian region is influenced by multiple integration organizations, in particular:

- The Intergovernmental Forum "Asia-Pacific Economic Cooperation" (APEC);

- The Pacific Economic Cooperation Council (PECC);
- The Association of Southeast Asian Nations (ASEAN);
- The summit of the East Asian Community (EAC);
- The Eurasian Economic Union (EAEU);
- The Shanghai Cooperation Organization (SCO);
- The Commonwealth of Independent States (CIS).

Nowadays, it was registered 12 integration unions, which is very attractive for future cooperation of other foreign countries. The largest modern regional integration organizations were presented in Table 11.1.

Table 11.1

The largest modern regional integration organizations of Asia

No	Name and date of organization	Members
1	2	3
1	Economic Cooperation Organization (ECO) – since 1964	10 countries – Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkmenistan, Turkey, Uzbekistan
2	Association of South East Asian Nations (ASEAN) – since 1967	10 counties – Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar (Burma), Philippines, Singapore, Thailand, Vietnam.
3	The Pacific Economic Cooperation Council (PECC) - since 1980	23 countries - Australia; Brunei Darussalam; Canada; Chile; China; Colombia; Ecuador; Hong Kong; Indonesia; Japan; Korea; Malaysia; Mexico; Mongolia; New Zealand; Peru; the Philippines; Singapore; Taiwan; Thailand; the United States; Vietnam.
4	Asia-Pacific Economic Cooperation (APEC) - since 1989	21 countries - Australia, Brunei Darussalam, Canada, Indonesia, Japan, South Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, United States, Chinese Taipei, Hong Kong, People's Republic of China, Mexico, Papua New Guinea, Chile, Peru, Russian Federation, Vietnam.

Table 11.1 continuation

1	2	3
5	The summit of the East Asian Community (EAC) - since 2005	18 countries - Australia, Brunei, Cambodia, China, India, Indonesia, Japan, Laos, Malaysia, Myanmar, New Zealand, Philippines, Russia, Singapore, South Korea, Thailand, United States, Vietnam.
6	The Eurasian Economic Union (EAEU) - since 2015	5 countries – Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia
7	The Shanghai Cooperation Organization (SCO) - since 1996	8 countries - India, China, Kazakhstan, Kyrgyzstan, Pakistan, Russia, Tajikistan, Uzbekistan.
8	Commonwealth of Independent States - since 1991	9 countries - Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Uzbekistan.

So, each of these organizations has particular influence in the Asia-Pacific region.

Asia-Pacific region has a great experience of economic growth that cannot attract the attention of researchers in the world. Besides, trade in the Asia-Pacific region is very dynamic. The region is characterized by the considerable variety in a resource distribution and a development level that allows the countries to use the considerable opportunities for the growth, caused these distinctions. The trade allowed the rich labor and resource-poor countries to trade manufactured goods for raw materials; developed and fast growing economies – to exchange hi-tech and laborious products and services; and the fast-growth countries – to make a breakthrough in the new industry, having begun transfer of old industries to new “rising stars”. Vietnam and China became two last Asian countries which have joined WTO; it was necessary to go on the considerable concessions, and both of these countries considerably gained from it.

Empirical results confirm the value of integration of the Asia-Pacific region within both directions of negotiation process. Analysts of the East-West Center have identified four main results.

First, integration of the Asia-Pacific region promises the considerable benefits. The income growth associated with liberalization is

likely to exceed 1 trillion dollars, or about 1,5% of world gross domestic product in 2025. The Asia-Pacific agreements are the project of scale of the Doha negotiation round. These scale benefits reflect the fact that even though the region provides only part of world trade, the scenarios provided within this research, offer the considerable liberalization that they can introduce more value, than it is possible within such global agreements as Doha – by giving the new forces to global negotiations.

Second, benefits increase in proportion to the scale and ambitions of the integration project. With the TPP expansion from nine member countries to thirteen (through inclusion of Canada, Japan, Korea and Mexico), the total amount of benefits has to grow from 16 billion dollars in 2015 to 104 billion dollars in 2025. Within the Asian way of integration, authors of research reveal similar economic incentives of driving from the tripartite agreement between China, Japan and Korea to the EAFTA block with thirteen members.

This path will bring the benefits estimated at 44 billion dollars in 2015 and to 215 billion dollars in 2025 that is higher than the expected benefits within the TPP as initial barriers (especially between three largest economy of the region) are rather high to trade; on the contrary, the considerable part of trade between the TPP countries is already captured by efficient trade agreements.

Third, although almost all of the economy will benefit in the implementation of any of the scenarios, the countries that systematically will benefit (in relative terms) are small countries, initially protected by high barriers and involved from the early stages in each of the paths of integration. Taking part in both processes, Vietnam, for example, would be in a particularly good position, having caught the industries which China leaves, passing to more high-tech stage of development. However such economies as Malaysia and Peru, also will receive the considerable benefits. In absolute expression, certainly, the main beneficiaries will be bound to the largest economy in the region, namely China, the U.S. and Japan.

Fourth, the benefits of the two paths of integration will be formed as a result of the establishment of new trade links - deeper integration made possible by the reduction of barriers instead of redirecting existing trade flows to the new direction, which would be provided at the expense of those countries which do not use preferences of partici-

pants of the agreement. For example, Europe will also benefit from the formation of Asia-Pacific region free trade zone, mainly due to higher production efficiency, as the deepening integration of the APR will improve the terms of the Europe trade with the region countries.

The modern APR trade institutes are founded by initiatives of the Association of Southeast Asian Nations (ASEAN), instead of communications between huge economy of the of Northeast Asia nations. This feature leaves a noticeable mark on the “Asian” path of integration which shows now quite good results, mainly because China plays the central role in region economy.

The Association of Southeast Asian Nations (ASEAN) is a group of ten member countries that encourages political, economic, and social cooperation in the region (figure 11.1).



Figure 11.1 ASEAN emblem

ASEAN Membership: 10 States - Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam. 1 Observer - Papua New Guinea.

ASEAN Regional Forum (ARF) Membership: 27 States – Australia, Bangladesh, Brunei Darussalam, Cambodia, Canada, China, European Union, India, Indonesia, Japan, Democratic Peoples’ Republic of Korea, Republic of Korea, Laos, Malaysia, Myanmar, Mongolia, New Zealand, Pakistan, Papua New Guinea, Philippines, Russian Federation, Singapore, Sri Lanka, Thailand, Timor Leste, United States, and Vietnam.

ASEAN was established on 8 August 1967 in Bangkok by the five original member countries: Indonesia, Malaysia, Philippines, Sin-

gapore, and Thailand. Brunei Darussalam joined on 8 January 1984, Vietnam on 28 July 1995, Laos and Myanmar on 23 July 1997, and Cambodia on 30 April 1999.

The Bangkok Declaration sets out the objectives of the Association as follows:

- To accelerate the economic growth, social progress and cultural development in the region through joint endeavors in the spirit of equality and partnership in order to strengthen the foundation for a prosperous and peaceful community of South-East Asian Nations;

- To promote regional peace and stability through abiding respect for justice and the rule of law on the relationship among countries of the region and adherence to the principles of the United Nations Charter;

- To promote active collaboration and mutual assistance on matters of common interest in the economic, social, cultural, technical, scientific and administrative field;

- To provide assistance to each other in the form of training and research facilities in the educational, professional, technical and administrative spheres;

- To collaborate more effectively for the greater utilization of their agriculture and industries, the expansion of their trade, including the study of the problems of international commodity trade, the improvement of their transportation and communications facilities and the raising of the living standards of their peoples;

- To promote South-East Asian studies; and

- To maintain close and beneficial cooperation with existing international and regional organizations with similar aims and purposes, and explore all avenues for even closer cooperation among themselves.

During the Ministerial Meeting in Jakarta, May 7-9, 1974, it was decided that Jakarta would be the site of the ASEAN Secretariat. The Agreement on the Establishment of the ASEAN Secretariat, adopted at the Heads of Government (Summit) Meeting in Bali, Indonesia, February 23-25, 1976, provides that the office of the Secretary-General shall be held in turn by nationals of the member countries for a two-year period. However, at the 18th ASEAN Ministerial Meeting in Kuala Lumpur on July 8-9, 1985, it was agreed that the term of office of the Secretary-General would be for a three-year period beginning

July 1986. A Declaration of ASEAN Concord was adopted in February 1976.

An Agreement on ASEAN Preferential Trading Arrangements was signed in Manila on February 24, 1977. The Agreement states that member countries shall cooperate through mutual assistance in respect of basic commodities, particularly food and energy, provision of market support for products of ASEAN industrial projects, expansion of intra-ASEAN trade and increase in the utilization of raw materials available in the contracting states. The arrangements were improved by the Protocol on Improvements on Extension of Tariff Preferences under the ASEAN Preferential Trading Arrangements, Manila, December 15, 1987.

An Agreement on ASEAN Industrial Projects (AIP) and an Agreement on ASEAN Industrial Complementation (AIC) were signed in Kuala Lumpur on March 6, 1980 and in Manila on June 18, 1981, respectively. A new program for ASEAN industrial cooperation was launched with the signing of the Basic Agreement on ASEAN Industrial Joint Venture (BAAIJV) in Jakarta on November 7, 1983. The agreement on AIPs provides the framework for cooperation in the establishment of large-scale industrial projects that meet regional requirements for essential products. Projects currently in operation under the scheme are the Urea Fertilizer Projects in Indonesia and Malaysia. The Agreement on AICs provides for a system of schemes for the manufacture of different products within an industry or industries in the ASEAN countries and their subsequent exchange. A complementation program is currently being implemented in the automotive industry on a brand-to-brand basis. The AIJV Program, on the other hand, seeks to promote industrial joint ventures in the region through the effective consolidation of markets by granting AIJV products preferred access to the markets of participating countries and other privileges.

To further enhance industrial cooperation, the ASEAN Economic Ministers signed the ASEAN Industrial Cooperation (AICO) Scheme Agreement on April 27, 1996 in Singapore. The Scheme is the latest industrial cooperation program of ASEAN to promote the sharing of industrial activities between ASEAN-based companies. It is based on the principles and concepts of the CEPT Scheme for AFTA (as mentioned in later paragraphs). The Scheme minimizes tariff dissimilarity

ties and offers qualified participating companies the immediate benefit of the CEPT tariff rates in the range of zero to five percent.

On March 7, 1980, ASEAN signed an economic cooperation agreement with the European Economic Community, to increase trade and economic links between the two regional groups. An agreement on economic cooperation was also signed with Canada on September 25, 1981. The Agreement provides for industrial, commercial and development cooperation, and transfer of technology.

The Fourth ASEAN Summit, held in Singapore on January 27-28, 1992, agreed to establish the ASEAN Free Trade Area (AFTA) within 15 years. At this Summit, the Framework Agreement on Enhancing ASEAN Economic Cooperation and the Agreement on the Common Effective Preferential Tariff (CEPT) Scheme for the ASEAN Free Trade Area were signed. The CEPT Scheme for AFTA was launched in January 1993. This was preceded by a simultaneous announcement by ASEAN Member Countries of their indicative lists of products for inclusion and exclusion in the CEPT in December 1992.

The 26th ASEAN Economic Ministers Meeting held in Chiang Mai, Thailand, endorsed the Fifth AFTA Council's decision to accelerate the realization of AFTA from 15 to 10 years. The Fifth ASEAN Summit held in Bangkok on December 14-15, 1995 adopted an Agenda for Greater ASEAN Economic Integration. The Summit decided to accelerate and deepen tariff reductions under AFTA, made greater commitments in trade facilitation and launched new initiatives in services, intellectual property, industrial cooperation and investment. The ASEAN Leaders also decided to meet every year, with formal Summits to be held every three years and informal Summits in between. At the Bangkok Summit, the ASEAN Leaders met for the first time with their counterparts from Laos, Cambodia, and Myanmar, taking ASEAN one step closer to the realization of an ASEAN comprising all the ten Southeast Asian countries. The first informal meeting of the Heads of Government of ASEAN took place in Jakarta on November 30, 1996.

At the Singapore Summit earlier, a decision was also made to use established fora to promote external dialogues on enhancing security in the region. To this end, ASEAN would intensify its external dialogues on political and security matters using ASEAN Post-Ministerial Conferences (ASEAN-PMC). As a first step in implementing the

Summit decision, political and security issues were put on the agenda of the 25th AMM/PMC in Manila. As a further step in strengthening the PMC process, Senior Officials from ASEAN, Australia, Canada, the EC, Japan, Korea, New Zealand, and United States held a Meeting on May 20-21, 1993 in Singapore. The Meeting agreed to hold consultations at least once a year and adopted a work program to guide their future activities.

As part of confidence-binding measures, ASEAN continued to reaffirm its commitment to the peaceful settlement of disputes and conflicts among nations. ASEAN initiated the resolution on the Treaty of Amity and Cooperation in South-East Asia which was adopted by consensus at the 47th session on the UNGA. The Treaty is expected to complement the role of the United Nations as it provides the only regional diplomatic instrument so far for dispute resolution in South-East Asia. Laos and Vietnam acceded to the Treaty at the 25th AMM in July 1992.

ASEAN's initiatives in confidence-building measures took a step forward in 1994 when the ASEAN Regional Forum (ARF) was inaugurated. ARF is a consultative forum for discussing regional and political security cooperation issues. Participants in the inaugural ARF were the Foreign Ministers of ASEAN, the seven Dialogue Partners, three Observers (Vietnam, Laos and Papua New Guinea) and two guests, China and Russia.

The ASEAN Declaration states that the *aims and purposes* of the Association are:

1) to accelerate the economic growth, social progress and cultural development in the region through joint endeavors in the spirit of equality and partnership in order to strengthen the foundation for a prosperous and peaceful community of Southeast Asian nations;

2) to promote regional peace and stability through abiding respect for justice and the rule of law in the relationship among countries in the region and adherence to the principles of the United Nations Charter. In 1995, the ASEAN Heads of State and Government re-affirmed that "Cooperative peace and shared prosperity shall be the fundamental goals of ASEAN.

The Treaty of Amity and Cooperation (TAC) in Southeast Asia, signed at the First ASEAN Summit on 24 February 1976, declared that

in their relations with one another, the High Contracting Parties should be guided by the following fundamental *principles*:

- Mutual respect for the independence, sovereignty, equality, territorial integrity, and national identity of all nations;
- The right of every State to lead its national existence free from external interference, subversion, or coercion;
- Non-interference in the internal affairs of one another;
- Settlement of differences or disputes by peaceful manner;
- Renunciation of the threat or use of force; and
- Effective cooperation among themselves.

The TAC stated that ASEAN political and security dialogue and cooperation should aim to promote regional peace and stability by enhancing regional resilience. Regional resilience shall be achieved by cooperating in all fields based on the principles of self-confidence, self-reliance, mutual respect, cooperation, and solidarity, which shall constitute the foundation for a strong and viable community of nations in Southeast Asia.

Some of the major political accords of ASEAN are as follows:

- ASEAN Declaration, Bangkok, 8 August 1967;
- Zone of Peace, Freedom and Neutrality Declaration, Kuala Lumpur, 27 November 1971;
- Declaration of ASEAN Concord, Bali, 24 February 1976;
- Treaty of Amity and Cooperation in Southeast Asia, Bali, 24 February 1976;
- ASEAN Declaration on the South China Sea, Manila, 22 July 1992;
- Treaty on the Southeast Asia Nuclear-Weapon-Free Zone, Bangkok, 15 December 1997;
- ASEAN Vision 2020, Kuala Lumpur, 15 December 1997;
- Declaration on Joint Action to Counter Terrorism, 5 November 2001;
- Declaration of ASEAN Concord II, Bali, 7 October 2003;
- ASEAN Convention on Counter Terrorism (ACCT), 11 January 2007;
- Cebu Declaration on the Acceleration of the Establishment of an ASEAN Community by 2015, 11 January 2007.

Structure. The Meeting of the ASEAN Heads of Government is the highest authority of the Association. The overall coordination is

carried out by the ASEAN Ministerial Meeting (AMM) consisting of the Foreign Ministers of Member Countries.

The ASEAN Standing Committee carries on the work of the Association between Meetings of Foreign Ministers. All ASEAN economic cooperation activities are directed by the ASEAN Economic Ministers (AEM) through the ASEAN Senior Economic Officials (SEOM). Ministerial Meetings of other fields of ASEAN cooperation are held when necessary to draw up programs of cooperation in their respective ministerial areas.

The Secretary-General of ASEAN is appointed on merit by the ASEAN Heads of Government upon recommendation of the AMM. He is accorded ministerial status with an enlarged mandate to initiate, advise, coordinate and implement ASEAN activities. The Secretary-General chairs all ASEAN Standing Committee Meetings, except the first and last.

Political consultation are carried out by Senior Political Officials (SOM) who report to the ASEAN Ministerial Meeting (AMM). Economic cooperation is directed by Economic Ministers of Member Countries through the Senior Economic Officials Meeting (SEOM). There are also six non-economic Committees or equivalent bodies: (1) Committee on Culture and Information (COC); (2) Committee on Social Development (COSD); (3) Committee on Science and Technology; (4) ASEAN Senior Officials on Drug Matters (ASOD); (5) ASEAN Senior Officials on Environment (ASOEN); and (6) ASEAN Conference on Civil Service Matters (ACCSM).

Since 1978, ASEAN Committees in Third Countries were established in order to safeguard and advance ASEAN interests through joint consultation with the host governments. To date, ASEAN Committees/Groups (composed of heads of diplomatic missions) have been established in: Australia (Canberra), Belgium (Brussels), Canada (Ottawa), France (Paris), Germany (Bonn), India (New Delhi), Japan (Tokyo), Korea (Seoul), New Zealand (Wellington), Switzerland (Geneva), the United Kingdom (London), and the United States (Washington, DC). There are 41 Non-Governmental Organizations (NGOs) which are formally affiliated with ASEAN.

Notwithstanding a more subdued growth trend in recent years, globally and in some ASEAN Member States (AMS), the growth outlook in the region remains relatively robust and better than the global

average. The global growth outlook is projected at 3.3% in 2015, slightly lower than last year's growth at 3.4%. While ASEAN's economic performance remained resilient in 2014 at 4.6%, the region is projected to sustain its growth momentum in 2015 before accelerating to 4.9% in 2016. The relatively slower regional output growth in 2014 largely reflected lower growth by most of the larger economies in ASEAN (Indonesia, the Philippines, Singapore and Thailand) while Malaysia, Myanmar and Viet Nam recorded higher growth rates in 2014 compared to 2013.

Regional economic integration will continue to contribute to economic resilience and growth performance. Looking to 2015 and beyond, the macroeconomic landscape of ASEAN will continue to transform to weather challenging global economic conditions. Continued efforts to implement economic integration initiatives embodied in the AEC will have a significant, positive influence on trade and FDI, promoting overall economic growth in the region as well as stimulating structural transformation across ASEAN economies.

ASEAN's total trade reached US\$2.5 trillion in 2014. In terms of trade share, total intra-ASEAN trade has not fluctuated significantly over the period, with a slight decline from 25.0% in 2007 to 24.1% in 2014 (figure 11.2). While the share of intraregional trade is often used as an indicator of integration 'success', it may be argued that ASEAN's pursuit of regional integration has been placed consistently in the broader context of integration into the global economy.

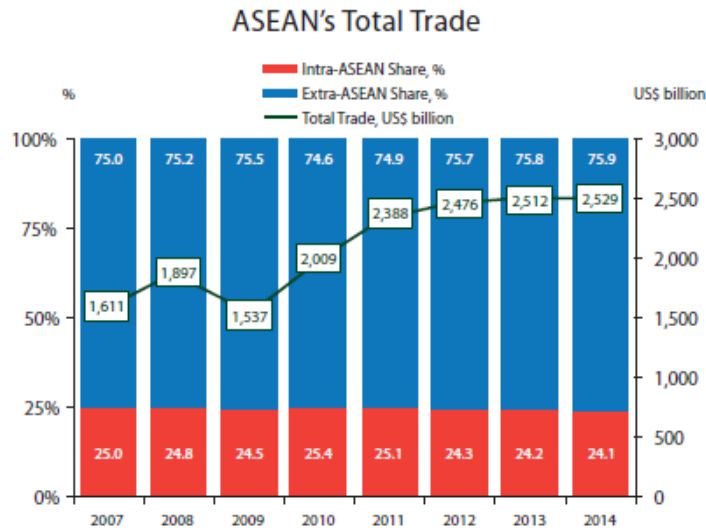


Figure 11.2 ASEAN's total trade

Year-on-year growth in intra-regional trade fluctuated considerably from 2007 to 2014, broadly reflecting the vacillating adjustments and uneven recovery among many economies after the 2008 financial crisis (figure 11.3). However, using trade value in 2007 as the baseline (2007=100) showed that despite the fluctuations, both intra-regional and extra-regional trade has been consistently increasing. By 2014, intra-regional trade was 58.9% higher than that in 2007, only marginally above the rise in extra-regional trade, for which the 2014 trade value was 51.7% higher than that in 2007.

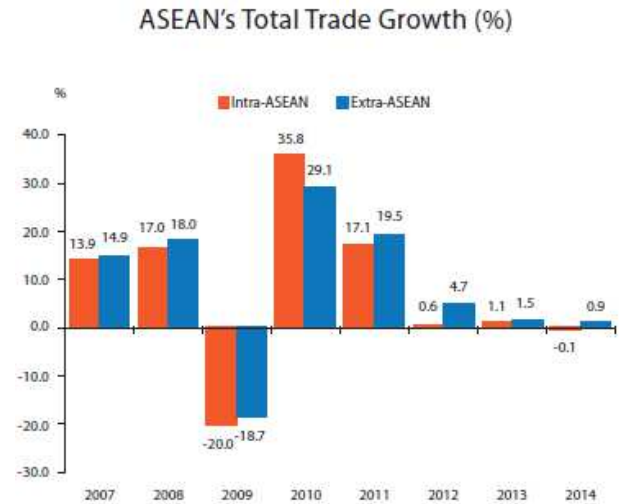


Figure 11.3 ASEAN's total trade growth

The dominance of developed countries in ASEAN trade has been on a decline. In particular, the trade shares of USA, Japan and EU-28 have been reduced, while China has emerged as ASEAN's biggest trade partner since 2011.

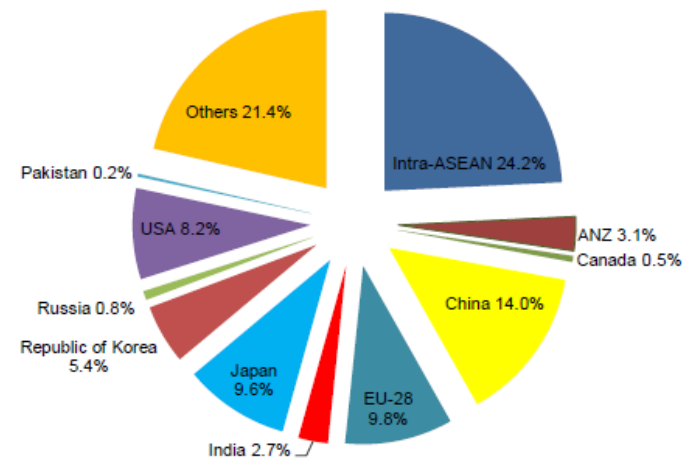


Figure 11.4 10 Share of Major Trade Partner in ASEAN Trade, 2014

China's share in ASEAN trade increased from 4.3% in 2000 to 14% in 2013, while the shares of USA, Japan and EU-28 declined from around 16%, 15% and 14% in 2000 to 8%, 10% and 10% in 2013, respectively (figure 11.4).

ASEAN is a very important export market (with a share of 15% or higher) for 8 AMSs, and a very important import supplier (15% or higher) for all AMSs. For Cambodia and Viet Nam, ASEAN is an important export market (10-15%).

China is a very important export market for Myanmar (with a share of 27%) and an important export market (share between 10-15%) for 7 AMSs. It is also a very important import supplier (15% or higher) for 7 AMSs and an important import supplier (10-15%) for 3 AMSs.

Japan remains a very important export market for Brunei Darussalam and Philippines at 40% and 21% shares respectively, and an important market (10-15%) for another 3 AMSs. Japan is a very important import supplier for Thailand at 16% share and an important import supplier (10-15%) for 4 other AMSs.

EU-28 maintains its position as a very important export market for Cambodia and Viet Nam at 27% and 18% respectively and is an important market for Philippines at 11%. EU-28 is also an important import supplier (10-15%) for 3 other AMSs.

Similar to EU-28, USA is also a very important export market for Cambodia and Viet Nam at 23% and 18% respectively, and is important (10-15%) for Philippines and Thailand. It remains an important import supplier (10-15%) for 4 AMSs.

Republic of Korea is a very important export market for Brunei Darussalam at 16% and a very important import supplier for Viet Nam at 16%.

As an export market, India is fairly important partner (with a share between 5-10%) for Myanmar, Brunei Darussalam, and Indonesia, and less important partner (share less than 5%) for the remaining 7 AMSs. It is a less important import supplier (less than 5%) for all AMSs.

Australia and New Zealand as a group is a very important export market for Lao PDR at 28% and an important market for Brunei Darussalam at 11%. However, as an import supplier, it is less important (less than 5%) for all AMSs.

2. Asia-Pacific Economic Cooperation (APEC): structure, purposes and tasks. Commodity and geographical structure of export and import of APEC.

Asia-Pacific Economic Cooperation (APEC) (figure 11.5), organization that seeks to promote free trade and economic cooperation throughout the Asia-Pacific region. Established in 1989 in response to the growing interdependence of Asia-Pacific economies and the advent of regional economic blocs (such as the European Union and the North American Free Trade Area) in other parts of the world, APEC works to raise living standards and education levels through sustainable economic growth and to foster a sense of community and an appreciation of shared interests among Asia-Pacific countries. At the end of the 1990s APEC's membership included its 12 founding members - Australia, Brunei, Canada, Indonesia, Japan, South Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, and the United States - as well as Chile, China, Hong Kong, Mexico, Papua New Guinea, Peru, Russia, Taiwan, and Vietnam. The Pacific Economic Cooperation Council (PECC), the South Pacific Forum (SPF), and the secretariat of the Association of Southeast Asian Nations (ASEAN) maintain observer status. The APEC's headquarters are in Singapore.



Figure 11.5 APEC emblem

Asia-Pacific Economic Cooperation (APEC) was established in 1989 in response to the growing interdependence among Asia-Pacific economies. Begun as an informal dialogue group, APEC has since become the primary regional vehicle for promoting open trade and prac-

tical economic cooperation. Its goal is to advance Asia-Pacific economic dynamism and sense of community. Despite the financial instability of 1997-98, the Asia-Pacific remains one of the fastest growing regions in the world. It is a major contributor to global prosperity and stability. Today, APEC includes all the major economies of the region and the most dynamic, fastest growing economies in the world. APEC's 21 member economies had a combined Gross Domestic Product of over US\$16 trillion in 1998 and 42 percent of global trade. Brunei Darussalam is the APEC Chair for the year 2000.

The member economies represent the rich diversity of the region as well as differing levels of economic development. Despite such differences there is a growing sense of common purpose and cooperation aimed at sustained regional and world growth.

APEC has come a long way since 1989. It has built steadily on the efforts of the past and looks forward to further progress. The initial years of APEC were focused largely on exchanges of views and project-based initiatives. The concerns were simply to advance the process of Asia-Pacific Economic Cooperation and to promote a positive conclusion to the Uruguay Round of GATT negotiations. Today, APEC has evolved with the needs of its members to be a forum of greater substance and higher purpose—it aims to build the Asia-Pacific community through achieving economic growth and equitable development through trade and economic cooperation.

At Blake Island near Seattle the APEC Economic Leaders met for the first time for informal discussions in November 1993. They envisioned a community of Asia-Pacific economies based on the spirit of openness and partnership; of cooperative efforts to solve the challenges of change; of free exchange of goods, services and investment; of broadly based economic growth and higher living and educational standards; and, of sustainable growth that respects the natural environment.

In subsequent annual meetings, APEC Ministers and Leaders further refined the vision and launched mechanisms to translate it into action. In 1994 in Bogor, Indonesia the vision of an open trading system became the very ambitious goal of free and open trade and investment in the Asia-Pacific by 2010 for developed member economies and 2020 for developing ones.

In Osaka in 1995, APEC Leaders adopted the Osaka Action Agenda, which firmly established the three pillars of APEC activities: trade and investment liberalization, business facilitation and economic and technical cooperation. The Manila Action Plan for APEC (MAPA), adopted by the Economic Leaders in November 1996, compiled members' initial individual action plans to achieve the objectives outlined in Bogor. APEC Leaders also instructed that high attention be given to the following six areas of economic and technical cooperation: developing human capital; fostering safe and efficient capital markets; strengthening economic infrastructure; harnessing technologies of the future; promoting environmentally sustainable growth; and encouraging the growth of small and medium-sized enterprises.

In Vancouver in 1997 the APEC Economic Leaders recognized members' efforts to improve the commitments in their Individual Action Plans and reaffirmed their intention to update these annually. The Leaders endorsed their Ministers' agreement that action should be taken with respect to early voluntary sectoral liberalization (EVSL) in 15 sectors, with nine to be advanced throughout 1998 and implementation to begin in 1999. The Leaders welcomed the progress of APEC fora in involving business, academics and other experts, women and youth and encouraged them to continue these efforts. The Leaders endorsed the Vancouver Framework for Enhanced Public-Private Partnership for Infrastructure Development, as infrastructure is inextricably linked to the questions of financial stability that APEC addressed that year.

In Kuala Lumpur in 1998, the APEC Leaders reaffirmed their confidence in the strong economic fundamentals and prospects for recovery for the economies of the Asia-Pacific. They agreed to pursue a cooperative growth strategy to end the financial crisis. They pledged efforts to strengthen social safety nets, financial systems, trade and investment flows, the scientific and technological base, human resources development, economic infrastructure, and business and commercial links so as to provide the base and set the pace for sustained growth into the 21st century. Leaders also welcomed Ministers' decision to seek an EVSL agreement with non-APEC members at the World Trade Organisation.

The Leaders adopted the Kuala Lumpur Action Program on Skills Development with the objective of contributing towards sustainable growth and equitable development while reducing economic dispari-

ties and improving the social well-being of the people, through skills upgrading/improvement.

APEC is organized into numerous committees, ad hoc policy groups, working groups, and a business advisory council. The committees, which examine issues such as trade and investment, economic trends, and budgetary matters, meet twice per year. The working groups are headed by experts and consider specific issues, including energy, tourism, fishing, transportation, and telecommunications. The organization’s chair, which rotates annually, hosts an annual summit meeting and meetings of foreign and economic ministers and other senior officials. The APEC secretariat, established in 1993 and headquartered in Singapore, provides advisory and logistic services as well as research and analysis.

In 2014, the value of APEC members’ total exports and imports reached USD 18.5 trillion, equivalent to 49% of total world trade (figure 11.6).

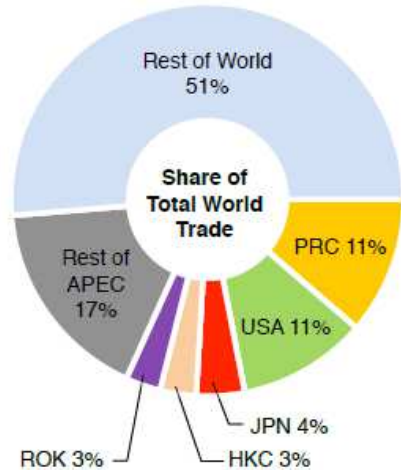


Figure 11.6 Share of Total World Trade of APEC

The value of APEC members’ aggregate trade increased three-folds to USD 18.5 trillion in 2014 from USD 6.4 trillion in 2000, growing at an average annual rate of 10.4% during the period. Intra-regional trade also kept pace, expanding by around 2.7 times during

the same period from USD 4.5 trillion to USD 12.1 trillion (figure 11.7).

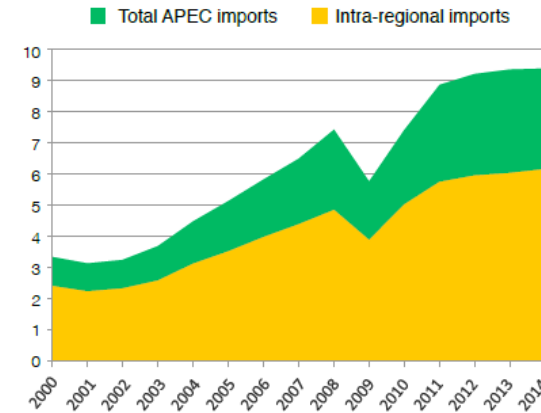


Figure 11.7 Total APEC imports and intra-regional imports, 2014

Total exports of goods in the APEC region climbed to USD 9.1 trillion in 2014, of which 65.3% were intra-regional exports. APEC imports were higher at USD 9.4 trillion, of which 65.4% were sourced from other APEC economies (figure 11.8).

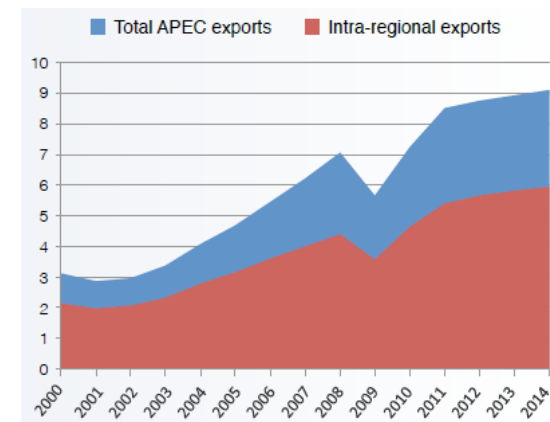


Figure 11.8 Total APEC exports and intra-regional exports, 2014

Trade growth in the region has been slowing down in recent years, reflecting the uneven economic recovery in the aftermath of the

global financial crisis. The value of APEC's total exports grew by 1.9% in 2014 while total imports grew 0.3%, with intra-regional trade outperforming trade with the rest of the world during the year (figure 11.9).

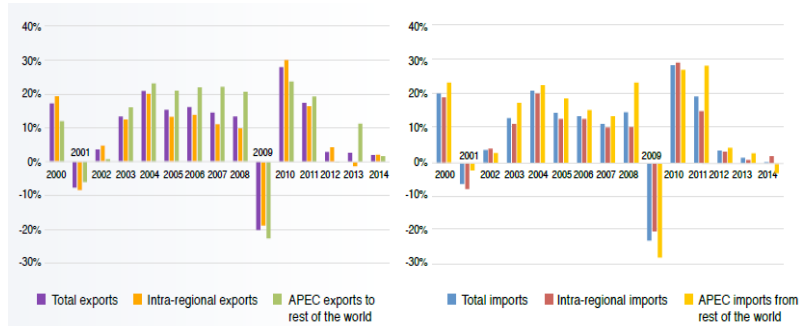


Figure 11.9 Nominal Trade Growth in APEC, 2000-2014

In 2014, at least 84% of intra-APEC trade-in-goods was accounted for by the top 5 APEC exporters and importers. China was the largest exporter of goods while the US was the largest importer (figure 11.10).

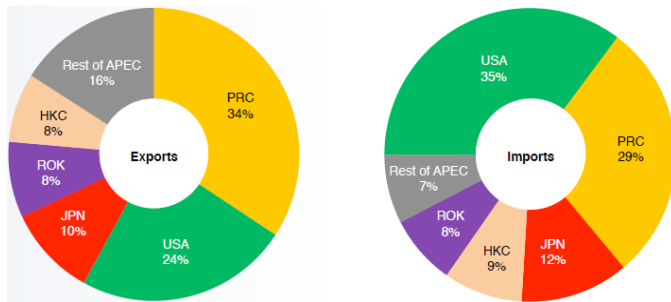


Figure 11.10 Share of Intra-regional Trade in APEC (percent share), 2014

The top 10 product exports accounted for 33% of the total value of APEC's exports to the world in 2014 (using the Harmonized System 4-digit headings). Electronics and petroleum oils were the top ex-

port products at 5.1% and 5.0% of total value, respectively (figure 11.11).

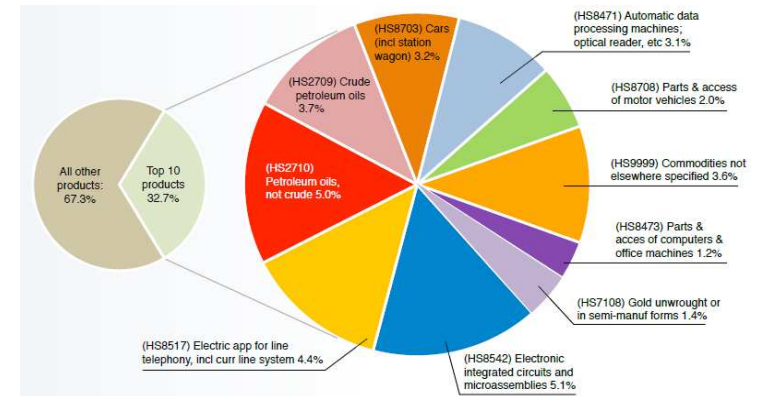


Figure 11.11 Top 10 Exports from APEC to the World by Value (percent share), 2014

The top 10 products imported by APEC economies accounted for 36.8% of the total value of imports in 2014 (using the Harmonized System 4-digit headings). Petroleum products, electronics and cars were the leading imports, with crude petroleum oils being the largest at 9.5% of total import value (figure 11.12).

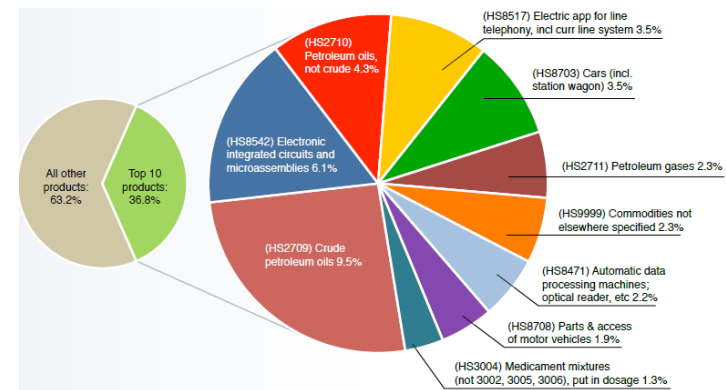


Figure 11.12 Top 10 Imports from the World to APEC by Value (percent share), 2014

The top 10 most traded product groupings within the APEC region accounted for 33% of total exports from APEC members to other APEC members in 2014 (using the Harmonized System 4-digit sub-headings) (figure 11.13).

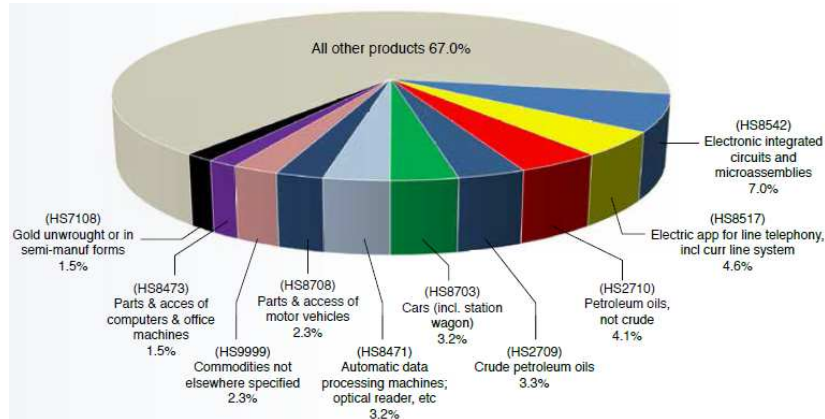


Figure 11.13 Top 10 Most Traded Products in APEC by Value (percent share), 2014

Electronic and petroleum products are among the most traded within the region, with electronic integrated circuits and micro-assemblies getting the biggest share at 7.0% of total intra-APEC export value.

3. Association of regional cooperation of the Southern Asia (SAARC): structure, purposes, tasks. Commodity and geographical structure of export and import of SAARC.

The South Asian Association for Regional Cooperation (SAARC) (figure 11.14) comprises Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka. SAARC is a manifestation of the determination of the peoples of South Asia to work together towards finding solutions to their common problems in a spirit of friendship, trust and understanding and to create an order based on mutual respect, equity and shared benefits. The main goal of the Association is to ac-

celerate the process of economic and social development in member states, through joint action in the agreed areas of cooperation. It is headquartered in Kathmandu, Nepal.



Figure 11.14 Emblem of SAARC

Membership: Eight states—Afghanistan, Bangla-desh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. Six observers—China, Japan, European Union, Republic of Korea, United States, Iran

The idea of regional cooperation in South Asia was first raised in November 1980. After consultations, the foreign secretaries of the seven founding coun-tries—Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka—met for the first time in Colombo in April 1981. This was followed a few months later by a meeting of the Committee of the Whole, which identified five broad areas for regional cooperation. The foreign ministers, at their first meet-ing in New Delhi in August 1983, adopted the Decla-ration on South Asian Association for Regional Co-operation (SAARC) and formally launched the Inte-grated Program of Action (IPA) in the five agreed areas of cooperation: agriculture; rural development; telecommunications; me-teorology; and health and population activities. Later, transport; postal services; scientific and technological cooperation; and sports, arts, and culture were added to the IPA. Afghanistan became the newest member of SAARC at the 13th annual summit in 2005. China and Japan were granted observer status at the same.

Purposes: The SAARC seeks to promote the welfare of the peoples of South Asia, strengthen collective self-reliance, promote

active collaboration and mutual assistance in various fields, and cooperate with international and regional organizations.

The objectives, principles and general provisions, as mentioned in the SAARC Charter, are as follows:

- To promote the welfare of the peoples of South Asia and to improve their quality of life;
- To accelerate economic growth, social progress and cultural development in the region and to provide all individuals the opportunity to live in dignity and to realise their full potentials;
- To promote and strengthen collective self-reliance among the countries of South Asia;
- To contribute to mutual trust, understanding and appreciation of one another's problems;
- To promote active collaboration and mutual assistance in the economic, social, cultural, technical and scientific fields;
- To strengthen cooperation with other developing countries;
- To strengthen cooperation among themselves in international forums on matters of common interests; and
- To cooperate with international and regional organizations with similar aims and purposes.

Principles:

- Cooperation within the framework of the Association is based on respect for the principles of sovereign equality, territorial integrity, political independence, non-interference in the internal affairs of other states and mutual benefit.
- Such cooperation is to complement and not to substitute bilateral or multilateral cooperation.
- Such cooperation should be consistent with bilateral and multilateral obligations of the member states.
- Decisions at all levels in SAARC are taken on the basis of unanimity.
- Bilateral and contentious issues are excluded from its deliberations.

Institutional structure:

- Summits - The highest authority of the Association rests with the Heads of State or Government.
- Council of Ministers - Comprising the Foreign Ministers of member states is responsible for the formulation of policies; reviewing

progress; deciding on new areas of cooperation; establishing additional mechanisms as deemed necessary; and deciding on other matters of general interest to the Association. The Council meets twice a year and may also meet in extraordinary session by agreement of member states.

- Standing Committee - Comprising the Foreign Secretaries of member states is entrusted with the overall monitoring and coordination of programmes and the modalities of financing; determining inter-sectoral priorities; mobilising regional and external resources; and identifying new areas of cooperation based on appropriate studies. It may meet as often as deemed necessary but in practice it meets twice a year and submits its reports to the Council of Ministers.

- Programming Committee - Comprising the senior officials meets prior to the Standing Committee sessions to scrutinize Secretariat Budget, finalise the Calendar of Activities and take up any other matter assigned to it by the Standing Committee.

- Technical Committees - Comprising representatives of member states, formulate programmes and prepare projects in their respective fields. They are responsible for monitoring the implementation of such activities and report to the Standing Committee. The chairmanship of each Technical Committee normally rotates among member countries in alphabetical order, every two years.

- Action Committees - According to the SAARC Charter, there is a provision for Action Committees comprising member states concerned with implementation of projects involving more than two, but not all member states. At present, there are no such Action Committees.

- Other Meetings - During the first decade of SAARC, several other important meetings took place in specific contexts. A number of SAARC Ministerial Meetings have been held, to focus attention on specific areas of common concern and has become an integral part of the consultative structure. In addition, a high level Committee on Economic Cooperation (CEC) has been established in 1991, for identifying and implementing programmes in the core area of economic and trade cooperation. A three-tier mechanism was put in place in 1995, to follow-up on the relevant SAARC decisions on Poverty Eradication. The tiers consist of Meeting of Secretaries in-Charge of Poverty Era-

dication, Meeting of Finance/Planning Secretaries, and Meeting of Finance/Planning Ministers.

- SAARC secretariat - Established in Kathmandu on 16 January 1987, the SAARC Secretariat is responsible to coordinate and monitor the implementation of SAARC activities, service the meetings of the Association and serve as the channel of communication between SAARC and other international organizations. The Secretariat comprises of the Secretary-General, a Director from each member state and the General Services Staff. The Secretary-General is appointed by the Council of Ministers upon nomination by a member state, on the principle of rotation in alphabetical order, for a period of two years. Directors are appointed by the Secretary-General, upon nomination by member states for a period of three years which, in special circumstances, may be extended by the Secretary-General for a period not exceeding another full term, in consultation with the member state concerned.

Trade and economic cooperation in SAARC

SAARC has taken important steps to expand cooperation among member countries in the core economic areas. The completion of the Regional Study on Trade, Manufactures and Services (TMS) in 1991, was the first significant step which paved the way for SAARC to move forward in strengthening cooperation in this important field. The Study outlined a number of recommendations for promoting regional cooperation in the core economic areas.

A high-level Committee on Economic Cooperation (CEC) comprising the Commerce Secretaries of Member States, was established in July 1991 to act as the forum to address economic and trade issues. The Committee is charged with the responsibility of, inter-alia, monitoring the progress in the implementation of decisions relating to expansion of trade and economic cooperation under the framework of SAARC. It considers the reports of Inter-Governmental Group (IGG) on trade liberalisation, Inter-Governmental Expert Group (IGEG) on transition to South Asian Free Trade Area (SAFTA), and Committee of Participants (COP), and other expert groups on customs, investments, and standardisation. It also reviews progress in the implementation of decisions of meetings of SAARC Commerce Ministers.

At the Colombo Summit in December 1991, the Heads of State or Government approved the establishment of (IGG) to seek agreement

on an institutional framework under which specific measures for trade liberalisation among SAARC member states could be furthered. The IGG evolved a draft Agreement on SAARC Preferential Trading Arrangement (SAPTA), which was subsequently signed by the Council of Ministers in Dhaka on 11 April 1993 during the Seventh SAARC Summit, upon the recommendation of CEC.

After completion of procedural formalities by all SAARC member countries and subsequent to a notification issued by the Secretariat to this effect, as per Article 22 of the Agreement, the SAPTA Agreement entered into force on 7th December 1995 - two years ahead of the time schedule envisaged initially. SAPTA contains provisions giving special and favourable treatment to the LDCs in the SAARC region. Additional measures in favour of LDCs including provisions for safe-guard action and balance of payment measures are also incorporated in SAPTA to protect the interests of member states during critical economic circumstances.

With the operationalisation of SAPTA in December 1995, the IGG on Trade Liberalisation, embarked on its Second Round of Trade Negotiations, which was successfully concluded after four meetings of the Group in Colombo, Islamabad, New Delhi and at the SAARC Secretariat, Kathmandu in March, September, October and November 1996 respectively. The number of products enjoying preferential treatment at the conclusion of the Second Round is more than 2000. The non-tariff barriers in the way of expansion of intra-SAARC trade are also being identified and removed. The Third Round of Trade Negotiations under SAPTA is presently underway and is expected to be completed shortly. Following the ratification of SAPTA by all Member States, the Sixteenth Session of the Council of Ministers (New Delhi, December 1995) agreed that Member States should strive for the realisation of a South Asian Free Trade Area (SAFTA). An Inter-Governmental Expert Group (IGEG) on transition to SAFTA comprising experts from the Member Countries was set up as an ad-hoc body by the CEC to identify the necessary steps towards moving into a free trade area. The IGEG has met twice and held in-depth discussions and agreed on the draft terms of reference for the Group and has also drawn up a broad framework of Action Plan for achieving SAFTA. In order to give impetus to intra-SAARC trade under the SAPTA Agreement and to promote economic cooperation in the region, the Com-

merce Ministers of SAARC countries met in New Delhi in January 1996. It has since been decided that the Commerce Ministers shall meet annually and the second meeting has been held in Islamabad in April 1998.

The first SAARC Trade Fair was held in New Delhi in January 1996 with the theme "Cooperation for Growth". The Fair, organised as a part of the commemoration of the first decade of SAARC, was jointly inaugurated by the Commerce Ministers and leaders of delegations of Member States. The Fair provided a befitting venue for the representatives of the business and industry of SAARC Member Countries to discuss various issues connected with promotion and expansion of intra-SAARC trade. The second SAARC Trade Fair was held in Colombo (1998) and the next SAARC Trade Fair is slated to be held in Islamabad in 1999.

The Heads of State or Government at the Ninth SAARC Summit recognised the importance of achieving a free trade area by the year 2001 A.D., and reiterated that steps towards trade liberalisation must take into account the special needs of the smaller and the Least Developed Countries and that benefits must accrue equitably.

The Tenth SAARC Summit decided to constitute a Committee of Experts with specific terms of reference to work on drafting a comprehensive treaty regime for creating a free trade area and emphasised the importance of finalising the text of regulatory framework by the year 2001 A.D.

Questions for discussion:

- What is an essence of disagreements of the developed and developing member countries of the ASEAN?
- What are purposes of creation and basic principles of the ASEAN, SAARC and APEC?
- What are the rounds of negotiations within the ASEAN, SAARC and APEC and what are their results?
- What are the tasks and ASEAN, SAARC and APEC structures?
- What is an essence of disagreements of the developed and developing member countries of the SAARC and APEC?

THEME 12. EURASIAN ECONOMIC UNION

1. History of Eurasian integration: structural evolution. The member-countries of Eurasian Economic Union.
2. General economic indicators of EAEU member-countries.
3. Commodity and geographical structure of export and import of EAEU member-countries.
4. Advantages and disadvantages of Eurasian Economic Union.

1. History of Eurasian integration: structural evolution. The member-countries of Eurasian Economic Union.

The process of Eurasian integration dates back more than 20 years. Efforts to salvage the economic and business ties built over many decades in the Soviet Union began immediately after the break-up of the USSR.

The integration process was driven by the extensive ties between the new independent states in a range of economic sectors (industry, agriculture, transport and energy). The existence of a largely shared social and humanitarian space was also an important factor.

While the main priority for all the newly established states was to achieve full economic and political sovereignty, it was understood that economic development and improving living standards would be much more difficult to achieve unless ties were preserved.

On December 8, 1991 the presidents of Belarus, Russia and Ukraine met at Belovezhskaya Pushcha in Belarus and signed an agreement establishing the Commonwealth of Independent States (CIS). The agreement was endorsed by other former Soviet republics in Alma-Ata on December 21, 1991. In this treaty countries agreed to collaborate in developing common economic space and set up principles of cooperation through coordinated institutions.

The goals were to create a common economic space based on a free trade area, and to sustain and develop economic and humanitarian cooperation. However, the objectives of the Commonwealth leaders did not and still do not envisage the creation of any integration group other than a free-trade zone.

On this basis, the countries that were prepared for closer economic cooperation began to consider new forms of integration. In 1995

Belarus, Kazakhstan and Russia set about establishing a customs union.

In 1996 Belarus, Kazakhstan, Russia and Kyrgyzstan signed the Treaty on Increased Integration in the Economic and Humanitarian Fields. The treaty set up basic goals in integration including creation of common markets for goods, services, capitals, labour and developing single transport, energy and information systems.

These agreements developed in 1999 when Belarus, Kazakhstan, Russia, Kyrgyzstan and Tajikistan signed the Treaty on the Customs Union and the Single Economic Space. By signing this treaty all parties agreed to complete the formation of the Custom Unions and the Single Economic Space.

In 2000 Belarus, Kazakhstan, Russia, Kyrgyzstan and Tajikistan established the Eurasian Economic Community (EurAsEC). Uzbekistan joined this community in 2006. The priorities of the new organization were to improve cooperation and promote integration.

In 2003 the Presidents of Belarus, Kazakhstan, Russia and Ukraine decided to establish the Single Economic Space (SES). Although Ukraine was subsequently to withdraw from the project, the groundwork had now been laid for moving ahead with the integration process.

In August 2006 at an informal EurAsEC summit meeting in Sochi it was decided that Belarus, Kazakhstan and Russia would step up efforts aimed at the establishment of the Customs Union, while Kyrgyzstan and Tajikistan would join the organization as soon as they were ready. Based on these arrangements the Treaty on the Establishment of the Common Customs Territory and Formation of the Customs Union between Belarus, Kazakhstan and Russia was signed in October 2007.

The global financial crisis, which began in 2008, prompted countries worldwide to search for new ways of minimizing economic risks and achieving sustainable development. This proved a major factor in revitalizing regional integration processes.

In June 2009 integration stages and timeline of creation single custom area were defined. The Supreme Body of the Customs Union resolved that the Union would be enacted as of January 1, 2010. The “troika” of countries then moved to establish of the Single Economic Space on the basis of the Customs Union.

The three leaders declared that development of the Customs Union and the Single Economic Space should in the future lead to creation of the Eurasian Economic Union. The underlying goal of integration was to create an environment conducive to cooperation with other countries and other economic unions. In particular, there was an aspiration to create a common economic space with the European Union.

On November 18, 2011 the presidents of Belarus, Kazakhstan and Russia signed a Declaration on Eurasian Economic Integration, predicated on recognition of the success of the Customs Union. International agreements setting out the legal framework of the Single Economic Space, now came into effect, and on January 1, 2012 the SES became operational.

On the same day – November 18, 2011 – the presidents of Belarus, Kazakhstan and Russia worked out an agreement on the Eurasian Economic Commission. Based on this agreement on February 2, 2012 the Eurasian Economic Commission began work as the permanent supranational regulatory body of the Customs Union and the Single Economic Space.

A deadline of January 1, 2015 was set for the codification of international agreements, which would constitute the legal and regulatory framework of the Customs Union and the Single Economic Space, on the basis of which the Eurasian Economic Union would be founded (figure 12.1).



Figure 12.1 Structural evolution of Eurasian Economic Union

The Eurasian Economic Union is an international organization for regional economic integration. It has international legal personality and is established by the Treaty on the Eurasian Economic Union.

The EAEU provides for free movement of goods, services, capital and labor, pursues coordinated, harmonized and single policy in the sectors determined by the Treaty and international agreements within the Union.

The Member-States of the Eurasian Economic Union are the Republic of Armenia, the Republic of Belarus, the Republic of Kazakhstan, the Kyrgyz Republic and the Russian Federation.

The treaty establishing the Eurasian Economic Union was formally signed by three states: Belarus, Kazakhstan, and Russia. Agreements to enlarge the EEU to the other post-Soviet states of Armenia and Kyrgyzstan were signed on 9 October and 23 December 2014, respectively (table 12.1).

Table 12.1

Membership in EAEU

Country	Accession Date	Date of Signature
Armenia	2 January 2015	10 October 2014
Belarus	1 January 2015	29 May 2014
Kazakhstan	1 January 2015	29 May 2014
Kyrgyzstan	12 August 2015	23 December 2014
Russian Federation	1 January 2015	29 May 2014

In force since 2012, the multilateral CIS Free Trade Zone Agreement established a free trade area between the member states of the Eurasian Economic Union, Ukraine, Uzbekistan and Moldova. The Union and its member states have furthermore signed an agreement with Vietnam, which is planned to enter into force in early 2016 (table 12.2).

Table 12.2

Free Trade Agreement with EAEU

Country	Date of entry into force	Date of Signature
Vietnam	2016 (not yet in force)	29 May 2015
Uzbekistan	9 January 2014	18 October 2011
Moldova	1 January 2013	18 October 2011
Ukraine	20 September 2012	18 October 2011

Russia's economic development minister stated that the Turkish economic minister, Nihat Zeybekci, put forward an initiative for closer cooperation with the Eurasian Economic Union, including the forma-

tion of a free trade zone between the union and Turkey. In February 2015, Egyptian president Abdel Fattah al-Sisi announced his country to sign a free-trade agreement with the Eurasian union.

The Union is being created to comprehensively upgrade, raise the competitiveness of and cooperation between the national economies, and to promote stable development in order to raise the living standards of the nations of the Member-States.

Chairman of the Eurasian Commission - Viktor Khristenko.

Administrative centers:

- Commission: Moscow, Russia;

- Court: Minsk, Belarus;

- Development Bank: Astana, Kazakhstan.

The Eurasian Economic Union represents the opening of new economic opportunities without sacrificing political independence.

2. General economic indicators of EAEU member-countries.

Regional economic integration is a noticeable trend in the global economy, whose future, probably, will largely depend on the effectiveness of global dialogue of integrational entities and on their internal stability. Therefore, in order to secure a proper place in a new structure of the world economic system, the emergence of which we have been witnessing over recent years, the Eurasian Economic Union Member States develop their project of economic integration.

The Single Economic Space established a single market across the territory of Belarus, Russia and Kazakhstan. In 2015, the single market was expanded to include Armenia and Kyrgyzstan. The countries represent a market of some 183 million people and a combined GDP of around \$4 trillion.

The Eurasian Economic Union is designed to reach a number of macroeconomic objectives such as reducing commodity prices by reducing the cost of transportation of raw materials, increasing return on new technologies and products due to the increased market volume, and promoting "healthy" competition in the common market. It is also designed to lower food prices, increase employment in industries and increase production capacity.

The Eurasian Economic Union is seen as an energy superpower, producing about 20.7% of the world's natural gas, and 14.6% of the

world's oil and gas condensate, making it the world's top producer in both domains. It also produces 9% of the world's electrical energy and 5.9% of the world's coal, making it the third and fourth producer in the world, respectively. In Kazakhstan, energy is the leading economic sector. The country holds about 4 billion tons of proven recoverable oil reserves and 2,000 cubic kilometers (480 cu mi) of gas. Kazakhstan is the world's 17th largest oil exporter and the world's 23rd largest natural gas exporter (table 12.3).

Table 12.3

General economic indicators of EAEU

Countries	Population	GDP	GDP per capita	HDI	Debt	Debt (% GDP)	Deficit (% GDP)
Armenia	2,983,990	11,644 M.\$	3,902\$	0.730	4,809 M.\$	41.32%	- 1.94%
Belarus	9,470,000	76,139 M.\$	8,040\$	0.786	27,827 M.\$	38.07%	- 0.91%
Kazakhstan	17,422,000	216,036 M.\$	12,400\$	0.757	32,082 M.\$	14.86%	1.83%
Kyrgyzstan	5,834,200	7,402 M.\$	1,269\$	0.628	3,924 M.\$	51.34%	0.09%
Russia	146,300,000	1,860,598 M.\$	12,718\$	0.778	331,363 M.\$	17.82%	- 1.18%
Total	182,010,190	2,171,819 M.\$	11,932\$		400,005 M.\$	18.43%	

Russia has the world's largest natural gas reserves, the 8th largest oil reserves, and the second largest coal reserves. Russia is also the world's leading natural gas exporter and the second largest natural gas producer, while also the largest oil exporter and the largest oil producer (figure 12.2, figure 12.3, figure 12.4, figure 12.5, figure 12.6).

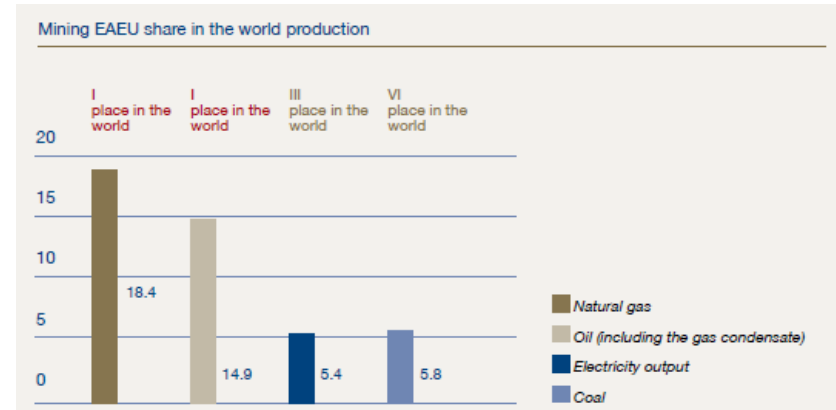


Figure 12.2 Mining EAEU share in the world production

The Eurasian Economic Commission, within its competence, interacts with external partners: states, international organizations, regional integrational entities. Mutually beneficial dialogue, based on mutual trust and respect is one of the basic principles of the EEC activities both in cooperation with the EAEU Member States and with the third countries.

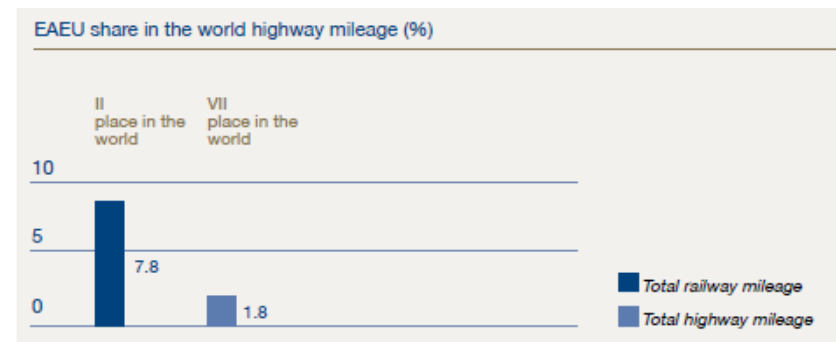


Figure 12.3 EAEU share in the world highway mileage (%)

The Commission within the competences of the Union shall cooperate and exchange experience with international partners from

abroad, with leading international organizations and with international expert community.

The Eurasian Economic Union is the top producer of sugar beet and sunflower, producing 18.6% of the world's sugar beet and 22.7% of the world's sunflowers, as well as a top producer of rye, barley, buckwheat, oats and sunflower seed. It is also a large producer of potatoes, wheat and grain (and grain legumes).

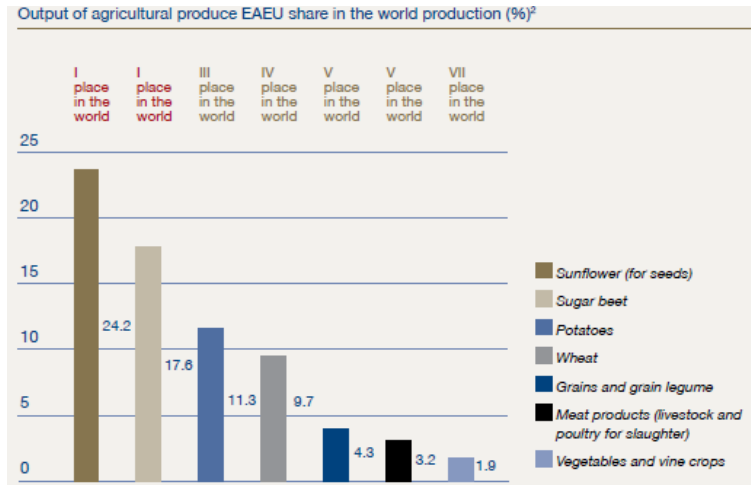


Figure 12.4 Output of agricultural produce EAEU share in the world production (%)

International cooperation is intended to help in addressing major challenges of the EAEU economic development, including ensuring sustainable development and predictability of economic relations within the Union and of the Union's external relations.

Interaction with third countries, international organizations and integration associations allows us to study and classify world experience of economic integration and to optimize practices applied in the EAEU, focusing on best international practices. It also allows to establish mutually beneficial forms of cooperation with the third countries and their associations with the widest possible coverage of issues of mutual interest.

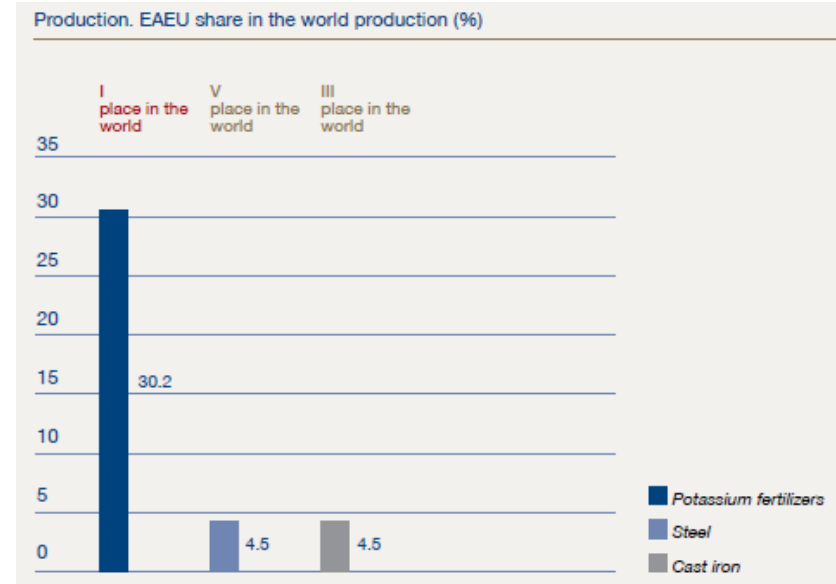


Figure 12.5 Production. EAEU share in the world production (%)

In 2013-2014, the Commission worked closely and it continues to work with international organizations, including the United Nations Conference on Trade and Development (UNCTAD), the Economic Commission for Europe (UNECE), the Economic and Social Commission for Asia and the Pacific (ESCAP), the Eurasian Development Bank (EDB), the Russian National Committee of the World Energy Council (WEC RNA).

The Commission has an observer status in the UNCTAD. The Commission established cooperation with the Forum "Asia-Pacific Economic Cooperation" (APEC), with the Common Market of the South (MERCOSUR), the Secretariat of the Association of Southeast Asian Nations (ASEAN), conducted a dialogue with other partners, in particular through the BRICS.

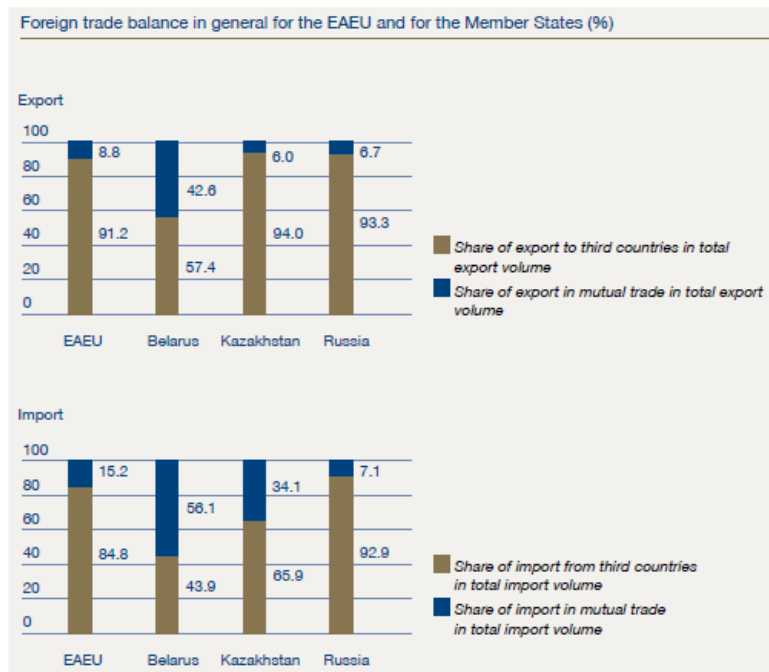


Figure 12.6 Foreign trade balance in general for the EAEU and for the Member States (%)

3. Commodity and geographical structure of export and import of EAEU member-countries.

Trade Policy of the Union aims to promote the sustainable economic development of Member States, economic diversification, innovative development, increasing the volume and improving the structure of trade and investment, accelerating the integration process, as well as further development of the Union as an effective and competitive organisation in the global economy.

Trade Policy is implemented by the Union independently or jointly with the Member States, in the areas in which the bodies of the Union take binding decisions on the Member States, through the signing of international agreements with third parties, participation in interna-

tional organisations or through independent applications of the measures and mechanisms of Foreign Trade Policy.

The Union may apply joint measures to promote exports of Member States into third party markets, in accordance with international treaties, norms and rules of the World Trade Organization, including conducting negotiations and establishing free trade areas (figure 12.7, figure 12.8, figure 12.9, figure 12.10).

Priorities of National Economy of the Russian Federation:

- Energy Efficiency.
- Space Technologies and Telecommunications.
- Medical Technologies and Pharmaceuticals.
- Information Technologies and Software.
- Nuclear Energy.

Priorities of National Economy of the Republic of Kazakhstan:

- Petroleum Refining and Oil-and-Gas Sector Infrastructure.
- Ore Mining and Smelting.
- Chemical Industry.
- Nuclear Industry.
- Mechanical Engineering.
- Pharmaceutical Industry.
- Industry & Agriculture.
- Tourism.
- Information Technologies.
- Biotechnologies.
- Outer Space Exploration.
- Alternative Energy.

Priorities of National Economy of the Republic of Belarus:

- Alternative Energy.
- Electronics and Home Appliances.
- Biotechnologies and Pharmaceuticals.

Priorities of National Economy of the Republic of Armenia:

- Food Industry.
- Mining Industry.
- Energy;
- Information Technologies and Telecommunications.
- Chemical and Pharmaceutical Sectors.
- Tourism.

Priorities of National Economy of the Kyrgyz Republic:

- Tourism.
- Mining Industry.
- Light Industry.
- Agroindustrial Complex.
- Transportation.
- Construction.
- Energy Industry.

General Economic Indicators of EAEU member-countries:

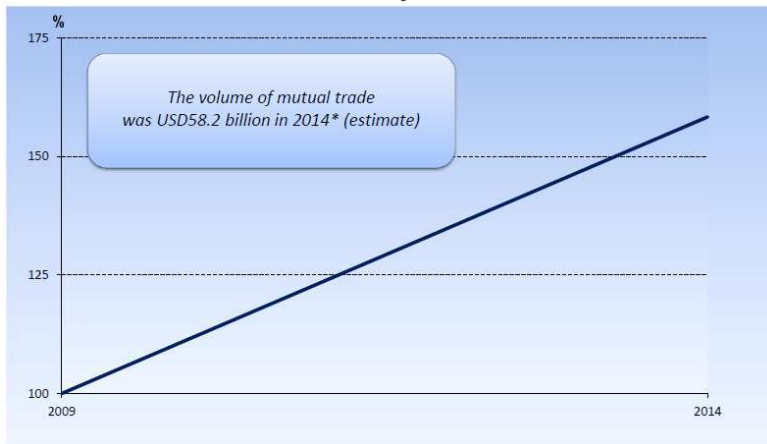


Figure 12.7 The volume of mutual trade in goods (2009-2014)

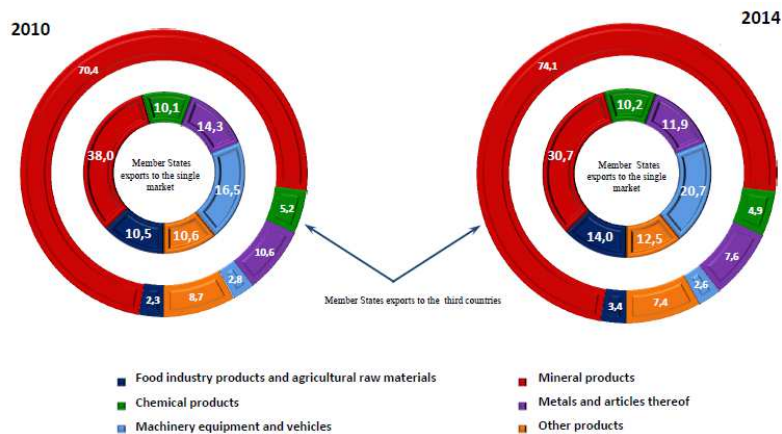


Figure 12.8 Structure of exports by commodity groups (2009-2014)

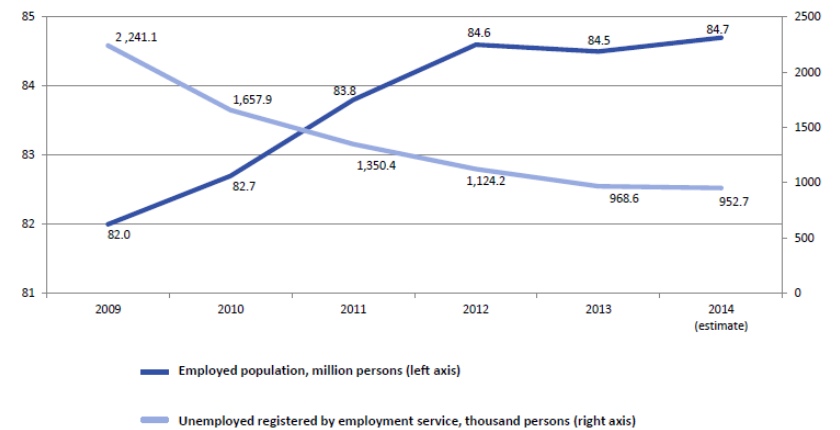


Figure 12.9 Employment and Unemployment (2009-2014)



Figure 12.10 Main Economic Indicators (2009-2014)

The freedom of movement of goods, services, capital and labour is ensured in the framework of the Union. Besides, the framework enables the execution of coordinated, coherent and common economic policy, established by the Treaty and international agreements within the Union.

4. Advantages and disadvantages of Eurasian Economic Union.

There are actually many more benefits of being a member of the EAEU than can be identified by economists and politicians. But it is better to focus only on the essential economic aspects which can be seen as momentous. Economists agree on a set of following *advantages of being in the EAEU*:

- 1) greater competition in the markets for commodities and services;
- 2) new employment opportunities;
- 3) inflow of investment and support for entrepreneurs.
- 4) As customs controls between member states will be abolished, they will be exempt from customs duties. Thus, costs of some goods will be lower, which will increase the trade volume among member states.

5) Producing companies will be able to import customs-free raw materials from member states, which will lower production costs, and facilitate and increase the production of related goods.

6) The volume of direct investments among member states will increase with the free movement of goods and capital. In this way, there will be more employment opportunities, and cash flow into those countries will increase.

7) The free movement of workers will enable citizens of member states to live and work in other member states without visas.

8) One of the objectives of membership is a common currency. This would prevent exchange rate fluctuations, which would improve and facilitate commercial relations within the union and contribute to the creation of a stable commercial environment.

There are, of course, other benefits which are also important, but they can be attributed as part of the benefits identified above. So, it is rather convenient to stop at them within the context of advantages which are more relevant (figure 12.11a, figure 12.11b).

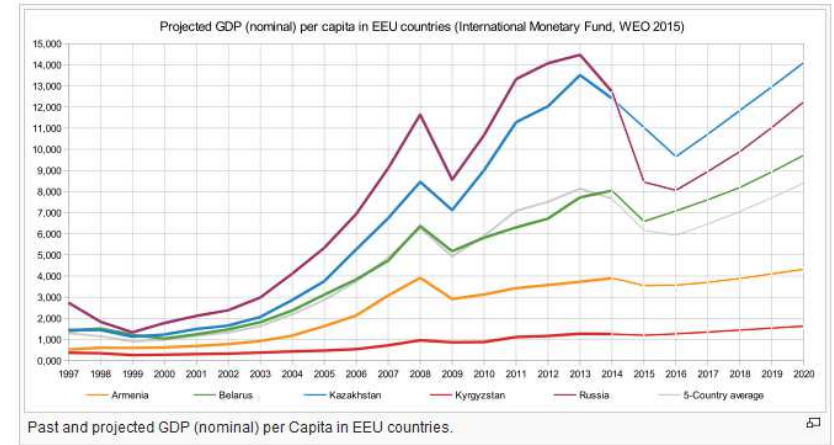


Figure 12.11a The future of development of EAEU till 2020

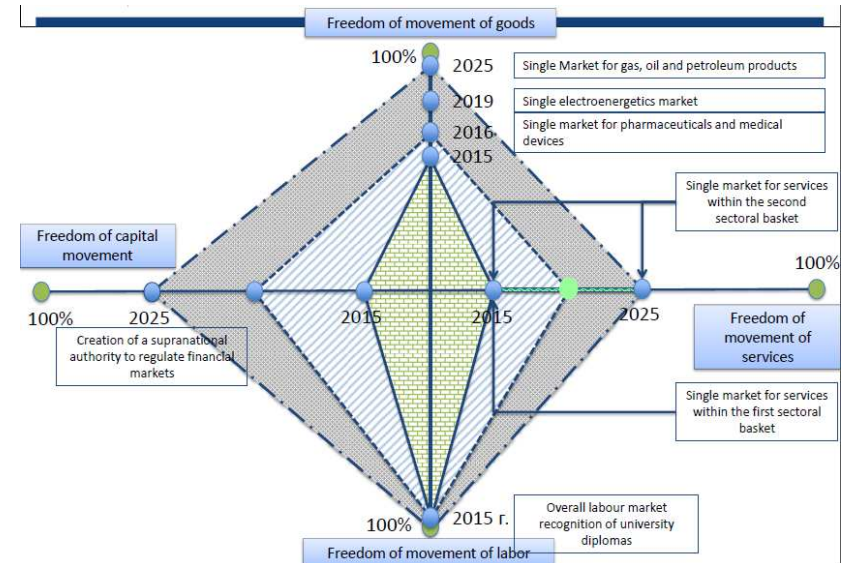


Figure 12.11b The future scenario of development of EAEU till 2025

The first immediate effect of the establishment of the EAEU will be reduction and/or removal of tariffs and quotas on imported goods

from member countries. As a result, this allows producers to promote their goods more freely in a larger market than before, and the increase of the size of the market allows reduction of prices of the goods. These are definitely beneficial for consumers, but it is wrong to think that producers are going to lose due to the lower prices. The reason lies behind free movement of commodities, labour and capital within the EAEU. The greater the choice the more sensitive buyers are to prices of the good, labour or capital, and the prices will go down. Hence, not only the prices of commodities fall, but so do the prices of inputs such as labour and capital. In this case, it is rational to forecast that prices will fall for two reasons:

- a) the size of the market increases competition, and lowers prices;
- b) more input choices available to producers makes the price of inputs lower and reduces the costs of production, and the prices of final goods will go down eventually.

Disadvantages of the Eurasian Economic Union:

1) The most important disadvantage of the Customs Union will be member states' renunciation of their sovereignty and their right to follow independent policies. Member states will not be able to enter into agreements with third countries as they wish, and they will have to obtain the approval of other members.

2) Member states will apply higher customs tariffs on the products they buy from third countries in order to increase the trade volume among them. In this way, products which formerly were bought from third countries at lower prices will become more expensive, and production costs will accordingly rise.

3) Energy is the leading export for countries rich in hydrocarbon resources, such as Azerbaijan, Kazakhstan and Turkmenistan. In this case, they will not be able to adopt independent policies in energy trade, which is the engine of their economic development. A uniform energy policy will be adopted across the union. Member states will have to sell their resources at lower prices to other member states and for higher prices to third countries, which will be a huge disadvantage for countries where energy exports are the primary source of revenue.

4) Although common customs tariffs will be applied, they will largely comply with Russia's customs tariffs, which will serve its particular national interests.

5) Labour forces in less developed countries such as Kyrgyzstan, Tajikistan and Armenia, which are expected to become members, would flow to Russia, Azerbaijan, Kazakhstan and Turkmenistan, all of which have stronger economies. This would have a negative impact on domestic labour force markets and lower the wages in those countries.

6) Given that most member states have no direct access to the sea, imports from third countries will be mostly managed by Russia via its Black Sea coast, and these imported products can be sold to other member states duty free.

Questions for discussion:

- What are the purposes of creation and basic principles of the Custom Union and Eurasian Economic Union? What are the tasks and Eurasian Economic Union structures?

- What are the benefits, problems and losses from the accession of Republic of Kazakhstan to Eurasian Economic Union?

- Do you know about other CIS's regional trading agreements?

- What is an essence of the main collected problems within the Eurasian Economic Union?

- What is the advantage for Republic of Kazakhstan from a rule of conference of the Eurasian Economic Union?

III SECTION. WORLD GOODS MARKETS

THEME 13. AGRICULTURAL MARKETS: MARKETS OF THE FOOD AND AGRICULTURAL RAW MATERIALS

1. Foodstuff in international trade: products of agriculture, animal husbandry, forestry, fishery and sea trade, and the agro-cultural semifinished products and some final goods.
2. Markets of wheat, vegetables and fruits.
3. Markets of agricultural raw materials (food flavoring goods): sugar, coffee, tea, cocoa, spices.
4. United Nation's Food and Agricultural Organization (FAO) and Republic of Kazakhstan.

1. Foodstuff in international trade: products of agriculture, animal husbandry, forestry, fishery and sea trade, and the agro-cultural semifinished products and some final goods.

Food is any substance consumed to provide nutritional support for the body. It is usually of plant or animal origin, and contains essential nutrients, such as fats, proteins, vitamins, or minerals. The substance is ingested by an organism and assimilated by the organism's cells to provide energy, maintain life, or stimulate growth.

Historically, people secured food through two methods: hunting and gathering and agriculture. Today, the majority of the food energy required by the ever increasing population of the world is supplied by the food industry.

Most food has its origin in plants. Some food is obtained directly from plants; but even animals that are used as food sources are raised by feeding them food derived from plants. Cereal grain is a staple food that provides more food energy worldwide than any other type of crop. Corn (maize), wheat, and rice – in all of their varieties – account for 87% of all grain production worldwide. Most of the grain that is produced worldwide is fed to livestock.

Some foods not from animal or plant sources include various edible fungi, especially mushrooms. Fungi and ambient bacteria are used in the preparation of fermented and pickled foods like leavened bread, alcoholic drinks, cheese, pickles, kombucha, and yogurt.

The food industry is a complex, global collective of diverse businesses that supply most of the food consumed by the world population. Only subsistence farmers, those who survive on what they grow, can be considered outside of the scope of the modern food industry.

Most food has always been obtained through agriculture. With increasing concern over both the methods and products of modern industrial agriculture, there has been a growing trend toward sustainable agricultural practices.

Agriculture, also called *farming* or *husbandry*, is the cultivation of animals, plants, fungi, and other life forms for food, fiber, bio fuel and other products used to sustain human life (figure 13.1).



Figure 13.1 Agriculture process

Agriculture is the process of producing food, feeding products, fiber and other desired products by the cultivation of certain plants and the raising of domesticated animals (livestock). The practice of agriculture is also known as "farming". Scientists, inventors, and others devoted to improving farming methods and implements are also said to be engaged in agriculture. 1 in 3 people worldwide are employed in agriculture, yet it only contributes 3% to global GDP. Agriculture was the key development in the rise of sedentary human civilization, whereby farming of domesticated species created food surpluses that nurtured the development of civilization. The study of agriculture is known as agricultural science. Agriculture generally speaking refers to human activities, although it is also observed in cer-

tain species of ant and termite. The word *agriculture* is the English adaptation of Latin *agricultūra*, from *ager*, "a field", and *cultūra*, "cultivation" in the strict sense of "tillage of the soil". To practice agriculture means to use natural resources to "produce commodities which maintain life, including food, fiber, forest products, horticultural crops, and their related services." This definition includes arable farming or agronomy, and horticulture, all terms for the growing of plants, animal husbandry and forestry.

Agriculture involving domestication of plants was developed around 11,500 years ago separately in both the Fertile crescent and at Chogha Golan in modern day Iran, where wild barley, wheat and lentils were cultivated and with domesticated forms of wheat appeared about 9,800 years ago. Agriculture has undergone significant developments since the time of the earliest cultivation. The Fertile Crescent of Western Asia, Egypt and India were sites of the earliest planned sowing and harvesting of plants that had previously been gathered in the wild. Independent development of agriculture occurred in northern and southern China, Africa's Sahel, New Guinea, parts of India and several regions of the Americas. Agricultural techniques such as irrigation, crop rotation, the application of fertilizers were developed soon after the Neolithic Revolution but have made significant strides in the past 200 years. The Haber-Bosch method for synthesizing ammonium nitrate represented a major breakthrough and allowed crop yields to overcome previous constraints.

In the past century, agriculture in the developed nations, and to a lesser extent in the developing world, has been characterized by enhanced productivity, the replacement of human labor by synthetic fertilizers and pesticides, selective breeding, and mechanization. The recent history of agriculture has been closely tied with a range of political issues including water pollution, biofuels, genetically modified organisms, tariffs and farm subsidies.

Agricultural economics or agronomics is an applied field of economics concerned with the application of economic theory in optimizing the production and distribution of food and fibre — a discipline known as agronomics. Agronomics was a branch of economics that specifically dealt with land usage. It focused on maximizing the crop yield while maintaining a good soil ecosystem. Throughout the 20th century the discipline expanded and the current

scope of the discipline is much broader. Agricultural economics today includes a variety of applied areas, having considerable overlap with conventional economics. Agricultural economists have made substantial contributions to research in economics, econometrics, development economics, and environmental economics. Agricultural economics influences food policy, agricultural policy, and environmental policy.

The global trade of food is a diverse and complex operation and one in which most countries strive to take part. Governments recognize that a strong national food industry is an important supplier of food to the population and a significant contributor to food security. They also view food exports as an important source of foreign exchange. The expansion and diversification of the food trade can be attributed to many factors. First, the disciplines of food microbiology, food chemistry and food technology are continuously providing a broader range of foods by developing new and more sophisticated preservation, processing and packaging techniques which make foods safer, less perishable and more attractive to the consumer. Second, rapid transport and improved handling methods have reduced the length of time and difficulties associated with moving food long distances, thus allowing traders access to new and far-away markets. Third, consumers' tastes and food habits have become more varied and their incomes and purchasing power have risen, stimulating the demand for traditional and new foods from other regions.

International exports and imports: Whether a country is a net food importer or exporter may be determined by factors such as local conditions for agricultural production and food manufacturing, costs and demands for domestic or foreign food products and economic activities which provide other sources of income. An increasing number of countries are becoming both significant importers and exporters of food. It is customary for countries that are self-sufficient in food or have an excess of food to also import some food products. At the same time, countries that are not self-sufficient in food may export some of their products, especially when these foods are much sought after elsewhere and bring premium prices.

Animals are used as food either directly or indirectly by the products they produce (figure 13.2). Meat is an example of a direct

product taken from an animal, which comes from muscle systems or from organs.

Food products produced by animals include milk produced by mammary glands, which in many cultures is drunk or processed into dairy products (cheese, butter, etc.). In addition, birds and other animals lay eggs, which are often eaten, and bees produce honey, a reduced nectar from flowers, which is a popular sweetener in many cultures. Some cultures consume blood, sometimes in the form of blood sausage, as a thickener for sauces, or in a cured, salted form for times of food scarcity, and others use blood in stews such as jugged hare.



Figure 13.2 Animal husbandry

Animal husbandry (figure 13.2) is the agricultural practice of breeding and raising livestock. Animal husbandry is the science of looking after and breeding animals - specifically those that are used in agriculture, to provide products, for research purposes or as domestic pets. The subject covers a wide range of activities, including care and grooming, livestock farming, accommodation and hygiene. The study also overlaps with many other disciplines, such as agriculture, veterinary science and genetics. Not all people involved in husbandry will necessarily take part in all these activities or require knowledge of other disciplines. In many parts of the world, people are essentially practicing animal husbandry through being farmers, ranchers, shepherders, or simply taking care of large groups of livestock.

Meat and Meat Production

World meat production grew modestly in 2014 to 311.6 million tonnes, 3 million tonnes or 1.1 percent above 2013. Growth is anticipated to be concentrated in the developing countries, which are also the main centres of rising demand (figure 13.3).

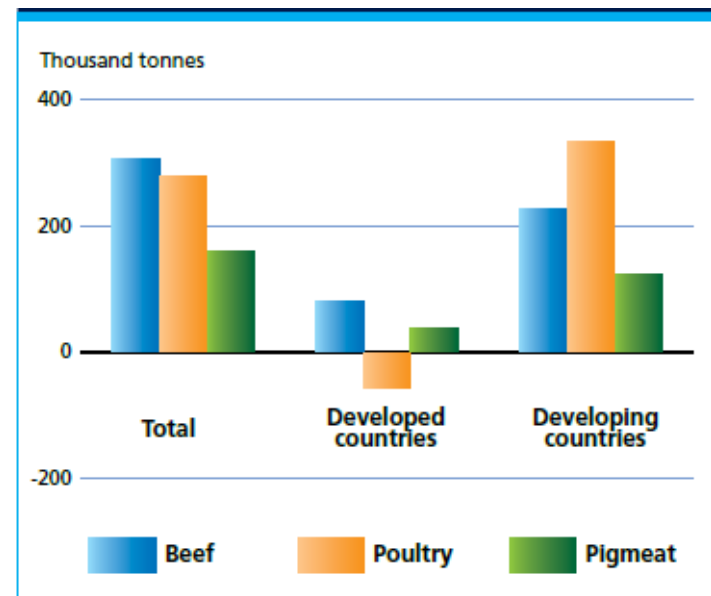


Figure 13.3 Projected changes in meat exports, 2014

At the international level, prices have remained high by historical standards for the past three years, with the FAO Meat Price Index generally oscillating around 185 points. Since April 2014, the Index has registered further upward movement, reaching 208 points in September. Prices rose for all categories, especially bovine meat, although towards the end of the period, some reduction was evidenced for porcine and ovine meat (figure 13.4).

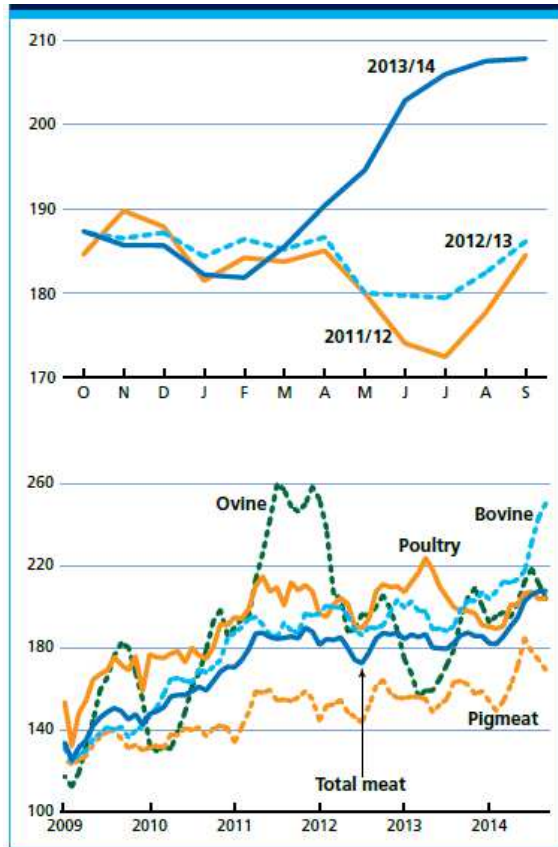


Figure 13.4 Meat prices reach historic highs

Global meat trade is forecast to expand at a moderate rate of 2.3 percent in 2014, to 31.6 million tonnes. The anticipated growth would be less than the average for recent years, due to a variety of causes, including production constraints in some of the principal exporting countries, animal health concerns and trade restrictions. There are diverging projected trade trends for the various types of meat, with growth forecast for bovine, pigmeat and poultry, and decline forecast for ovine meat. Poultry remains the main product traded, representing 43 percent of the total, followed by bovine, pig and ovine meat, respectively (figure 13.5).

MEAT AND MEAT PRODUCTS

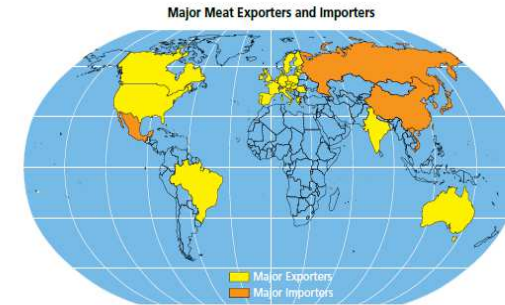


Figure 13.5 Major exporters and importers of meat and meat products, 2014

Bovine meat production is forecast to remain largely unchanged at around 68 million tonnes, only 0.8 percent more than in 2013 – continuing a trend of limited growth that has been evident for several years.

The small increase in world production is being led by developing countries, which collectively account for almost 60 percent of the total. As a group, developing countries are forecast to record 2.3 percent growth, concentrated principally in Latin America and the Caribbean, and Asia. The developed countries are predicted to experience a 1.3 percent decline in output, mainly due to a fall in North America.

In *South America*, cattle availabilities and slaughter have been rising, particularly in *Brazil*, the country, which is the second largest producer after the United States, is anticipated to account for most of the regional growth, with production projected to rise 3.4 percent to 9.9 million tonnes. The Brazilian cattle herd is in an expansion phase, supported by improvements in productivity and genetics. Additionally, favourable prices on the export market have stimulated the use of feed to maintain cattle weight during the dry season. In *Argentina*, government export restrictions have obliged the industry to focus increasingly on internal demand, which absorbs over 90 percent of production. Preference for younger, lighter animals for the domestic market

means that production is growing at a relatively slow rate. In neighbouring *Paraguay* and *Uruguay*, strong production growth is anticipated, spurred by international demand and sustained cattle prices, and supported by an expanding herd and productivity increases.

In *Asia, India*, the fifth largest bovine meat producer, continues to see the industry grow, supported by government programmes to utilize male buffalo calves from the country's expanding dairy herd. Output drop in the *Republic of Korea*, where low profitability has led to herd reduction. In *China*, production is anticipated to show moderate growth to 6.8 million tonnes. High slaughter rates are reported among smallproducers, prompted by strong cattle prices and difficulties in meeting new production standards. Most parts of *Africa* received adequate rainfall during the current season, which improved pasture conditions and led to a moderate increase in bovine meat production. However, due to a delay in the onset of seasonal rains in parts of East Africa, pasture and fodder and feed supplies in the subregion suffered. As a consequence, production growth may be constrained in *Ethiopia, Kenya, Somalia, northern Tanzania* and eastern *Uganda*. Furthermore, outbreaks of foot-and-mouth disease (FMD) in east-central Kenya could have a negative impact on production, although a mass vaccination programme has been initiated and the movement of livestock curtailed in the affected areas. *Egypt* show continued limited growth in production – based on dairy cattle (including buffaloes). The sector is benefiting from a government-run FMD vaccination programme and legislation limiting calf slaughter. Output in southern Africa is set to increase as a result of favourable rains which have promoted pasture growth and feed and forage production. Furthermore, in *South Africa*, a rise in cattle prices should underpin improved profitability and boost production.

Overall, bovine meat output in *developed countries* is forecast to fall by 1.3 percent, to 28.7 million tonnes. In the *United States*, the world's largest producer, prolonged and extensive dry conditions caused a fall-off in the production of calves which led to an herd reduction. Consequently, beef output could decline by 4.5 percent, to 11.2 million tonnes this year, its lowest level since 1994. The long-term decline in the cattle herd in neighbouring *Canada*, evident since 1992, is expected to continue.

In *Oceania*, the after-effects of drought are impinging on production. In *Australia*, slaughter rates increased markedly in 2013 and early 2014, prompted by a reduced availability of pasture and fodder. Diminished herd size and rebuilding will result in lower output for 2014 overall, with a decline of 1.4 percent to 2.3 million tonnes anticipated. In *New Zealand*, production is foreseen to be moderately higher, at around 608 000 tonnes. The beef industry in New Zealand is highly dependent on the dairy sector which provides 80 percent of the total supply in the form of culled cows and male calves for fattening. In the *Russian Federation*, improved productivity and slaughtering facilities may be sufficient to counterbalance long-term herd reduction, resulting in a small increase in output overall. In the *European Union*, the world's third largest beef producer at 7.5 million tonnes, the prolonged reduction in the cattle herd has reversed as a result of dairy sector expansion. Bovine meat production is anticipated to rise by 1.4 percent in 2014, mainly owing to a rise in the number of male dairy calves for fattening.

Milk and Milk Production

Trade in dairy products is projected to rise by 4.6 percent, slightly up on last year, to reach 71.9 million tonnes of milk equivalent (table 13.1). The two principal exporters, *New Zealand* and the *European Union*, which together account for 50 percent of world trade, are both anticipated to record an increase in sales. Also, the *United States*, with a 15 percent share of the world market, is set for further growth, following an exceptional hike in sales last year.

Table 13.1

World dairy market at a glance in 2014

	2012	2013	2014	Change: 2014 over 2013 (%)
	Million tonnes			
<i>World balance</i>				
Total milk production	762.3	773.4	792.0	2.4
Total trade	66.1	68.8	71.9	4.6
<i>Supply and demand indicators</i>				
<i>Per caput food consumption:</i>				
World (kg/yr)	107.7	108.0	109.4	1.3

Table 13.1 continuation

Developed (kg/yr)	222.5	220.6	223.2	1.2
Developing (kg/yr)	75.4	76.4	77.7	1.7
Trade share of production (%)	8.7	8.9	9.1	2.2
FAO dairy price index (2002-2004=100)	194	243	239	0.3

Asia remains the main centre for rising international demand, with substantially increased purchases forecast for *China, Malaysia, Vietnam* and *Thailand*. Elsewhere in the region, *Saudi Arabia, Indonesia, the Philippines, Singapore, Japan* and the *United Arab Emirates* remain important markets, but the level of their imports may not change markedly and, in some cases, could decrease. The fall in international prices may stimulate import demand in *Africa* as a whole, after purchases had decreased for the previous two years. The principal importers that could experience growth are *Algeria, Egypt and Ghana* (figure 13.6).

MILK AND MILK PRODUCTS



Figure 13.6 Major exporters and importers of milk and milk products, 2014

In *Latin America*, increased domestic production could displace imports in *Mexico and Brazil*, while *Venezuela* is projected to substantially increase its level of international purchases. Finally, imports by the *Russian Federation* are anticipated to fall, perhaps by as much as

10 percent for the year as a whole, following the ban, introduced in August 2014, on imports of dairy products from Australia, Canada, the EU, Norway and the United States. For the Federation, this would constitute a reversal of its decadelong trend that saw imports increase by an average of 10 percent per year. Of the countries not banned, only *New Zealand* would be in a position to make up a substantial share of the shortfall – and then for only some products. Trade in cheese is expected to be particularly affected by the ban; however, market adjustment, including price reductions, may be sufficient to absorb any resulting excess supply.

Forestry is the science, art, and craft of creating, managing, using, conserving, and repairing forests and associated resources in a sustainable manner to meet desired goals, needs, and values for human benefit.

A *forest product* is any material derived from a forestry for direct consumption or commercial use, such as lumber, paper, or forage for livestock (figure 13.7). Wood, by far the dominant forest product, is used for many purposes, such as wood fuel (e.g. in form of firewood or charcoal) or the finished structural materials used for the construction of buildings, or as a raw material, in the form of wood pulp, that is used in the production of paper. All other non-wood products derived from forest resources, comprising a broad variety of other forest products, are collectively described as non-timber forest products.

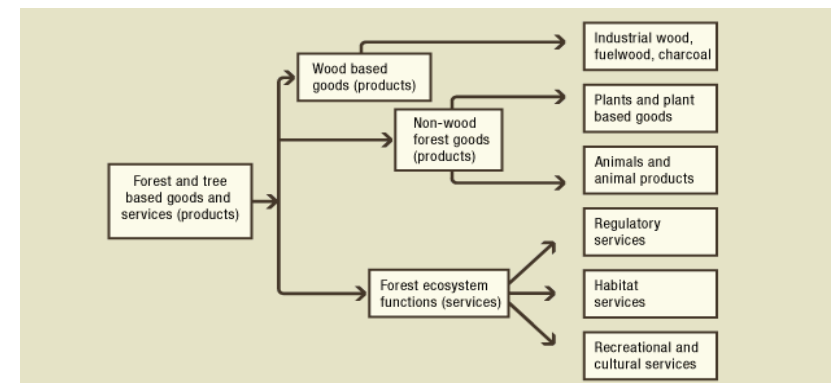


Figure 13.7 Forest products

Forests and forest management have changed substantially over the past 25 years. Overall, this period has seen a series of positive results. Even though, globally, the extent of the world's forest continues to decline as human populations continue to grow and demand for food and land increases, the rate of net forest loss has been cut by over 50 percent. At the same time, the attention paid to sustainable forest management has never been higher: more land is designated as permanent forest, more measurement, monitoring, reporting, planning and stakeholder involvement is taking place, and the legal framework for sustaining forest management is nearly universal. Larger areas are being designated for conservation of biodiversity at the same time as forests are meeting increasing demand for forest products and services.

In 1990 the world had 4 128 million ha of forest; by 2015 this area has decreased to 3 999 million ha (table 13.2). This is a change from 31.6 percent of global land area in 1990 to 30.6 percent in 2015. Yet deforestation, or forest conversion, is more complicated than that. Globally, forest gains and losses occur continuously, and are very difficult to monitor even with high resolution satellite imagery. Natural forest and planted forest area change dynamics differ – and vary dramatically across national circumstances and forest types.

Table 13.2

Global forest area change 1990-2015

Year	Forest (000 ha)	Annual change (000 ha)	Annualized* change
1990	4 128 269		
2000	4 055 602	-7 267	-0.18
2005	4 032 743	-4 572	-0.11
2010	4 015 673	-3 414	-0.08
2015	3 999 134	-3 308	-0.08

* calculated as the compound annual growth rate

The top ten forest countries account for some 67 percent of global forest area (table 13.3).

Table 13.3

The top ten countries by forest area in 2015

	Country	Forest area (000 ha)	% of country area	% global forest area
1	Russian Federation	814 931	48	20
2	Brazil	493 538	58	12
3	Canada	347 069	35	9
4	United States	310 095	32	8
5	China	208 321	22	5
6	Democratic Republic of the Congo	152 578	65	4
7	Australia	124 751	16	3
8	Indonesia	91 010	50	2
9	Peru	73 973	58	2
10	India	70 682	22	2
	Total	2 686 948		67

We can describe forest area change as a process of gain (forest expansion) and loss (deforestation). Change in total forest area provides a picture of how all forest resources combined are changing. Natural forest change is perhaps a better indicator of natural habitat and biodiversity dynamics. Change in planted forest helps us to understand shifts in the forest product mix from natural and planted forests.

The production/consumption of wood in general has increased throughout the period while reliance on woodfuel has remained large. In 1990 annual wood removals amounted to 2.8 billion m³, of which 41 percent was for woodfuel; in 2011 annual wood removals amounted to 3.0 billion m³, of which 49 percent was for woodfuel. Both the proportion of wood removals used for fuel and the total amount of wood used for fuel have increased.

In 2015 about 30 percent of the world's forest was designated as production forest, a slight increase from 1990 (28 percent). Forest designated as multiple use increased from 23 percent of total forest area to 26 percent between 1990–2015. Multiple-use forest provides timber, range, non-wood forest products, water, recreation and wildlife management values. These increases in proportion come in part from stable designations and decreasing total forest areas.

Wood is part of almost everyone's life, whether in their use of paper or other wood products. The tracking of reported industrial roundwood and woodfuel removals provides an approximation of how much wood from the forest goes to meet these needs and how this demand changes. Most of the world's wood comes from production and multiple-use forest areas. For some countries this tracking also shows where wood removals are not significant in production or multiple-use forest and where trees outside forests or from other wooded land are more important. Analysis of trends in wood demand and the types of forest that supply timber and woodfuel help to highlight the importance of these forest classifications for long-term security of wood supplies.

The demand for wood and the amount of forest land designated to produce it have increased since 1990. Wood demand has gone from 2.75 billion m³ per year in 1990 to 3.0 billion m³ per year in 2011. For the period 1990–2015, the area designated for wood production and multiple use increased by over 128 million ha. Close to 1.2 billion ha of forests are designated for production, with more than half of this area found in high-income countries and only 8 percent in low-income countries (figure 13.8a). There has been an increase of 47 million ha in reported production forest area since 1990. In addition, about 1 billion ha of forests are designated for multiple use, in most cases including the production of wood and non-wood forest products (figure 13.8b).

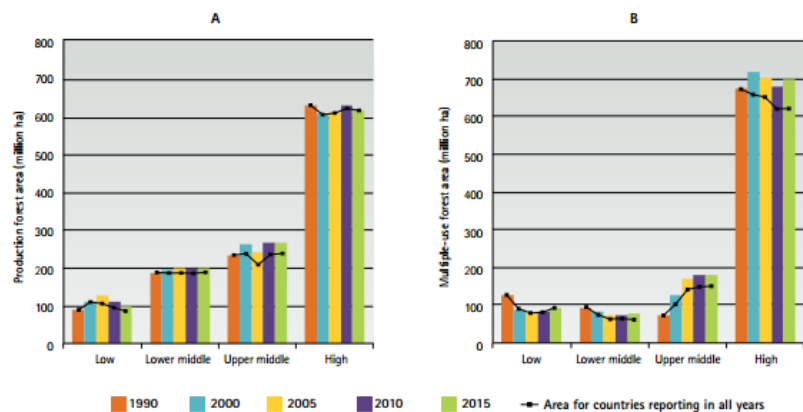


Figure 13.8 Forest area designated for (A) production (1990–2015) and (B) multiple use by income categories (1990–2015)

About two-thirds of the total forest area designated for multiple use are found in the high-income countries and only one tenth in the low-income countries. In the last 25-year period the area designated for multiple use has increased by some 82 million ha; most of this increase is in the upper middle-income countries.

Countries with the highest wood removals are noted on table 13.4.

Table 13.4

The top ten countries by wood removals in 2011

	Country	Wood removals (1 000 m ³)	Woodfuel as % of total wood removals
1	India	434 766	88.6
2	United States	324 433	12.5
3	Brazil	228 929	50.7
4	Russia	197 000	22.2
5	Canada	149 855	2.5
6	Ethiopia	104 209	97.2
7	Democratic Republic of the Congo	81 184	94.4
8	China	74 496	9.3
9	Nigeria	72 633	87.0
10	Sweden	72 103	8.2
	Total	1 739 608	

Fishing is the activity of trying to catch fish. Fish are normally caught in the wild. Techniques for catching fish include hand gathering, spearing, netting, angling and trapping.

The overall supply of fishery products continues to rise in 2014, with annual growth an estimated 1.9 percent over 2013. Aquaculture remains the major contributor, with production moving quickly and steadily in the direction of surpassing wild fisheries. Fish farming holds tremendous potential for responding to the surging demand for food that is taking place due to global population growth. Aquaculture's expansion can contribute to food and nutrition security as fish helps to improve the diets of many people and can provide viable livelihood opportunities. Yet, despite aquaculture's tremendous potential, investments in research and new technology will be vital to sustain growth as competition for space and scarce water resources put grow-

ing pressure on ability to increase in yields. Aquaculture production for 2014 is 73.9 million tonnes, up by 4.9 percent compared with 2013, while capture fisheries has been more or less stagnant at around 90 million tonnes for years (table 13.5).

Table 13.5

World fish market at a glance

	2012	2013	2014	Change: 2014 over 2013 (%)
	Million tonnes			
<i>World balance</i>				
Production	158.0	162.9	165.9	1.9
Capture fisheries	91.3	92.4	92.0	-0.4
Aquaculture	66.6	70.5	73.9	4.9
Trade value (exports USD billion)	129.4	136.4	145.3	6.5
Trade volume (live weight)	58.1	58.8	59.4	1.0
Total utilization	158.0	162.9	165.9	1.9
Food	136.2	141.1	144.6	2.5
Feed	16.3	16.8	16.6	-1.2
Other uses	5.4	5.0	4.7	-6.0
<i>Supply and demand indicators</i>				
<i>Per caput food consumption:</i>				
Food fish (kg\yr)	19.2	19.7	20.0	1.4
From capture fisheries (kg\year)	9.8	9.9	9.8	-1.0
From aquaculture (kg\year)	9.4	9.8	10.2	3.7
FAO fish price index (2002-2004=100)	144	148	158	11.0

The ever increasing fishmeal and fish oil prices have encouraged feed manufacturers to seek alternative ingredients such as soymeal. Nevertheless, fish utilization for feed production expects a mild increase. However, most of the additional fish produced this year will likely be consumed directly, due to the broadly recognized health effects of fishery products.

The export value for fish and fishery products is expected to reach USD 145 billion this year, a 6.5 percent increase from 2013 and a new record (figure 13.9). The FAO fish price index hit a historic high in March, mainly driven by the limited supplies of species such as

salmon, shrimp and tuna. This demonstrated that the substitution of product by buyers in the short-run is less feasible than many had expected. Prices of aquaculture products also reached record high levels, pushed up by higher costs and by supply constraints for some species. During the second quarter, prices started falling, particularly for salmon and shrimp.

FISH AND FISHERY PRODUCTS

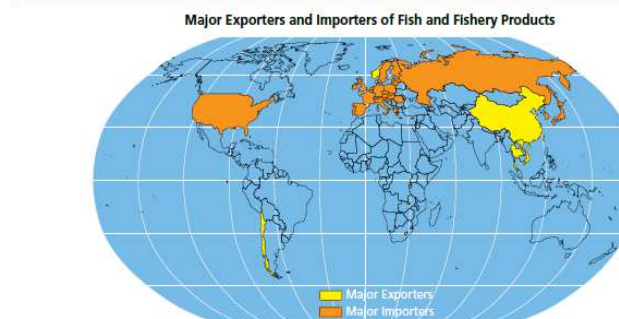


Figure 13.9 Major exporters and importers of fish and fishery products, 2014

Although the long-term outlook remains positive, prices can be expected to remain weak with an upturn during the final months of the year (figure 13.10).

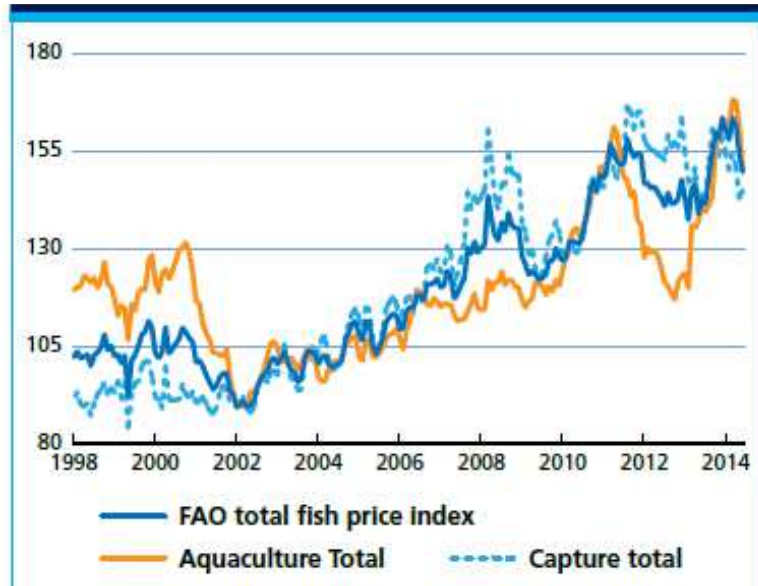


Figure 13.10 The FAO Fish Price Index

It is foreseen that 2014 will be the year fish consumption from aquaculture will overtake that from capture, with world food fish annual per capita consumption eventually reaching an average of 20 kg.

Intermediate goods or producer goods or semi-finished products are goods used as inputs in the production of other goods, such as partly finished goods. Also, they are goods used in production of final goods.

2. Markets of wheat, vegetables and fruits.

Wheat is a cereal grain, originally from the Levant region of the Near East but now cultivated worldwide. In 2013, world production of wheat was 713 million tons, making it the third most-produced cereal after maize (1,016 million tons) and rice (745 million tons). Wheat was the second most-produced cereal in 2009; world production in that year was 682 million tons, after maize (817 million tons), and with rice as a close third (679 million tons) (figure 13.11).

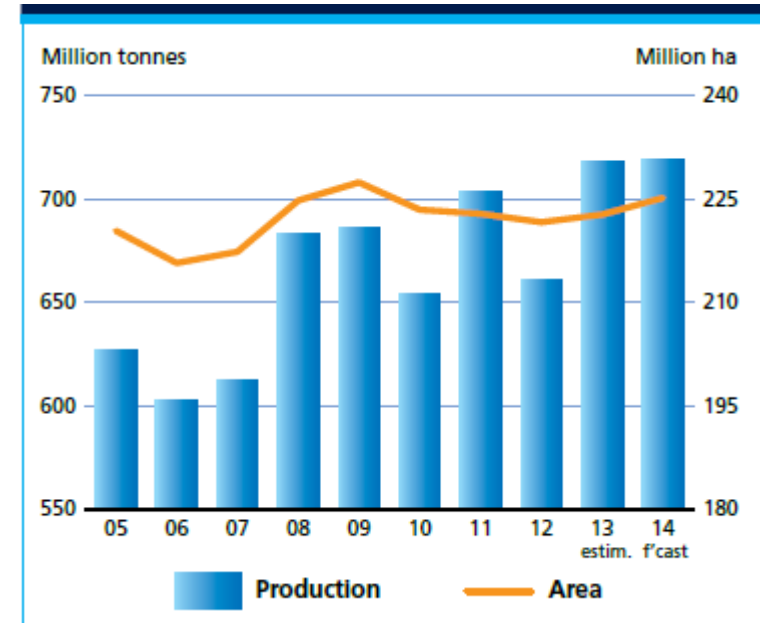


Figure 13.11 Wheat production and area, 2014

This grain is grown on more land area than any other commercial food. World trade in wheat is greater than for all other crops combined. Globally, wheat is the leading source of vegetable protein in human food, having a higher protein content than other major cereals, maize (corn) or rice. In terms of total production tonnages used for food, it is currently second to rice as the main human food crop and ahead of maize, after allowing for maize's more extensive use in animal feeds.

Wheat was a key factor enabling the emergence of city-based societies at the start of civilization because it was one of the first crops that could be easily cultivated on a large scale, and had the additional advantage of yielding a harvest that provides long-term storage of food. Wheat contributed to the emergence of city-states in the Asian Fertile Crescent, including the Babylonian and Assyrian empires. Wheat grain is a staple food used to make flour for leavened, flat and steamed breads, biscuits, cookies, cakes, breakfast cereal, pasta,

noodles, couscous and for fermentation to make beer, other alcoholic beverages, and biofuel.

FAO's latest forecast for 2014 global wheat production stands at 718.5 million tonnes, marginally higher than the record output in 2013 (table 13.6). Strong year-on-year production gains are estimated in European countries, notably the *Russian Federation*, while larger crops are foreseen in *India and China*. These increases have more than compensated for the lower output in *North America* and an expected decrease in *Australia*.

Table 13.6

World wheat market at a glance

	2012/13	2013/14	2014/15	Change: 2014/15 over 2013/14 (%)
	Million tonnes			
<i>World balance</i>				
Production	660.6	717.1	718.5	0.2
Trade ¹	140.2	157.3	150.0	-4.6
Total utilization	687.3	689.1	700.8	1.7
Food	475.3	481.7	486.7	1.0
Feed	132.3	128.6	132.6	3.1
Other uses	79.7	78.8	81.5	3.4
Ending stocks	158.2	176.5	192.4	9.0
<i>Supply and demand indicators</i>				
<i>Per caput food consumption:</i>				
World (kg/yr)	67.2	67.4	67.3	-0.1
LIFDC (kg/year)	46.3	46.5	46.6	0.2
World stock-to-use ratio (%)	23.0	25.2	26.9	
Major exporters stock-to-dissappearance ratio ² (%)	14.1	14.1	15.6	
FAO fish price index ³ (2002-2004=100)	204	194	183	-6.7

¹ Trade refers to exports based on a common July/June marketing season.

² Major exporters include Argentina, Australia, Canada, EU, Kazakhstan, Russian Federation, Ukraine, and the United States.

³ Derived from the International Grains Council (IGC) wheat index.

Production in *Europe* is put at 236.3 million tonnes for 2014, about 5 percent (11 million tonnes) up from the 2013 estimate and the

highest level since the record in 2008. The bulk of the increase is accounted for by the *Russian Federation's* 13 percent rise, to 59 million tonnes, following favourable weather that contributed to higher yields. More modest gains are estimated in the *EU* (2 percent), while improved yields in *Ukraine* more than offset a smaller area planted, resulting in a 5 percent production increase in 2014. In the *United States*, despite increased plantings, production fell by 5 percent to 55.2 million tonnes, reflecting lower yields caused by dry weather. Production in *Canada* is sharply down, decreasing by 26 percent (nearly 10 million tonnes) to 27.7 million tonnes, as lower prices contributed to an 11 percent contraction in 2014 plantings, and lower yields further reduced the output (table 13.7).

Table 13.7

World wheat production: leading producers, 2014

	2012	2013	2014	Change: 2014 over 2013 (%)
	Million tonnes			
European Union	132.6	143.7	147.1	2.4
China (Mainland)	120.8	121.9	125.3	2.8
India	94.9	93.5	95.9	2.6
United States	61.7	58.0	55.2	-4.8
Russian Federation	37.7	52.1	59.0	13.2
Canada	27.2	37.5	27.7	-26.1
Australia	22.9	27.0	24.2	-10.4
Pakistan	23.5	24.2	25.3	4.5
Turkey	20.1	22.0	19.8	-10.0
Ukraine	15.8	22.0	23.0	4.5
Islamic Republic of Iran	13.8	14.0	13.0	-7.1
Kazakhstan	9.8	14.0	13.6	-2.9
Argentina	8.0	9.2	11.5	25.0
Egypt	8.8	8.8	9.0	2.3
Uzbekistan	6.7	6.9	7.3	5.8
Other countries	56.3	62.3	61.6	-1.1
World	660.6	717.1	718.5	0.2

In *Asia*, with harvesting complete, the aggregate wheat output in 2014 is estimated at 321 million tonnes, slightly above last year, as increases in *India, China and Pakistan* were partly offset by an overall contraction in the *Near East*. In *China*, production expand to a new

record of 125.3 million tonne, mainly attributed to higher yields, following good rains. Similarly, *India and Pakistan* collected record volumes of 95.9 million and 25.3 million tonnes respectively, underpinned by higher plantings and improved yields. By contrast, the wheat crop in *Turkey*, which accounts for about half of the *Near East* production, was hindered by drought conditions and cold weather, resulting in a 10 percent fall. Compared to last year's record level, wheat production in *North Africa*, which is mainly rainfed, fell overall. Dry weather at the start of the season in *Morocco* resulted in a smaller planted area and a consequent 27 percent decrease in the national output to 5.1 million tonnes. Unfavourable weather also caused a small reduction in *Algeria*, while production recovered strongly in *Tunisia* and remained relatively unchanged in *Egypt*.

The 2014 wheat harvest, which is underway in the Southern Hemisphere countries, will only be completed early next year. In *South America*, production prospects are positive, with the aggregate output forecast to grow for a second successive year, reaching 23.8 million tonnes, which is up 25 percent from 2013. In *Argentina and Brazil*, farmers responded positively to higher domestic wheat prices and increased plantings. Production rise by 25 percent over last year's below-average output in *Argentina*, to 11.5 million tonnes, and by 38 percent in *Brazil* to 7.9 million tonnes. Wheat output in 2014 is forecast to decline in *Australia*, where dry weather has reduced yield prospects, particularly in Western Australia, the largest producing state. Despite an increase in the area planted, production is expected to decline by 10 percent to a below-average 24.2 million tonnes. In *Southern Africa*, aggregate production is estimated to fall by 8 percent to just over 2 million tonnes, with declines expected in the two main producing countries, *South Africa and Zambia*, on account of reduced plantings.

World wheat trade

FAO's forecast for world wheat trade (including wheat flour in wheat equivalent) in 2014/15 (July/June) has been raised by 2 million tonnes since September and now stands at 150 million tonnes, almost 4.2 million tonnes (2.7 percent) below the 2013/14 record level (figure 13.12 and figure 13.13).

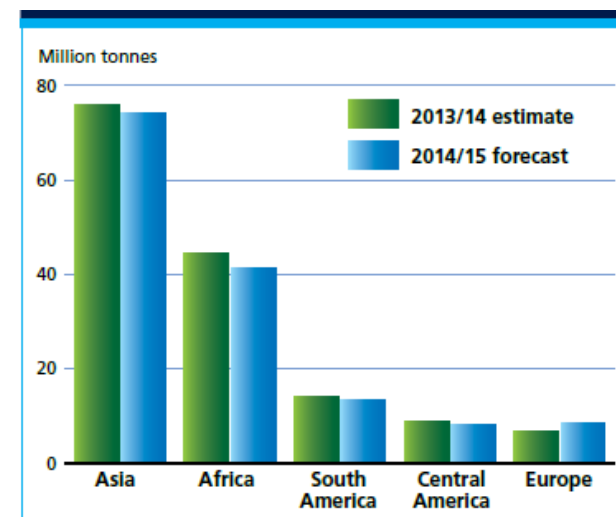


Figure 13.12 Wheat imports by region, 2014

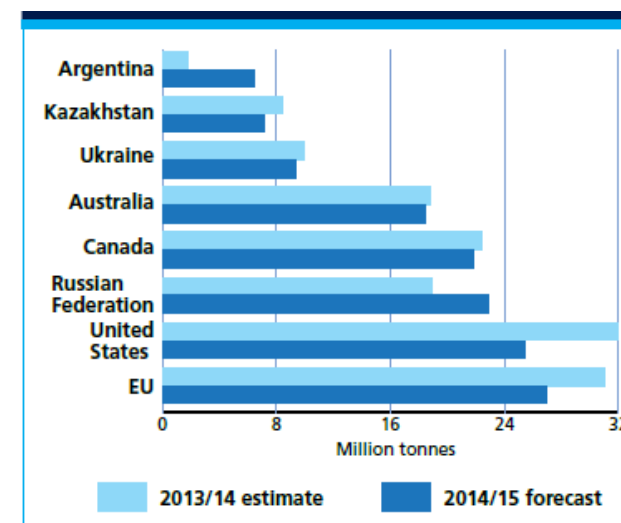


Figure 13.13 Major wheat exporters, 2014

In *Asia*, total wheat imports are likely to approach 74 million tonnes, nearly 2 million tonnes less than the previous season's estimated level, yet almost 1 million tonnes higher than had been antic-

ipated. *China* (Mainland) accounts for the bulk of the anticipated fall in wheat imports, which, given *China's* prospect for a bumper harvest this year, could plunge by 2.7 million tonnes to 4 million tonnes in 2014/15. Wheat imports by the *Islamic Republic of Iran* are expected to reach 5.5 million tonnes, down 500 000 tonnes from the unusually high level of the previous season. Other countries where this season's imports could be reduced include *Pakistan, Yemen and Uzbekistan*. By contrast, a number of countries, such as the *Republic of Korea and Israel*, are seen to import more feed wheat, given its abundant supplies, especially in Europe. Wheat purchases by *Indonesia* are likely to increase further in 2014/15, following an upward trend which is very much a reflection of the country's increasing demand for wheat-based products.

In *Africa*, aggregate imports are anticipated to fall to 41 million tonnes, down 3 million tonnes from the record set in 2013/14. In *North Africa*, deliveries to *Algeria, Egypt and Morocco* are estimated to decrease slightly below the previous season. Because of lower than anticipated domestic production, the forecast for imports by *Algeria* has been raised since September to 6.5 million tonnes, which still falls 1 million tonnes short of last year's estimate. Total imports by *Egypt* are forecast at 10 million tonnes, down by 0.5 million tonnes compared with the previous season, due to higher domestic supplies. Following a strong rebound in domestic wheat production, imports by *Tunisia* could fall by 0.4 million tonnes to 1.6 million tonnes in 2014/15. Given the above-normal inventory level in *Morocco*, imports are set to decline in spite of this year's reduced domestic production. In *sub-Saharan Africa*, imports by most countries are likely to remain close to the previous season's levels with *Nigeria*, the region's largest wheat importer, purchasing at least 4.5 million tonnes this season. In *Sudan*, imports could rise to 2.2 million tonnes, sustained by stronger demand and the need to reconstitute depleted stocks.

In *Europe*, total imports in 2014/15 are put at 8.1 million tonnes, up 1.6 million tonnes from the 2013/14 estimate. The increase is mostly attributed to the *EU* where, notwithstanding this year's record crop, quality concerns and a shortage of milling wheat are expected to encourage larger purchases. Aggregate imports in

Latin America and the Caribbean are lower than in the previous season. Imports in *Brazil* are expected to decrease by 0.6 million

tonnes, to 6.3 million tonnes, helped by the prospect of a bumper crop this year. *Mexico* is also expected to purchase slightly less, around 3.7 million of tonnes, as a result of good domestic production this year.

Regarding exports, the biggest decrease is expected for the *United States*, whose shipments may drop by 6.6 million tonnes compared with the previous year, given the anticipated contraction in world import demand and a continued strong US dollar, which is undermining the country's competitiveness. By contrast, in *Argentina*, following the exceptionally low level of shipments registered in 2013/14, this season's sales are likely to rebound sharply (up at least 4.5 million tonnes) to 6 million tonnes, driven by improved domestic supply. Supported by good crops and a weakening currency, shipments from the *Russian Federation* are heading toward a record, at 22.5 million tonnes, up 4 million tonnes from the already high level registered in 2013/14. Exports from *Ukraine* could fall short of last season's record but a bumper crop could still keep sales at an above average level of 9 million tonnes. By contrast, exports from the *EU* are forecast to return to more normal levels, falling by 4 million tonnes from the peak of 30.6 million tonnes reached in 2013/14. Shipments from *Australia* could also decrease slightly, on anticipated decline in production. In *Canada*, despite a sharp fall in production, large carryover stocks following last year's record crop, combined with improved logistics, will help keep shipments stable. Among other exporters, exports from *India* could fall by as much as half, to 2.5 million tonnes, given the rising domestic requirement under the newly established National Food Security Act.

Fruits are the ripened ovaries of plants, including the seeds within. Many plants and animals have coevolved such that the fruits of the former are an attractive food source to the latter, because animals that eat the fruits may excrete the seeds some distance away. Fruits, therefore, make up a significant part of the diets of most cultures. Some botanical fruits, such as tomatoes, pumpkins, and eggplants, are eaten as vegetables.

Vegetables are a second type of plant matter that is commonly eaten as food. These include root vegetables (potatoes and carrots), bulbs (onion family), leaf vegetables (spinach and lettuce), stem vegetables (bamboo shoots and asparagus), and inflorescence

vegetables (globe artichokes and broccoli and other vegetables such as cabbage or cauliflower).

Trade in fruit and vegetable products has been among the most dynamic areas of international agricultural trade, stimulated by rising incomes and growing consumer interest in product variety, freshness, convenience, and year-round availability. Advances in production, postharvest handling, processing, and logistical technologies - along with increased levels of international investment - have played a facilitating role. For developing countries, trade in these products has been attractive in the face of highly volatile or declining long-term trends in the prices for many traditional export products. Although many developing-country suppliers have entered the field, relatively few have achieved significant, sustained success, reflecting the fact that the industry is highly competitive and rapidly changing.

World production of fruit and vegetables grew by 30 percent between 1980 and 1990 and by 56 percent between 1990 and 2003, reaching 1,274 million tons by 2003. Much of this growth occurred in China, where production grew by 134 percent in the 1980s and by 200 percent in the 1990s. China is currently the world's largest producer of fruits and vegetables, with a share of 34 percent, followed by Latin America and the Caribbean (11 percent), India (10 percent), and Africa and the European Union (EU) (both at 9 percent) (figure 13.14).

Although many countries have entered the fresh fruit and vegetable export markets, only a few middle-income countries have succeeded on a sustained basis. The average shares of developing countries in world exports of fresh fruits and vegetables hide the heavy domination of trade by just a handful of middle-income countries. Between 1997 and 2011, just four Latin American countries - Chile, Costa Rica, Ecuador, and Mexico - accounted for 43 percent of developing-country exports of fresh fruit (FAO 2013). These countries are leading players in the most internationally traded fruit products (table 13.8).

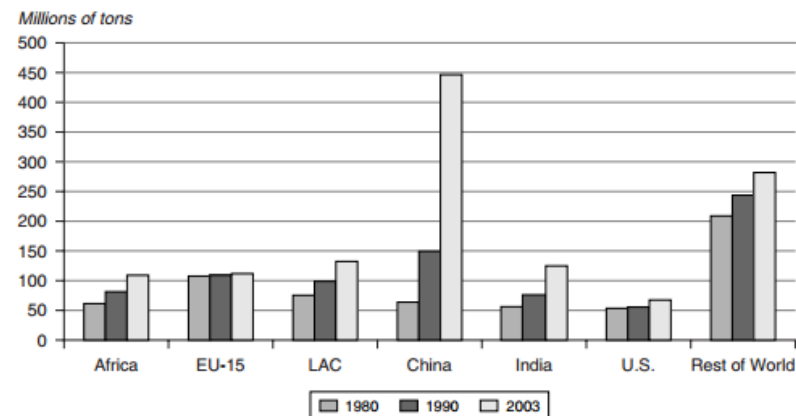


Figure 13.14 Dynamics of Production of Fruits and Vegetables by Regions

While exports of vegetables are similarly concentrated, the geographical distribution of exporters is wider (table 13.9). Mexico is the world's leading exporter of tomatoes, Kenya supplies 25 percent of the world's green beans, while Guatemala and Kenya jointly lead the world market for green peas.

Table 13.8

Concentration of Fresh Fruit and Vegetable Exports among Developing Countries

Product	Leading Suppliers	Joint Percentage of World Exports (value)
Asparagus	Peru, Mexico, Thailand	94
Mangoes	Brazil, Mexico, Phillipines	62
Pineapples	Costs Rico, Cote d'Ivoire	61
Bananas	Ecuador, Colombia, Costa Rico	60
Avocados	Chile, Mexico	53
Tomatoes	Mexico, Syria	52
Grapes	Chile, China, Mexico	38
Green beans	Jordan, Kenya, Mexico	49
Green peas	Guatemala, Kenya, Zimbabwe	38

Between 1997 and 2011, four suppliers - Argentina, China, Mexico, and the Syrian Arab Republic - accounted for 67 percent of fresh vegetable exports by developing countries (FAO 2013).

A small number of medium-income countries have been successful in the processed segment of the export market, but as a group, developing countries account for a relatively low share in world exports of these products (36 percent in 2011).

Table 13.9

Concentration of Processed Fruit and Vegetable Exports among Developing Countries

Product	Leading Suppliers	Joint Percentage of World Exports (value)
Orange juice concentrated	Brazil	91
Canned pineapples	Indonesia, Philippines, Thailand	74
Canned mushrooms	China	52
Dried mushrooms	China	52
Dried fruits	Chile, China, Thailand	35
Tomato paste	Chile, China, Turkey	35
Apple juice, concentrated	Argentina, Chile, Turkey	31

Chile, China, Thailand, and Turkey account for 58 percent of developing countries' exports of processed fruit and vegetable products (FAO 2013). Secondary, yet still significant exporters include Argentina, Indonesia, Mexico, and the Philippines (a combined 14 percent of developing countries' exports). Trade by developing countries in specific processed products is relatively highly concentrated.

3. Markets of agricultural raw materials (food flavoring goods): sugar, coffee, tea, cocoa, spices.

Sugar is the generalised name for a class of chemically-related sweet-flavored substances, most of which are used as food. There are various types of sugar derived from different sources. Simple sugars are called monosaccharides and include glucose, fructose and galactose. The table or granulated sugar most customarily used as food is sucrose, a disaccharide.

World sugar production is FAO to reach 183.9 million tonnes in 2014/15 (October/September), a modest 0.9 percent increase over the

2013/14 season, but still the second largest harvest in history (table 13.10, 13.11, figure 13.15, 13.16).

Table 13.10

World sugar market at a glance

	2012/13	2013/14	2014/15	Change: 2014/15 over 2013/14 (%)
	Million tonnes			
<i>World balance</i>				
Production	182.1	182.2	183.9	0.89
Trade ¹	53.5	55.0	55.7	1.18
Total utilization	173.1	177.7	181.9	2.37
Ending stocks	73.1	74.8	77.1	3.07
<i>Supply and demand indicators</i>				
<i>Per caput food consumption:</i>				
World (kg/yr)	24.7	25.0	25.3	1.11
LIFDC (kg/year)	16.5	16.5	16.8	1.87
World stock-to-use ratio (%)	42.2	42.1	42.4	0.68
ISA daily price average (2002-2004=100)	26.0	17.71	17.35	-2.03

¹ Trade refers to exports based on a common October/September marketing season.

World sugar trade in 2014/15 (October/September) stands at 55.4 million tonnes, a 3.7 percent increase over the previous season. The main feature of the sugar international market in the 2014/15 season is the greater availability of supplies in some traditional importing countries, including *China*, the *EU* and the *United States*. Although not expected to export more than in 2013/14, given its lower sugar production, *Brazil* is set to supply 49 percent of world trade in 2014/15. The bulk of the Brazilian shipments is in raw form and mainly shipped to China, Indonesia, Algeria and Egypt. However, the final volume it sells abroad will depend on the quantity of sugarcane production processed into ethanol, especially considering the increase in the mandated blend ratio in 2013/14 from 23 percent to 25 percent. Also, any further depreciation of the Brazilian real against the US dollar could stimulate Brazil's exports beyond the current forecasts.

Table 13.11

World sugar production, 2014

	2013/14	2014/15
	Million tonnes	
Asia	69.6	70.1
South America	48.1	47.9
Europe	24.9	26.1
Central America	14.5	14.6
Africa	12.4	12.7
North America	8.1	7.7
Oceania	4.6	4.8
World	182.2	183.9
Developing countries	141.6	142.2
Developed countries	40.6	41.7

In The second largest world exporter, *Thailand*, is expected to consolidate its position, with deliveries rising from 7.0 million tonnes to 8.1 million tonnes, amid ample domestic supplies and competitive export pricing. About 60 percent of the country's export shipped in raw form to neighbouring countries, including Indonesia, Malaysia and the Republic of Korea. Thai exports to ASEAN countries are expected to increase further, following the reduction of import tariffs under the existing ASEAN economic community free trade agreement. Sugar imports will be subject to duty free access in most ASEAN countries. However, because of a reduction in import demand, deliveries from Thailand to China are likely to decline.

Amid expected increases in sugar output, shipments from *India* are estimated to remain relatively strong, driven by large inventories and the newly introduced export subsidy programme. The objective of the subsidy is to provide sugar millers with additional cash flow, as part of a series of measures to address the issue of arrears due to sugarcane growers. Exports are composed of raw sugar and geared to markets in Asia and Africa.

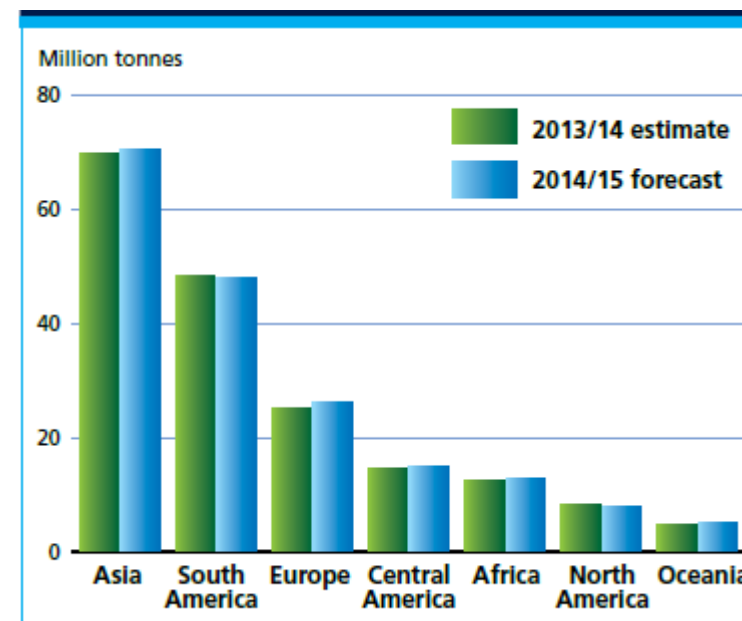


Figure 13.15 Sugar production by region, 2014

Deliveries from *Australia* are set to continue to perform well, just below the country's historic high of 3.61 million tonnes, supported by greater exportable surplus. In April 2014, Australia and the Republic of Korea signed a free trade agreement, under which Australian raw sugar exporters benefit from duty free access. The Republic of Korea existing import tariff (35 percent) on refined sugar will be eliminated within an agreed period of 18 years. This is likely to further consolidate the country as the major destination for Australian sugar. *South Africa* is expected to export about 500 000 tonnes of sugar, in light of sufficient domestic inventories, with the bulk of shipments directed to the Southern Africa Customs Union (SACU) market, and to the United States to fill its 2015 TRQ allocation.

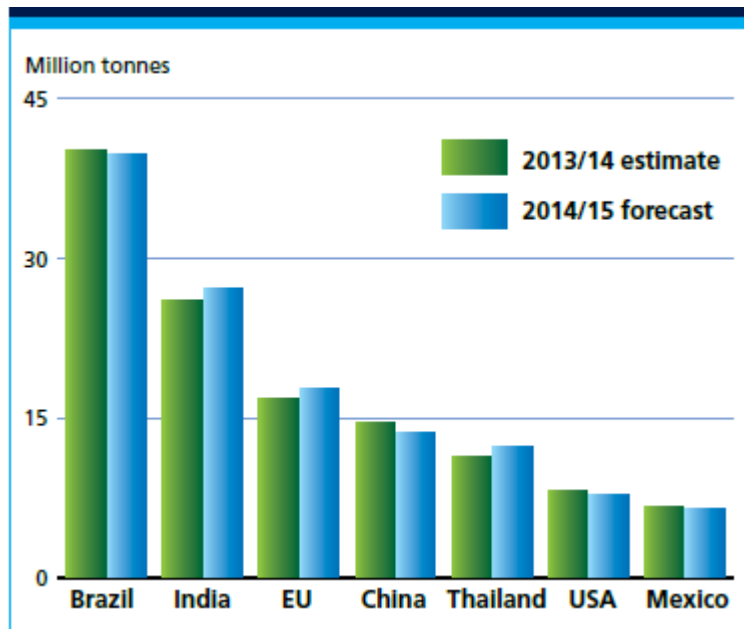


Figure 13.16 Sugar production by major producing countries, 2014

Exports by *Guatemala*, the second largest exporter in Latin America and the Caribbean, are foreseen to expand, given ample stock availabilities and competitive pricing. Sugar has become a key source of foreign exchange earnings for the country, with large investments targeting refined sugar export markets, especially in the United States, the Republic of Korea and Canada, the main destinations of Guatemala's sugar export. The country is now the fifth largest global sugar exporter and is focusing on increasing its exports of refined sugar. Expected production gains in 2014/15 are also anticipated to enable *Cuba* to boost exports, with about 0.4 million tonnes directed to China, as part of an export agreement between the two countries. On the other hand, sales by *Mexico* are anticipated to decline for the new season, with inventory levels falling and production remaining relatively unchanged from 2013/14. However, the final amount of shipped sugar will depend on the realized production for 2013/14 and the extent to which high fructose corn syrup (HFCS) substitutes for domestic sugar

use. Mexico's exports to the United States, under NAFTA, are anticipated to fall, which will be likely compensated by larger deliveries to other markets. Outside of the United States, other destinations for sugar export from Mexico include *Canada*, *Burkina Faso*, *Columbia*, *Chile* and *the Netherlands*.

Imports by *Asian* countries are forecast to rise in 2014/15, despite a notable contraction in purchases by *China*. In the latter, domestic sugar prices have been decreasing to the level of import parity prices, as the Government has suspended its reserve purchase programme, rendering out-of-quota imports unprofitable. In contrast, purchases by *Indonesia* are set to remain strong, driven by robust domestic utilization, particularly from the beverage and food processing sectors.

In *Europe*, shipments to the *EU* are forecast to stay relatively unchanged, on the back of adequate domestic production. With new free trade agreements with Peru, Colombia and six central American countries, namely Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama, being fully implemented, imports actually may end up rising further. An additional 20 000 tonnes of sugar from Ukraine is also available to enter the EU market, on the basis of newly negotiated free trade agreement. The EU is expected to remain the world's largest sugar importer. As a result of expanding domestic production, imports by the *Russian Federation*, once the world's largest sugar importer, are anticipated to fall in 2014/15. Also, any further depreciation of the Russian currency against the United States dollar (beyond current levels) could further dampen purchases. Likewise, shipments into *Kenya* are estimated to retract, while imports into *Malaysia* are to increase and those of *Turkey* are to remain unchanged from the previous season.

In the *rest of the world*, purchases by the *United States*, about half of which are managed through a TRQ system of 1.4 million tonnes, are anticipated to stay unchanged, or may increase slightly, as the season advances. Despite anticipated gains in sugar output in 2014/15, *African countries* are foreseen to buy more, in general, to meet a strong increase in domestic consumption.

Coffee is a brewed beverage with a distinct aroma and flavor, prepared from the roasted seeds of the *Coffea* plant. The seeds are found in coffee "cherries", which grow on trees cultivated in over 70

countries, primarily in equatorial Latin America, Southeast Asia, India and Africa. Green (unroasted) coffee is one of the most traded agricultural commodities in the world.

Prospects for growth in world coffee demand remain promising, mainly in emerging markets and exporting countries, in addition to the expansion of niche markets in traditional consuming countries. Indeed, consumption in emerging markets and exporting countries has been growing rapidly and shows strong potential for further growth. Exporting countries whose economic prospects are favourable for increased coffee consumption include Brazil, Indonesia, India and Mexico. Living standards in some coffee-exporting countries continue to improve, creating strong potential for growth in domestic coffee consumption, given an expanding middle class. Emerging markets are found in newly industrialized countries which have experienced considerable economic and social development. On the other hand, this growth in consumption should help to maintain a tight balance between supply and demand. In addition, the development of a processing industry in exporting countries could enable them to increase added value in the coffee sector (figure 13.17).

Graph 1: World coffee production and consumption (1990/91 - 2013/14)

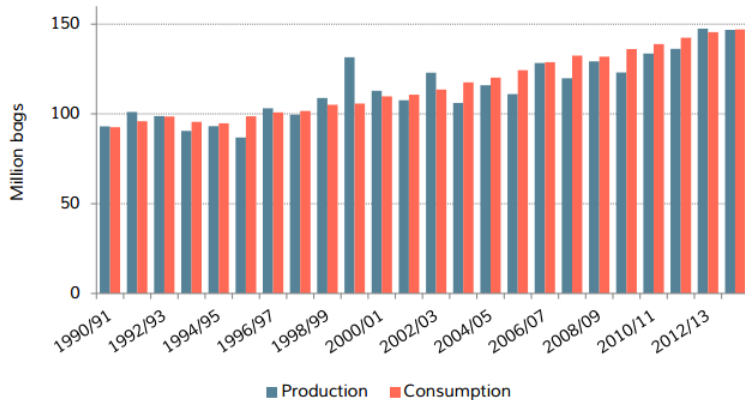


Figure 13.17 World coffee production and consumption, 2012

As a market becomes more mature, volume growth in consumption slows and is replaced by value augmentation, with a higher preference for specialty coffee. In East and Southeast Asia, this is best

exemplified by the Japanese coffee market (figure 13.18). Nevertheless, consumption in this region remains one of the most dynamic and high potential markets for future coffee demand. With 31% of the world's population and 29% of world GDP, the sixteen countries in this report currently account for just 14% of world coffee consumption. However, this share is rising, and if current trends continue, the region could potentially consume 28 to 30 million bags of coffee by 2020.

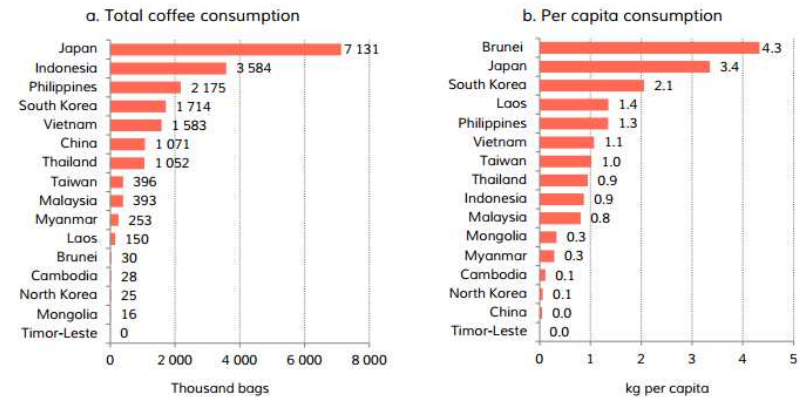


Figure 13.18 Coffee consumption in East and Southeast Asia, 2012

Coffee is an important commodity and a popular beverage. Over 2.25 billion cups of coffee are consumed in the world every day. Over 90% of coffee production takes place in developing countries, while consumption happens mainly in the industrialized economies.

Worldwide, 25 million small producers rely on coffee for a living. For instance, in Brazil alone, where almost a third of all the world's coffee is produced, over 5 million people are employed in the cultivation and harvesting of over 3 billion coffee plants; it is a much more labour-intensive culture than alternative cultures of the same regions as sugar cane or cattle, as it is not subject to automation and requires constant attention.

Coffee is also bought and sold as a commodity on the New York Board of Trade. This is where coffee futures contracts are traded, which are a financial asset involving a standardized contract for the

future sale or purchase of a unit of coffee at an agreed price. The world's largest transfer point for coffee is the port of Hamburg, Germany.

Green coffee is then purchased by importers from exporters or large plantation owners. Importers hold inventory of large container loads, which they sell gradually through numerous small orders. They have capital resources to obtain quality coffee from around the world, capital normal roasters do not have. Roasters' heavy reliance on importers gives the importers great influence over the types of coffee that are sold to consumers.

Tea is the manufactured drink most consumed in the world. Discovered about 2700BC, it is one of the oldest beverages in the world. Tea likely originated in China during the Shang Dynasty as a medicinal drink. Tea was first introduced to Portuguese priests and merchants in China during the 16th century. Drinking tea became popular in Britain during the 17th century. The British introduced tea to India, in order to compete with the Chinese monopoly on tea.

Tea is the most popular manufactured drink in the world in terms of consumption. Its consumption equals all other manufactured drinks in the world – including coffee, chocolate, soft drinks, and alcohol – put together. Most tea consumed outside East Asia is produced on large plantations in the hilly regions of India and Sri Lanka, and is destined to be sold to large businesses.

India is the world's largest tea-drinking nation, although the per capita consumption of tea remains a modest 750 grams per person every year. Turkey, with 2.5 kg of tea consumed per person per year, is the world's greatest per capita consumer.

World tea production (Black, Green and Instant) increased significantly by 6 percent to 5.07 million tonnes in 2013. Black tea output increased by 5.4 percent in response to continued firm prices while green tea output increased by 5.1 percent (figure 13.19).

	2006-08	2009	2010	2011	2012	2013
WORLD	3891.2	4040.0	4364.7	4627.0	4784.5	5063.9
Far East	2892.3	3089.7	3280.3	3579.1	3753.3	3965.6
Bangladesh	56.8	60.0	60.0	59.6	62.5	66.2
China (Mainland)	1150.5	1344.4	1475.1	1623.2	1789.8	1924.5
India	986.4	982.1	970.3	1119.7	1129.0	1200.4
Indonesia	150.3	156.9	156.6	150.8	150.9	152.7
Sri Lanka	311.3	291.2	331.4	327.5	328.4	343.1
VietNam	158.0	177.3	192.0	202.1	200.0	185.0
Others	78.9	77.8	94.8	96.2	92.7	93.8
Africa	535.9	520.5	616.1	591.7	580.2	649.5
Burundi	6.6	6.7	6.9	7.0	8.7	8.8
Kenya	345.2	318.3	403.3	383.1	373.1	436.3
Malawi	44.9	52.6	51.6	47.1	42.5	46.5
Rwanda	19.1	20.5	22.2	24.1	24.7	25.2
South Africa	3.5	2.0	2.1	2.2	2.2	2.5
Tanzania United Rep	32.6	32.1	31.6	33.0	32.3	32.4
Uganda	42.4	51.0	59.4	56.3	57.9	58.3
Zimbabwe	12.4	7.3	8.6	8.4	8.5	8.5
Others	29.0	30.0	30.2	30.6	30.4	30.9
Latin America and Caribbean	97.7	89.8	107.4	107.8	98.3	95.0
Argentina	79.6	73.4	90.7	91.2	81.3	78.9
Brazil	8.5	7.6	7.7	7.7	7.8	7.0
Others	9.7	8.8	8.9	8.8	9.2	9.1
Near East	255.2	238.2	262.0	251.1	251.5	253.5
Iran, Islamic Rep. of	41.4	39.6	27.0	29.5	26.5	26.5
Turkey	213.7	198.6	235.0	221.6	225.0	227.0
Oceania	7.1	7.2	7.2	6.6	6.4	6.5
Japan	94.7	86.0	83.0	82.1	85.9	84.7
CIS	8.3	8.4	8.4	8.5	8.6	8.9
Developed	113.7	103.8	101.0	99.5	103.3	102.9
Developing	3777.5	3936.2	4263.6	4527.5	4681.2	4961.0

Source: FAO IGG Secretariat

Figure 13.19 World tea production, thousand tonnes, 2013

Growth in world output was due to major increases in the major tea producing countries. China remained the largest tea producing country with an output of 1.9 million tonnes, accounting for more than 38 percent of the world total, while production in India, the second largest producer, also increased to reach 1.2 million tonnes in 2013. Output also increased in the two largest exporting countries where production reached 436 300 tonnes in Kenya and 343 100 tonnes in Sri

Lanka. Apart from the 7.5 percent decline in Vietnam to 185 000 tonnes, production in other major producing countries increased: Indonesia to 152 700 tonnes; Bangladesh to 66 200 tonnes; Uganda to 58 300 tonnes; Malawi to 46 500 tonnes; Tanzania to 32 400 tonnes; and Rwanda to 25 200 tonnes. Other producers in Africa recorded slight increases: Burundi to 8 800 tonnes; Zimbabwe to 8 500 tonnes; and South Africa to 2 500 tonnes.

World tea exports reached 1.77 million tonnes in 2013 a 5 percent increase compared to 2012. Volumes of black tea were up by 5.8 percent in 2013 and export earnings increased by 10 percent to USD 5.7 billion (figure 13.20).

	2006-08	2009	2010	2011	2012	2013
WORLD	1570.7	1544.7	1683.0	1674.8	1684.0	1768.5
Far East	1014.0	1008.8	1036.4	1051.9	1064.8	1077.9
Bangladesh	7.9	2.1	0.9	1.5	0.6	0.5
Sri Lanka	303.5	279.9	305.8	303.2	306.1	311.0
China (Mainland)	291.0	303.0	302.4	322.6	321.8	329.7
India	200.2	180.5	182.7	205.3	199.1	209.2
Indonesia	91.7	92.3	87.1	75.5	70.1	70.8
VietNam	108.2	134.1	138.4	122.6	145.0	133.5
Others	11.5	17.0	19.1	21.4	22.1	23.1
Africa	462.8	449.1	542.9	519.4	525.7	596.4
Kenya	301.0	281.1	362.3	347.5	349.9	415.9
Malawi	42.9	46.8	48.9	44.9	41.8	40.5
Zimbabwe	9.1	4.5	5.1	5.7	5.9	5.9
Rwanda	17.4	18.8	21.5	23.2	23.0	23.5
South Africa	5.6	5.3	5.0	2.7	2.8	5.2
Tanzania United Rep	26.4	24.4	26.1	27.1	27.8	26.2
Uganda	39.6	47.9	53.7	47.9	52.3	56.7
Others	20.8	20.3	20.3	20.3	22.3	22.5
Latin America and Caribbean	79.7	72.7	89.2	89.0	79.3	76.2
Oceania	7.0	7.8	7.4	6.7	6.1	6.6
Developed	16.7	17.5	17.2	14.5	13.7	18.1
Developing	1554.0	1527.2	1665.7	1660.2	1670.3	1750.4

Source: FAO IGG Secretariat

Figure 13.20 World tea exports, thousand tonnes, 2013

World tea consumption continued to increase in 2013. Total tea consumption increased by nearly 5 percent in 2013 to 4.84 million tonnes, which was underpinned by the rapid growth in per capita income levels, particularly in China, India and other emerging economies. Growth in demand was particularly marked in China. After a spectacular rise in consumption in recent years exceeding 8 percent annually, total consumption increased by 9 percent in 2013, on a year to year basis, to reach 1.61 million tonnes, the largest in the world. In India, consumption expanded by 2.4 percent in 2009 and 6.6 percent in 2013 to reach 1 million tonnes (figure 13.21).

	2006-08	2009	2010	2011	2012	2013
WORLD	3714.9	3916.0	4180.3	4449.6	4626.8	4842.1
DEVELOPED	826.0	792.1	818.8	834.4	827.8	814.8
South Africa	18.8	24.0	25.1	23.5	23.5	22.8
EU	259.7	228.5	230.3	246.6	238.0	242.0
France	14.6	13.9	15.3	14.9	15.1	15.2
Germany	23.2	19.0	24.9	25.9	29.9	28.9
Ireland	9.2	10.7	10.2	8.6	6.7	7.0
Netherlands	13.8	11.8	10.9	14.2	7.0	12.2
Poland	23.7	15.8	17.2	19.8	19.9	15.0
UK	134.0	121.0	119.8	129.3	125.2	116.2
Other EU	41.2	36.2	31.9	33.9	34.2	47.5
Japan	139.4	124.1	124.0	121.9	121.9	119.1
United States	109.6	108.2	123.8	124.6	122.7	127.4
Russian Federation	172.4	176.2	177.8	182.2	173.3	159.1
Others	114.7	107.1	112.7	112.1	125.0	121.6
DEVELOPING	2889.0	3123.9	3361.5	3615.1	3798.9	4027.3
China (Mainland)	867.0	1045.3	1188.5	1314.5	1481.7	1614.2
India	786.9	822.1	818.3	922.2	939.2	1001.4
Turkey	214.6	202.4	241.9	227.4	227.2	228.0
Egypt	81.1	82.3	68.5	95.7	95.4	99.0
Pakistan	107.3	85.7	120.3	126.2	131.3	126.6
Iran, Islamic Rep. of	76.8	86.1	89.6	80.2	80.3	83.4
Indonesia	56.1	56.8	59.9	61.1	63.3	64.9
Bangladesh	46.4	53.7	57.3	59.3	59.5	61.9
VietNam	25.5	27.5	27.9	29.3	30.3	31.7
Morocco	51.4	54.8	53.9	65.0	54.1	56.7
Kenya	17.3	18.1	18.7	20.0	23.0	26.6
Others	558.6	589.0	616.6	614.2	613.7	632.9

Source: FAO IGG Secretariat

Figure 13.21 World tea consumption, thousand tonnes, 2013

Cacao bean also *cocoa bean*, often simply *cocoa* and *cacao*. Cocoa is the dried and fully fermented fatty seed of *Theobroma cacao*, from which cocoa solids and cocoa butter are extracted.

The production increased by 131.7% in 30 years, representing a compound annual growth rate of 2.9%.

There are three main varieties of cocoa plant: Forastero, Criollo, and Trinitario. The first is the most widely used, comprising 95% of the world production of cocoa. Overall, the highest quality cocoa beans come from the Criollo variety, which is considered a delicacy.

Criollo plantations have lower yields than those of Forastero, and also tend to be less resistant to several diseases that attack the cocoa plant, hence very few countries still produce it. One of the largest producers of Criollo beans is Venezuela (Chua and Porcelana). Hacienda San José, located in Paria/Venezuela, cultivates Criollo beans. The total area of this hacienda is 320 hectares, of which 185 hectares are devoted to cacao, with a density of 1.000 plants per hectare. Trinitario is a hybrid between Criollo and Forastero varieties. It is considered to be of much higher quality than the latter, but has higher yields and is more resistant to disease than the former.

There are different metrics used for chocolate consumption. The Netherlands has the highest monetary amount of cocoa bean imports (US\$2.1 billion); it is also one of the main ports into Europe. The United States has highest amount of cocoa powder imports (\$220 million); the US has a large amount of cocoa complementary products. The United Kingdom has the highest amount of retail chocolate (\$1.3 billion) and is one of the biggest chocolate consumption per capita markets.

Cocoa beans can be held in storage for several years in bags or in bulk, during which the ownership can change several times, as the cocoa is traded much the same as metal or other commodities, to gain profit for the owner.

A *spice* is a dried seed, fruit, root, bark, or vegetative substance primarily used for flavoring, coloring or preserving food. Sometimes a spice is used to hide other flavors.

Spices are distinguished from herbs, which are parts of leafy green plants also used for flavoring or as garnish.

Many spices have antimicrobial properties. This may explain why spices are more commonly used in warmer climates, which have more infectious disease, and why use of spices is especially prominent in meat, which is particularly susceptible to spoiling. A spice may have other uses, including medicinal, religious ritual, cosmetics or perfume production, or as a vegetable. For example, turmeric roots are consumed as a vegetable and garlic as an antibiotic. India produces 70% of global spice production.

4. Food and Agricultural Organization (FAO) of the United Nation and Republic of Kazakhstan.

The *Food and Agriculture Organization of the United Nations (FAO)* is a specialized agency of the United Nations that leads international efforts to defeat hunger (figure 13.22).



Figure 13.22 FAO emblem

An intergovernmental organization, FAO has 194 Member Nations, two associate members and one member organization, the European Union. Its employees come from various cultural backgrounds and are experts in the multiple fields of activity FAO engages in. FAO's staff capacity allows it to support improved governance inter

alia, generate, develop and adapt existing tools and guidelines and provide targeted governance support as a resource to country and regional level FAO offices. Headquartered in Rome, Italy, FAO is present in over 130 countries.

Food and Agriculture Organization (FAO), oldest permanent specialized agency of the United Nations, established in October 1945 with the objective of eliminating hunger and improving nutrition and standards of living by increasing agricultural productivity.

The FAO coordinates the efforts of governments and technical agencies in programs for developing agriculture, forestry, fisheries, and land and water resources. It also carries out research; provides technical assistance on projects in individual countries; operates educational programs through seminars and training centres; maintains information and support services, including keeping statistics on world production, trade, and consumption of agricultural commodities; and publishes a number of periodicals, yearbooks, and research bulletins.

The Conference is the forum where representatives of the member states meet every two years to discuss global governance and regulatory issues and international frameworks, as well as to assess the work that has been done and approve the budget for the next two years.

The Council. This executive body acts in the period between conference sessions within the powers it has, such as those related to the global food and agriculture situation, and to the organization's activities, governance, financial management and constitutional matters. Council members are elected by the conference and have rotating tenures of three years for the executive supervision of the programme and the budget.

FAO is composed of six departments: Agriculture and Consumer Protection; Economic and Social Development; Fisheries and Aquaculture; Forestry; Corporate Services, Human Resources and Finance; and Technical Cooperation (table 13.12).

The sustainable development goals (SDGS):

Goal 1: End poverty in all its forms everywhere.

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

Goal 3: Ensure healthy lives and promote well-being for all at all ages.

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Goal 5: Achieve gender equality and empower all women and girls.

Goal 6: Ensure availability and sustainable management of water and sanitation for all.

Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all.

Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Goal 10: Reduce inequality within and among countries.

Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable.

Goal 12: Ensure sustainable consumption and production patterns.

Goal 13: Take urgent action to combat climate change and its impacts.

Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Table 13.12

FAO and Republic of Kazakhstan

	1990	2000	2014
1	2	3	4
<i>The setting</i>			
Population, total (mln)	15.9	14.6	16.6
Population, rural (mln)	7	6.5	7.8
Govt expend. (% total outlays)			

Table 13.12 continuation

1	2	3	4
Area harvested (mln ha)		12	18
Cropping intensity ratio		0.1	
Water resources (1 000 m ³ / person/year)	7	7	7
Area equipped for irrigation (1 000 ha)			2 066
Area irrigated (% area equipped for irrigation)			61.2
Employment in agriculture (%)		35.3	25.5
Employment in agriculture, female (%)		34	29.2
Fertilizers, Nitrogen (kg of nutrients per ha)		0.9	1
Fertilizers, Phosphate (kg of nutrients per ha)		0.6	0.7
Fertilizers, Potash (kg of nutrients per ha)		0	0
Energy consump, power irrigation (mln kWh)	1325	1325	98
Agr value added per worker (constant US\$)	3162	2084	3181
Hunger dimensions			
Dietary energy supply (kcal/pc/day)	2830	2813	3181
Average dietary energy supply adequacy (%)	125	121	137
Dietary en supp, cereals/roots/tubers (%)	60	57	39
Prevalence of undernourishment (%)	≤5.0	≤5.0	≤5.0
GDP per capita (US\$, PPP)	12728	9706	22470
Domestic food price volatility (index)			
Cereal import dependency ratio (%)	-17.1	-48.3	-50.6
Underweight, children under -5 (%)		3.8	3.7
Improved water source (% pop)	94.1	93.8	93.1
Food supply			
Food production value, (2004-2006 mln 1\$)	7543	4689	7421
Agriculture, value added (% GDP)	18	9	5
Food exports (mln US\$)	564	572	2634
Food imports (mln US\$)	301	346	3307

Table 13.12 continuation

1	2	3	4
Production indices (2004-06=100)			
Net food	128	79	125
Net crops	102	79	146
Cereals	145	86	134
Vegetables oils	41	45	281
Roots and tubers	84	67	144
Fruit and vegetables	39	75	161
Sugar	241	78	19
Livestock	155	81	111
Milk	117	79	104
Meat	182	84	113
Fish	257	111	105
Net trade (mln US\$)			
Cereals	514	511	2019
Fruit and vegetables	-70	-9	-840
Meat	12	-25	-424
Dairy products	-14	-38	-365
Fish		-7	-20
Environment			
Forest area (%)	1	1	1
Renewable water res withdrawn (% of total)			66
Terrestrial protect areas	2	3	3
Organic area (% total agricultural area)			0
Water withdrawal by agriculture (% of total)			66
Biofuel production (thousand kt of oil eq.)			
Wood pellet production (1000 tonnes)			0
Net GNG emissions from AFOLU (CO ₂ eq, Mt)	33	15	19

Agriculture is one of the key sectors of Kazakhstan's economy. The level of development of the agricultural sector has always been and continues to be a determining factor in the economic and political stability of Kazakhstan society. As one of the priority directions of development of economy of the Republic, the agriculture has the huge

potential and big reserves, various climatic conditions of Kazakhstan allow to grow up almost all cultures of a moderate thermal belt and to develop animal husbandry. Agriculture of Kazakhstan is characterized by such features as large size and small population, geographical remoteness from markets and lack of access to sea routes. The president of Kazakhstan Nursultan Nazarbayev paid attention that the republic in the sphere of agriculture is faced by a number of important tasks: "It is necessary to put a financial condition of the agricultural enterprises in order. They have to show results from the public funds allocated for this purpose. Another priority issue is import substitution in the provision of basic foodstuffs. It is necessary to arrange own production by such types of production which is imported now as fowl, sausages, apples. In general it is necessary to increase processing and to raise an agricultural products value added».

During the period of independence of the Republic of Kazakhstan in agro-industrial the complex has achieved considerable results: observed the constant increase of production based on market relations, increases productivity and productivity is updated fixed assets and infrastructure of the industry, achieved self-sufficient in basic foods, there has been a significant growth in exports of grain, oilseeds, fish and fishery products (table 13.13).

Table 13.13

Gross production (services) of agriculture of the Republic of Kazakhstan in the period of 1999-2014

Gross production (services) of agriculture				
million tenge				
1	Gross production (services) of agriculture	including:		
		Gross production of plant growing	Gross output of animal husbandry	Services in the field of agriculture
1	2	3	4	5
1990	50,8	29,3	19,9	1,6
1991	77,8	38,7	36,6	2,6
1992	924,1	674,1	202,7	47,3
1993	6 045,7	3 541,1	1 907,3	597,3
1994	113 611,3	73 330,4	33 767,5	6 513,4

Table 13.13 continuation

1	2	3	4	5
1995	208 919,2	107 409,5	91 681,3	9 828,5
1996	289 073,1	168 930,2	110 169,9	9 973,0
1997	308 740,1	170 605,1	131 627,4	6 507,7
1998	250 360,8	106 576,8	141 785,1	1 998,9
1999	337 253,8	177 703,7	157 266,6	2 283,5
2000	404 145,9	223 503,3	178 542,8	2 099,8
2001	535 124,0	325 770,2	207 869,1	1 484,7
2002	558 742,3	321 466,2	235 925,3	1 350,8
2003	613 306,9	351 448,7	259 497,1	2 361,1
2004	695 801,4	384 542,2	307 423,5	3 835,7
2005	749 077,8	389 526,6	355 786,3	3 764,9
2006	825 557,0	413 666,9	407 545,2	4 344,9
2007	1 089 384,0	608 392,3	476 276,0	4 715,7
2008	1 404 492,6	770 239,6	628 601,0	5 652,0
2009	1 641 352,4	932 305,1	703 174,5	5 872,8
2010	1 442 630,1	662 652,6	774 105,8	5 871,7
2011	2 286 042,3	1 337 194,4	942 384,3	6 463,6
2012	1 999 046,6	981 190,0	1 011 191,9	6 664,7
2013	2 386 103,5	1 313 003,5	1 064 338,1	8 761,9
2014	2 527 890,3	1 327 855,2	1 189 555,4	10 479,7

Gross production (services) of agriculture increased by 2 890,3 527 million tenge in 2014, compared with 50.8 million tenge in 1990. The gross production of plant growing for this during the period increased with 29,3 million tenge to 1 327 855,2 million tenge, the gross output of animal husbandry increased with 19,9 million tenge to 1 189 555,4 million tenge, and also services in the field of agriculture in the period of 1999-2014 increased with 1,6 million tenge to 10 479,7 million tenge.

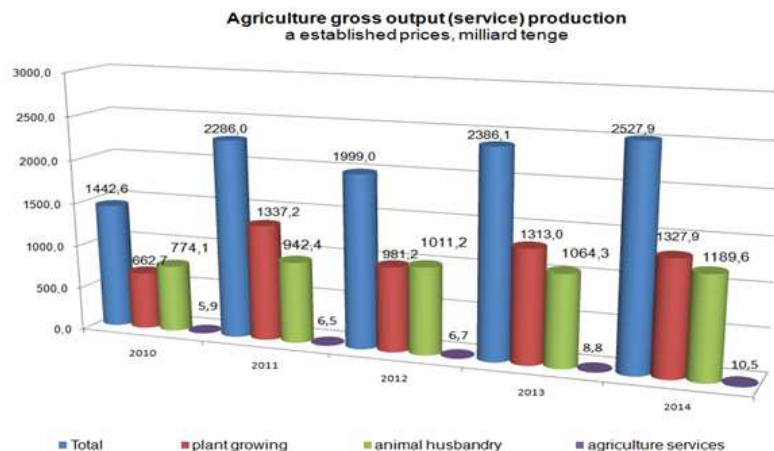


Figure 13.23 Agriculture gross output (services) production of the Republic of Kazakhstan

Gross output of products (services) of agriculture of the Republic of Kazakhstan in the period from 2010 to 2014 has increased by 42.9%, 2010 amounted to 1442630,1 million tenge in 2014 - 2 527 890,3 million tenge (figure 13.23, table 13.14). Also gross production of plant growing increased with 662 652,6 million tenge to 1 327 855,2 million tenge during this period, that is almost 2. Gross output of animal husbandry in this period increased in 1,5, and services in the field of agriculture increased in 1,8.

Table 13.14
Agriculture gross output (service) production all categories of economy

million tenge					
Regions	2010	2011	2012	2013	2014
1	2	3	4	5	6
Gross output					
Republic of Kazakhstan	1 442 630,1	2 286 042,3	1 999 046,6	2 386 103,5	2 527 890,3
Akmola	108 906,3	246 247,9	148 822,9	231 590,4	238 622,6

Table 13.14 continuation

	1	2	3	4	5	6
Aktobe	82 276,1	116 037,0	113 468,0	125 376,4	125 066,2	
Almaty	217 769,6	290 983,9	342 543,2	377 013,9	425 307,9	
Atyrau	19 475,1	33 478,2	40 376,1	44 029,9	48 824,0	
West Kazakhstan	52 808,2	82 756,0	73 418,9	79 678,4	84 573,0	
Zhambyl	68 461,6	89 360,3	94 393,8	127 346,6	166 387,5	
Karaganda	83 625,1	119 298,4	114 056,7	142 864,8	143 812,9	
Kostanay	213 494,7	394 419,8	184 938,9	230 861,6	235 396,7	
Kyzylorda	44 241,9	45 362,6	48 505,2	48 569,1	48 238,1	
Mangistau	4 429,2	6 563,8	7 822,5	8 036,6	8 724,7	
South Kazakhstan	163 832,8	207 914,9	259 203,7	296 993,7	322 824,0	
Pavlodar	60 689,7	94 522,2	79 643,4	118 680,7	106 849,0	
North Kazakhstan	166 754,7	353 527,5	252 501,9	264 936,4	280 476,8	
East Kazakhstan	153 133,2	202 249,2	237 221,8	287 755,2	288 776,1	
Astana c.	1 346,7	1 813,8	1 436,5	1 696,7	1 507,3	
Almaty c.	1 385,2	1 506,8	693,1	673,1	2 503,5	

In all regions of Kazakhstan there is a growth in the period from 2010 to 2014 gross agricultural output. A significant share in gross agricultural output of the country is Almaty region, its share in 2014 was 16.8%. On the second place of the North Kazakhstan region, the share of which amounted in 2014 to 12.8%.

The Agrobusiness 2020 program is carried out since 2013, which contains the whole complex of financial and non-financial mechanisms of support of agrarian branch. The purpose of the Program for development of agro-industrial complex of the Republic of Kazakhstan for 2013-2020 - Creation of conditions for increase of competitiveness of subjects of agrarian and industrial complex of the Republic of Kazakhstan.

State regulation developments of agrarian and industrial complex realized in the following forms:

- granting various forms of the state support among subjects of agrarian and industrial complex in the form of subsidies, government

procurements, etc.;

- the use of financial instruments that support the conditions for update of fixed assets - Park of agricultural machinery, equipment, livestock;

- ensuring availability of financial and credit tools to subjects of agrarian and industrial complex;

- creation of attractive conditions for attracting investment in projects of agricultural development;

- support of export of production;

- the provision of public services in the field of veterinary and phytosanitary security, control over budget spending;

- preservation and development of the infrastructure necessary for development of agrarian and industrial complex of the Republic of Kazakhstan – transport, water, storages, etc.;

- development of branch science and distribution of agrotechnological knowledge;

- the qualified management of development of agrarian and industrial complex of the Republic of Kazakhstan.

During the period of independence of the Republic of Kazakhstan in agro-industrial the complex has achieved considerable results: observed the constant increase of production based on market relations, increases productivity and productivity is updated fixed assets and infrastructure of the industry, achieved self-sufficient in basic foods, here was a considerable export growth of grain, oilseeds, fish and fishery products.

Questions for discussion:

- Name the purposes, tasks and principles of foodstuff in the foreign trade.

- What are the semi-finished products?

- Tell about the economic trade of agriculture products, animal husbandry, forestry, fishery and sea products.

- Tell about the economic trade of grain, vegetables and fruits, sugar, spices, coffee, tea and cacao.

- Tell about the economic trade of rubber, forest goods and textile fibers.

- Tell about the development of Food and agricultural organization (FAO).

THEME 14. WORLD MARKETS OF ORES, NON-FERROUS AND FERROUS METALS

1. Market of ferrous and non-ferrous metals. Market of iron ores. Producers, imports and exporters of iron ores.

2. Market of ores: copper, aluminum, bauxites, zinc. Producers, imports and exporters of ores (copper, aluminum, bauxites, zinc).

3. Market of ores: tin, nickel, gold. Markets of precious metals. Producers, imports and exporters of ores (tin, nickel, gold).

4. Features of development of market of ferrous and non-ferrous metals in Kazakhstan.

1. Market of ferrous and non-ferrous metals. Market of iron ores. Producers, imports and exporters of iron ores.

A 'Mineral Resource' is a concentration or occurrence of material of intrinsic economic interest in or on the earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. Mineral deposits can be classified as:

- Mineral resources that are potentially valuable, and for which reasonable prospects exist for eventual economic extraction;

- Mineral reserves or Ore reserves that are valuable and legally and economically and technically feasible to extract (figure 14.1).

Cumulative Production	IDENTIFIED RESOURCES			UNDISCOVERED RESOURCES	
	Demonstrated		Inferred	Probability Range (or)	
	Measured	Indicated		Hypothetical	Speculative
ECONOMIC	Reserves		Inferred Reserves		
MARGINALLY ECONOMIC	Marginal Reserves		Inferred Marginal Reserves		
SUB-ECONOMIC	Demonstrated Subeconomic Resources		Inferred Subeconomic Resources		

Other Occurrences	Includes nonconventional and low-grade materials
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Figure 14.1 McKelvey diagram

A "McKelvey diagram" showing the relation of mineral resource classifications to economics and geologic certainty.

Metallurgy is a domain of materials science and engineering that studies the physical and chemical behavior of metallic elements, their intermetallic compounds, and their mixtures, which are called alloys. Metallurgy is also the technology of metals: the way in which science is applied to the production of metals, and the engineering of metal components for usage in products for consumers and manufacturers. The production of metals involves the processing of ores to extract the metal they contain, and the mixture of metals, sometimes with other elements, to produce alloys. Metallurgy is distinguished from the craft of metalworking, although metalworking relies on metallurgy, as medicine relies on medical science, for technical advancement.

Metallurgy is subdivided into ferrous metallurgy (sometimes also known as black metallurgy) and non-ferrous metallurgy or colored metallurgy. Ferrous metallurgy involves processes and alloys based on iron while non-ferrous metallurgy involves processes and alloys based on other metals. The production of ferrous metals accounts for 95 percent of world metal production.

Ores (metals) are traded internationally and comprise a sizeable portion of international trade in raw materials both in value and volume. This is because the worldwide distribution of ores is unequal and dislocated from locations of peak demand and from smelting infrastructure.

Most base metals (copper, lead, zinc, nickel) are traded internationally on the London Metal Exchange, with smaller stockpiles and metals exchanges monitored by the COMEX and NYMEX exchanges in the United States and the Shanghai Futures Exchange in China.

Iron ore is traded between customer and producer, though various benchmark prices are set quarterly between the major mining conglomerates and the major consumers, and this sets the stage for smaller participants.

Other, lesser, commodities do not have international clearing houses and benchmark prices, with most prices negotiated between suppliers and customers one-on-one. This generally makes determining the price of ores of this nature opaque and difficult. Such metals include lithium, niobium-tantalum, bismuth, antimony and rare earths. Most of these commodities are also dominated by one or two major

suppliers with >60% of the world's reserves. The London Metal Exchange aims to add uranium to its list of metals on warrant.

The World Bank reports that China was the top importer of ores and metals in 2014 followed by the USA and Japan.

Iron ores are rocks and minerals from which metallic iron can be economically extracted.

Iron ore is the raw material used to make pig iron, which is one of the main raw materials to make steel. 98% of the mined iron ore is used to make steel. Indeed, it has been argued that iron ore is "more integral to the global economy than any other commodity, except perhaps oil".

Iron is the world's most commonly used metal - steel, of which iron ore is the key ingredient, representing almost 95% of all metal used per year. It is used primarily in structural engineering applications and in maritime purposes, automobiles, and general industrial applications (machinery).

Mining iron ore is a high volume low margin business, as the value of iron is significantly lower than base metals. It is highly capital intensive, and requires significant investment in infrastructure such as rail in order to transport the ore from the mine to a freight ship. For these reasons, iron ore production is concentrated in the hands of a few major players.

World production averages two billion metric tons of raw ore annually. The world's largest producer of iron ore is the Brazilian mining corporation Vale, followed by Anglo-Australian companies BHP Billiton and Rio Tinto Group. A further Australian supplier, Fortescue Metals Group Ltd has helped bring Australia's production to second in the world.

The seaborne trade in iron ore, that is, iron ore to be shipped to other countries, was 849 m tonnes in 2014. Australia and Brazil dominate the seaborne trade, with 72% of the market. BHP, Rio and Vale control 66% of this market between them.

The total recoverable reserves of iron ore in India are about 9,602 million tones of hematite and 3,408 million tones of magnetite. Chhattisgarh, Madhya Pradesh, Karnataka, Jharkhand, Odisha, Goa, Maharashtra, Andhra Pradesh, Kerala, Rajasthan and Tamil Nadu are the principal Indian producers of iron ore. World consumption of iron ore

grows 10% per annum on average with the main consumers being China, Japan, Korea, the United States and the European Union.

China is currently the largest consumer of iron ore, which translates to be the world's largest steel producing country. It is also the largest importer, buying 52% of the seaborne trade in iron ore in 2014. China is followed by Japan and Korea, which consume a significant amount of raw iron ore and metallurgical coal. In 2014, China produced 588 million tons of iron ore, with an annual growth of 38% (table 14.1).

Table 14.1

Top iron ore output countries 2014

Rank	Country	Tonnes
1	China	1 500 000
2	Australia	660 000
3	Brazil	320 000
4	India	150 000
5	Russia	105 000
6	Ukraine	82 000
7	South Africa	78 000
8	United States	58 000
9	Iran	45 000
10	Canada	41 000
11	Sweden	26 000
12	Kazakhstan	26 000
	Other countries	131 000
	Total country	3 220 000

Most other commodities already have a mature market-based pricing system, it is natural for iron ore to follow suit. To answer increasing market demands for more transparent pricing, a number of financial exchanges and/or clearing houses around the world have offered iron ore swaps clearing (figure 14.2).

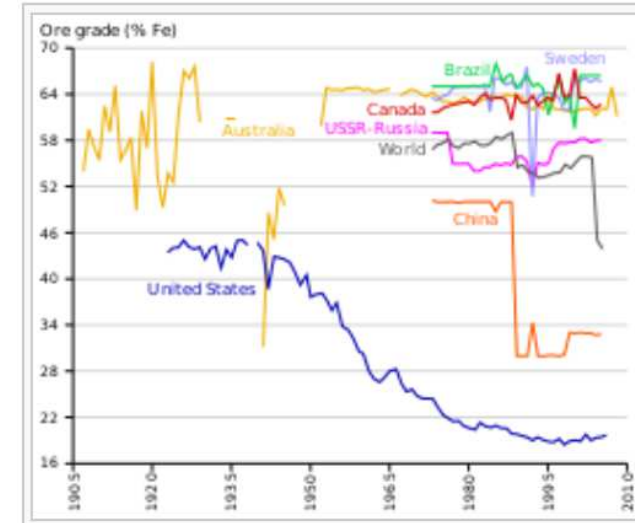


Figure 14.2 Evolution the extracted iron ore grade in different countries

The CME group, SGX (Singapore Exchange), London Clearing House (LCH.Clearnet), NOS Group and ICEX (Indian Commodities Exchange) all offer cleared swaps based on The Steel Index's (TSI) iron ore transaction data. The CME also offers a Platts based swap, in addition to their TSI swap clearing. The ICE (Intercontinental Exchange) offers a Platts based swap clearing service also. The swaps market has grown quickly, with liquidity clustering around TSI's pricing. By April 2011, over US\$5.5 billion dollars worth of iron ore swaps have been cleared basis TSI prices. By August 2012, in excess of one million tonnes of swaps trading per day was taking place regularly, basis TSI.

A relatively new development has also been the introduction of iron ore options, in addition to swaps. The CME group has been the venue most utilised for clearing of options written against TSI, with open interest at over 12,000 lots in August 2012.

Singapore Mercantile Exchange (SMX) has launched the world first global iron ore futures contract, based on the Metal Bulletin Iron Ore Index (MBOI) which utilizes daily price data from a broad spectrum of industry participants and independent Chinese steel consultant-

cy and data provider Shanghai Steelhome's widespread contact base of steel producers and iron ore traders across China. The futures contract has seen monthly volumes over 1.5 million tonnes after eight months of trading.

2. Market of ores: copper, aluminum, bauxites, zinc. Producers, imports and exporters of ores (copper, aluminum, bauxites, zinc).

Internationally, the market for *copper* is one of the largest of all metals behind iron and aluminum. The size of the global market for refined copper is over U\$150 billion annually.

Copper has been a material component in the evolution of human civilizations for thousands of years, and the contribution of the metal defined the Bronze Age. Copper is easy to work with, an efficient conductor of heat and electricity, corrosion resistant, and abundant. In fact, the US Geological Survey (USGS) estimates 2013 global land based copper resources of over 3.1 billion tonnes of which 690 million tonnes are listed as reserves.

These estimates have more than doubled since 1970 as annual world mined copper production has increased. As an added benefit, recycling contributes substantially to the amount refined copper available, with estimates ranging from 20-30% of annual refined copper production (figure 14.3).

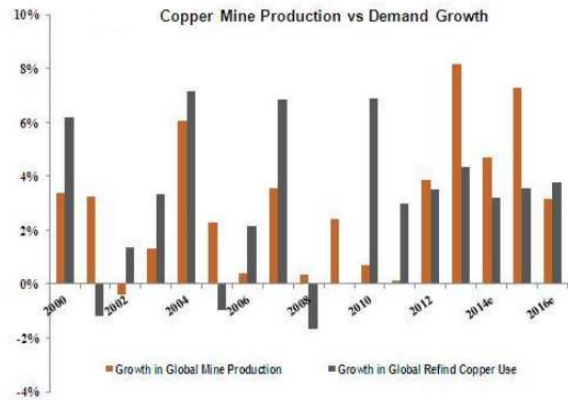


Figure 14.3 Copper mine production

Except for a brief spike in 1994/95, nominal prices of copper remained consistently below U\$1 per pound from 1980 to 2003. In fact, the annual average price throughout this period had a mean of U\$0.90 and a median of U\$0.82 per pound. The emergence of the BRICS nations from economic malaise has heavily impacted certain metals prices – iron ore being the most notable – but copper, lead, and tin prices all appreciated over 300% between 2003 and 2012. The shift over the last 20-years in industrial production away from developed countries to China has been both swift and staggering. China is now the largest consumer of many base and industrial metals, representing approximately 43% of global copper demand in 2012 (figure 14.4, table 14.2).

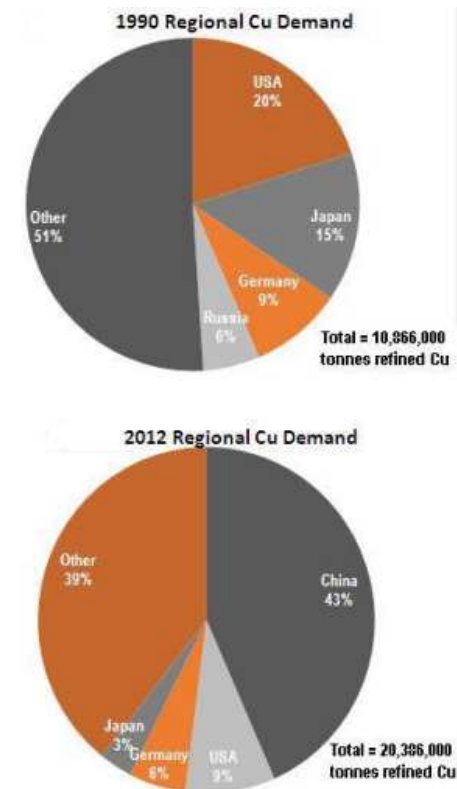


Figure 14.4 Copper mine production, 1990-2012

Table 14.2

Top copper output countries 2014

Rank	Country	Tonnes
1	Chile	5 800 000
2	China	1 620 000
3	Peru	1 400 000
4	United States	1 370 000
5	Congo (Kinshasa)	1 100 000
6	Australia	1 000 000
7	Russia	850 000
8	Zambia	730 000
9	Canada	680 000
10	Mexico	520 000
11	Kazakhstan	430 000
12	Poland	425 000
13	Indonesia	400 000
	Other countries	2 400 000
	Total country	18 700 000

The price of copper has historically been unstable, and it quintupled from the 60-year low of US\$0.60/lb (US\$1.32/kg) in June 1999 to US\$3.75 per pound (US\$8.27/kg) in May 2013. It dropped to US\$2.40/lb (US\$5.29/kg) in February 2014, then rebounded to US\$3.50/lb (US\$7.71/kg) in April 2014. In February 2014, weakening global demand and a steep fall in commodity prices since the previous year's highs left copper prices at US\$1.51/lb.

Anglo American PLC, First Quantum Minerals Ltd., Jiangxi Copper Company Limited, Rio Tinto Group, Codelco, The Furukawa Electric Co., and Nippon Mining & Metals Co. are the major players in the global copper market.

Aluminium (or aluminum) is the third most abundant element (after oxygen and silicon), and the most abundant metal, in the Earth's crust.

Aluminium is a silver to white colored, highly elastic, ductile element having atomic number 13 in the periodic table. It is a light metal with only 1/3rd density as compared to that of steel. It is as good a conductor of heat and electricity as the metal copper is. Aluminium

is known for its feature of being resistant to outside weather, atmospheric gases and liquids. That's why it is largely used in the cold conditions where it maintains its toughness unlike other metals and gains advantage over the metals carbon-steel and copper etc. Non-toxicity and non-magnetic are some of the other characteristics of this metal.

Aluminium's abundance in the earth's crust stands third among other elements. But it is not found in the free state anywhere in the world but in combined form with other materials in the ore form.

Aluminium is a newly discovered metal as compared to the other metals like copper, silver etc as it was found in the 18th and 19th century only. It is the most eco-friendly metal and is also sound technologically and economically. This fact gives aluminium the second place in the list of the largest consumed metals in the world after steel and it is often termed as a versatile metal. It also has unique and numerous properties such as gas resistant, moisture-vapor resistant, grease and oil resistant, corrosion resistant, reflective, lightweight, recyclable etc that makes it stand out when other metals are compared to it. On behalf of all this, it can be said that this metal is irreplaceable.

Aluminium is extracted from the aluminium ore, most commonly bauxite that is found in the areas lying in the tropical and the sub tropical belt on earth. Aluminium constitutes 8% of the earth's crust. Large deposits of bauxite are located in the continents like North America, South America, Africa, Australia and Asia and small deposits in Europe. The world production of aluminium is around 28.9 million tons, *China* being the largest producer followed by Russia, Canada and United States. As already mentioned that aluminium stands second in the largest consumed metals in the world, it is also true that the world consumption level has also risen significantly in the last few years. The following are *the major aluminium consuming countries*: United States, Japan, China, Germany, France, Korea, Italy, England, India, Canada, Austria, Denmark, Netherlands, Norway, Sweden, Switzerland.

The import – export situation of this metal is dependent upon the demand supply mismatch in the world. Consumption in the African continent is much lower than the production level and that states that countries in the African continent have a high exporting ability. *The major bauxite exporting countries are*: Guinea, Jamaica, Surinam, Australia.

The major countries that do not have much of the bauxite deposits import the ore to extract aluminium and make finished products out of it are: Russia, USA, Japan, Germany, Canada, Norway.

The major producers of primary aluminium in the world are United States of America, Russia, Canada, European Union, China, Australia, Brazil, Norway, South Africa, Venezuela, Bahrain, United Arab Emirates, India, New Zealand (table 14.3).

Table 14.3

Top aluminium output countries 2014

Rank	Country	Tonnes
1	China	23 300 000
2	Russia	3 500 000
3	Canada	2 940 000
4	United Arab Emirates	2 400 000
5	India	2 100 000
6	United States	1 720 000
7	Australia	1 680 000
8	Norway	1 200 000
9	Brazil	960 000
10	Bahrain	930 000
11	Iceland	810 000
12	South Africa	735 000
13	Qatar	610 000
14	Mozambique	560 000
15	Germany	500 000
16	Saudi Arabia	500 000
17	Argentina	425 000
	Other countries	4 440 000
	World total (rounded)	49 300 000

The global production of aluminium figures around 29 million tons and the above-mentioned countries share more than 90% of the aluminium production. China topped the chart in 2004 producing around 6.1 million tons of metal. Russia with 3.6 million tons, Canada with 2.64 million tons and USA with 2.5 million tons of production followed China.

Although aluminum is one of the world's most widely used non-ferrous metals, the global aluminum supply is projected to outstrip demand by a wide margin in 2013. While worldwide consumption le-

vels stood at around 45 million metric tons in 2012, global primary production of aluminum amounted to just under 48 million metric tons in the same year. In addition to this, the growing volume of recycled aluminum is expected to further exacerbate the imbalance of supply and demand in the aluminum industry. In light of a rising supply surplus, aluminum prices are projected to plunge by almost 40 percent in 2013 over 2008. As a result, aluminum producers are predicted to increase their levels of idle production capacities. Chalco, Rusal, Alcoa and Rio Tinto are ranked among the largest aluminum producers globally (figure 14.5). The main aluminum markets include China, the European Union, the United States, Japan and India.

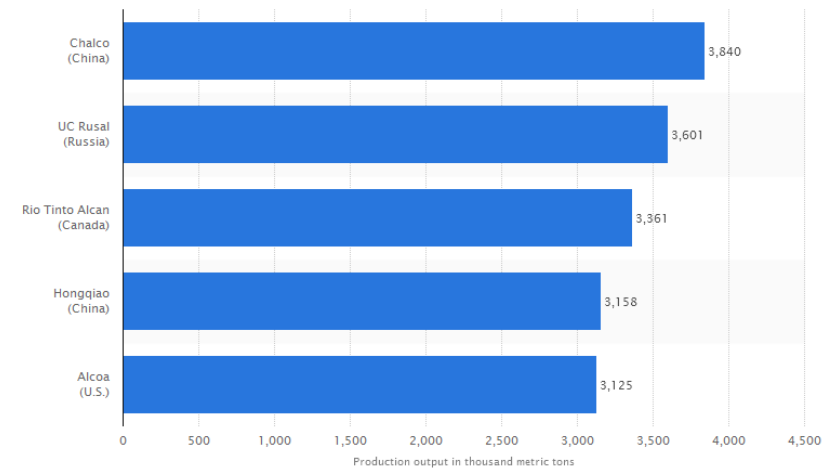


Figure 14.5 Top ten aluminium producing companies, 2014

The major trading centers of aluminium in the world are:

- London Metal Exchange (LME);
- Tokyo Commodity Exchange (TOCOM);
- Shanghai Futures Exchange (SHFE);
- New York Mercantile Exchange (NYMEX).

These above mentioned commodity exchanges provide direction to the world aluminium prices.

Bauxite is an aluminium ore and is the main source of aluminium. In 2010, Australia was the top producer of bauxite with almost one-third of the world's production, followed by China, Brazil, India, and

Guinea. Although aluminium demand is rapidly increasing, known reserves of its bauxite ore are sufficient to meet the worldwide demands for aluminium for many centuries. Increased aluminium recycling, which has the advantage of lowering the cost in electric power in producing aluminium, will considerably extend the world's bauxite reserves (table 14.4).

Table 14.4

Top bauxite output countries 2014

Rank	Country	Tonnes
1	Australia	81 000 000
2	China	47 000 000
3	Brazil	32 500 000
4	Guinea	19 300 000
5	India	19 000 000
6	Jamaica	9 800 000
7	Kazakhstan	5 500 000
8	Russia	5 300 000
9	Suriname	2 700 000
10	Venezuela	2 200 000
11	Greece	2 100 000
12	Guyana	1 800 000
13	Vietnam	1 000 000
14	Indonesia	500 000
	Other countries	4 760 000
	World total (rounded)	234 000 000

World bauxite export trade is growing. In 2011, the total export volume of the countries listed was 68.83 million tonnes, up by 85% over that of 2006.

Indonesia is the standout country. Its exports have leapt from only 7 million tonnes in 2006 to over 40 million tonnes in 2011. This situation could change rapidly however as the Indonesian government intends to introduce a ban on raw materials exports commencing 2014. The exports from other countries are relatively stable (figure 14.6).

Nation	2006	2007	2008	2009	2010	2011
Indonesia	7.27	11.66	16.79	14.72	27.41	40.64
Australia	5.51	7.16	8.66	6.37	7.95	10.29
Jamaica	14.72	14.51	14.72	8.1	8.49	10.06
Brazil	5.31	5.78	6.22	3.04	6.79	6.89
Greece	0.91	1.09	0.79	0.41	0.43	0.52
India	3.49	6.39	3.52	0.27	0.25	0.43
Total	37.22	46.59	50.7	32.92	51.35	68.83

Figure 14.6 Major Export countries of the Bauxites, 2011

China is the largest aluminium consuming and bauxite importing country in the world (figure 14.7).

No.	Nation	2006	2007	2008	2009	2010	2011
1	China	9.26	23.28	25.93	19.8	30.36	45.24
2	USA	11.6	11.79	12.47	7.92	7.32	9.47
3	Ukraine	3.12	3.62	3.92	3.9	4.46	4.92
4	Ireland	3.37	4.13	3.01	2.79	4.11	4.22
5	Canada	3.29	3.34	3.56	2.3	3.37	3.2
6	Spain	3.01	3.55	3.62	3.51	3.33	3.08
7	Germany	2.14	3.14	3.01	2.12	2	2.44
8	France	1.67	2	1.79	1.02	0.96	1.44
9	Japan	1.69	1.99	2.07	1.18	1.16	0.99
10	Azerbaijan	1.23	0.75	0.89	-	-	0.06
11	Italy	2.62	2.36	2.42	0.04	0.06	0.05
	Total	42.99	59.96	62.69	44.58	57.15	75.1

Figure 14.7 Major Import countries of the Bauxites, 2011

In 2011, China's aluminium consumption reached 17.629 million tonnes, accounting for over 40% of world's total; followed by the USA (9.6% of world's total).

Commensurate with its increased consumption of aluminium, China's bauxite imports have increased 5 fold in the period 2006-2011. In 2011 China accounted for 60% of all bauxite imports (figure 14.8).

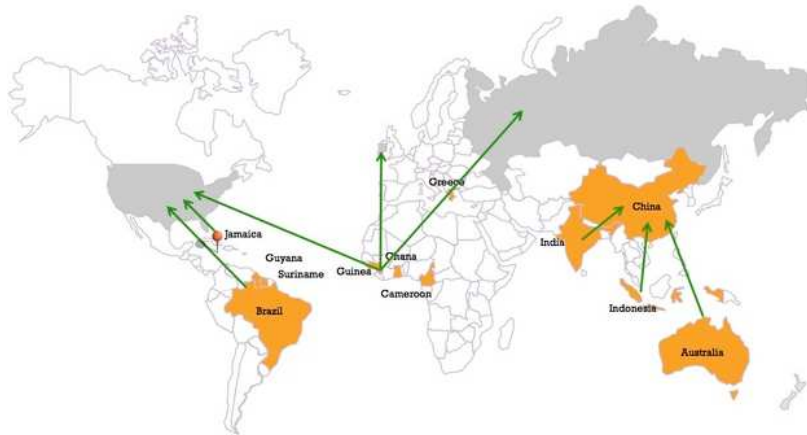


Figure 14.8 Major Bauxite Trade - Major Flows, 2011

Zinc is the fourth most common metal in use, trailing only iron, aluminium, and copper with an annual production of about 12 million tonnes. The world's largest zinc producer is Nyrstar, a merger of the Australian OZ Minerals and the Belgian Umicore. About 70% of the world's zinc originates from mining, while the remaining 30% comes from recycling secondary zinc. Commercially pure zinc is known as Special High Grade, often abbreviated *SHG*, and is 99.995% pure (figure 14.9).

Zinc mining is the process by which mineral forms of the metal zinc are extracted from the earth through mining. A zinc mine is a mine that produces zinc metal. Some mines produce primarily zinc, but some mines produce zinc as a side-product of some metal that has a higher concentration in the ore. Most zinc mines produce zinc and lead or zinc and nickel.

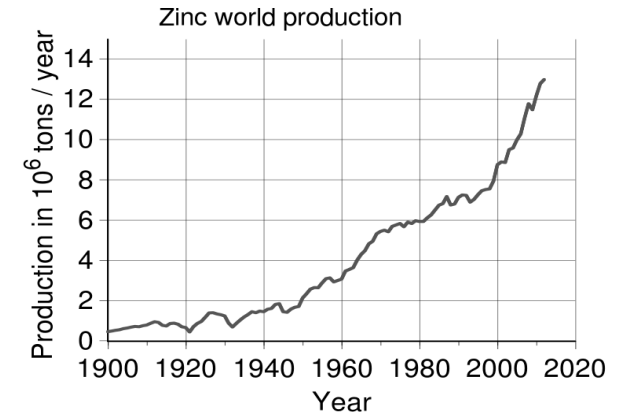


Figure 14.9 Zinc world production

The world's biggest zinc mine is Rampura Agucha Mine in Rajasthan, India. More than 50 countries around the world mine zinc ore, with Australia, Canada, China, Peru and the USA being the largest producers. About 80 percent of the world's zinc is mined underground, while 8 percent is mined via open pits with the rest using a combination of both methods (table 14.5). Zinc mine operators include Xstrata, Nyrstar, Boliden AB, Teck Resources.

Table 14.5

Top zinc output countries 2014

Rank	Country	Tonnes
1	China	5 000 000
2	Australia	1 500 000
3	Peru	1 300 000
4	India	820 000
5	United States	700 000
6	Mexico	700 000
7	Bolivia	410 000
8	Canada	350 000
9	Kazakhstan	330 000
10	Ireland	300 000
	Other countries	1 900 000
	World total (rounded)	13 300 000

There are zinc mines throughout the world, with the main mining areas being China, Australia and Peru. China produced 29% of the global zinc output in 2014.

3. Market of ores: tin, nickel, gold. Markets of precious metals. Producers, imports and exporters of ores (tin, nickel, gold).

Tin is unique among other mineral commodities by the complex "agreements" between producer countries and consumer countries dating back to 1921. The earlier agreements tended to be somewhat informal and sporadic; they led to the "First International Tin Agreement" in 1956, the first of a continuously numbered series that essentially collapsed in 1985. Through this series of agreements, the International Tin Council (ITC) had a considerable effect on tin prices. The ITC supported the price of tin during periods of low prices by buying tin for its buffer stockpile and was able to restrain the price during periods of high prices by selling tin from the stockpile. This was an anti-free-market approach, designed to assure a sufficient flow of tin to consumer countries and a decent profit for producer countries. However, the buffer stockpile was not sufficiently large, and during most of those 29 years tin prices rose, sometimes sharply, especially from 1973 through 1980 when rampant inflation plagued many world economies.

About 296,000 tonnes of tin have been mined in 2014, mostly in China (125,000 t), Indonesia (84,000 t), Peru (23,700 t), Bolivia (18,000 t), Brazil (12,000 t), etc. (table 14.6).

Table 14.6

Top tin output countries 2014

Rank	Country	Tonnes
1	2	3
1	China	125 000 000
2	Indonesia	84 000 000
3	Peru	23 700 000
4	Bolivia	18 000 000
5	Brazil	12 000 000
6	Burma	11 000 000
7	Australia	6 100 000
8	Vietnam	5 400 000

Table 14.6 continuation

1	2	3
9	Malaysia	3 500 000
10	Congo (Kinshasa)	3 000 000
11	Rwanda	2 000 000
12	Laos	800 000
13	Russia	600 000
14	Nigeria	500 000
15	Thailand	200 000
	Other countries	100 000
	World total (rounded)	296 000 000

Tin has replaced lead in a lot of soldering, and is now used in a variety of electronics products from televisions and tablets to smart-phones. The world's largest tin miner is China, followed by Indonesia (figure 14.10). As a result of China's growing tin consumption and Jakarta's commodity policy, the tin market is expected to see another year of demand exceeding supply.

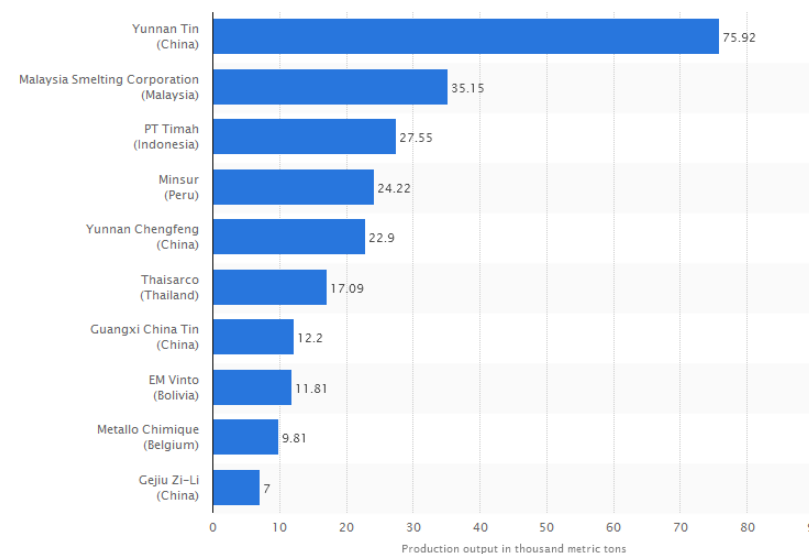


Figure 14.10 Top ten tin producing companies, 2014

Yunnan Tin took the first spot, with a production output of over 70,000 metric tons. The Chinese company is the world's largest producer and exporter of tin. By-product metals refined by Yunnan Tin include base metals and precious metals such as lead, copper, zinc and platinum group metals. Metallo-Chimique International specializes in the recycling of scrap metals.

New deposits are reported to be in southern Mongolia, and in 2009, new deposits of tin were discovered in Colombia, South America, by the Seminole Group Colombia CI, SAS.

Nickel is a lustrous, silvery-white metallic element. It is the fifth most common element on earth, however, much of this metal is located within the earth's core and therefore, inaccessible. Primary nickel can be used as an alloy, such as, ferro-nickel, produced largely in Japan and New Caledonia. In fact, one of its most popular uses is as an alloy (e.g. with chromium and other metals) to produce stainless and heat-resistant steels for use as pots, pans, kitchen sinks, etc. It can also be used as part of nickel oxides and within other chemicals. Nickel is a very versatile metal and is currently used for many different applications, such as those of, industrial, military, aerospace, marine, and architectural means. In its various applications, it can often be recycled and the secondary nickel then, commonly used as supplementation to newly mined material

Nickel is usually mined as a metal with greater than 75% purity through ore extraction using processes related to roasting and reduction (figure 14.11).

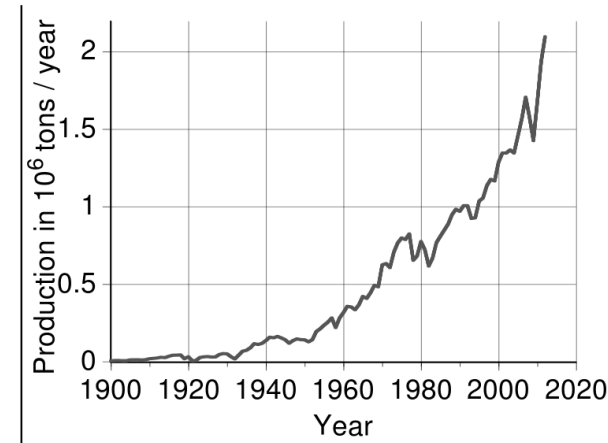


Figure 14.11 Nickel world production

Nickel ore is mined in 23 countries and smelted or refined in 25 countries, globally. Mining was most prominent in the Philippines, Indonesia, Russia, Australia, and Canada in 2014 and the average nickel price totaled approximately \$16,900 USD per metric ton. Currently, Australia has one of the world's largest reserves at 19 million metric tons; globally, there are some 81 million metric tons. As of 2012, nickel is estimated to have 15 remaining life years.

Australia and New Caledonia have the biggest estimate reserves (45% all together) (table 14.7).

Table 14.7

Top nickel output countries 2014

Rank	Country	Tonnes
1	2	3
1	Philippines	440 000 000
2	Russia	260 000 000
3	Indonesia	240 000 000
4	Canada	233 000 000
5	Australia	220 000 000
6	New Caledonia	165 000 000
7	Brazil	126 000 000
8	China	100 000 000
9	Colombia	75 000 000
10	Cuba	66 000 000
11	South Africa	54 700 000

Table 14.7 continuation

12	Madagaskar	37 800 000
13	United States	3 600 000
	Other countries	410 000 000
	World total (rounded)	2 400 000 000

In terms of World Resources, identified land-based resources averaging 1% nickel or greater contain at least 130 million tons of nickel (about the double of known reserves). About 60% is in laterites and 40% is in sulfide deposits.

In 2011, Russia was the largest producer of nickel with about one-fifth world share closely followed by Canada, Australia, and Indonesia and Philippines, as reported by the US Geological Survey. The largest deposits of nickel in non-Russian Europe are located in Finland and the second largest in Greece. A nickel deposit in western Turkey had been exploited, with this location being especially convenient for European smelters, steelmakers, and factories.

Gold is a dense, soft, shiny, malleable and ductile metal. This metal has been a valuable and highly sought-after precious metal for coinage, jewelry, and other arts since long before the beginning of recorded history. Gold standards have sometimes been a monetary policies, but were widely supplanted by fiat currency starting in the 1930s. The last gold certificate and gold coin currencies were issued in the U.S. in 1932. In Europe, most countries left the gold standard with the start of World War I in 1914 and, with huge war debts, failed to return to gold as a medium of exchange.

The consumption of gold produced in the world is about 50% in jewelry, 40% in investments, and 10% in industry.

Powered by formidable demand from China and India, global economic anxieties and whole raft of other factors, gold is right on track to hit the magical \$1,000/oz. But while that sounds like great news for gold companies and investors, massive supply issues and spiralling costs for exploration and production suggest huge challenges ahead for the industry

Global gold production has been in steady decline since 2002. Production in 2007 was around 2,444t, down 1% on the previous year (figure 14.12).



Figure 14.12 Gold world production

Analysts note that virtually all of the low-lying fruit has now been picked with respect to gold, meaning that companies will have to take on more challenging and more expensive projects to meet supply. The extent to which the current high price of gold can translate into profits remains to be seen.

As one of the world's biggest gold producers, China remains a net importer of gold, while demand increases at an alarming rate in line with rapid industrialisation. Similarly, demand from India is also extremely high.

India is the world's largest single consumer of gold, as Indians buy about 25% of the world's gold, purchasing approximately 800 tonnes of gold every year, mostly for jewelry. India is also the largest importer of gold; in 2008, India imported around 400 tonnes of gold. Indian households hold 18,000 tonnes of gold which represents 11% of the global stock and worth more than \$950 billion.

In South Africa – traditionally the world's biggest gold producer – electricity problems have seen several major producers flag significant production shortfalls (table 14.8).

Table 14.8

Top gold output countries 2014

Rank	Country	Tonnes
1	2	3
1	China	450 000

Table 14.8 continuation

1	2	3
2	Australia	270 000
3	Russia	245 000
4	United States	211 000
5	Canada	160 000
6	South Africa	150 000
7	Peru	150 000
8	Uzbekistan	102 000
9	Mexico	92 000
10	Ghana	90 000
11	Brazil	70 000
12	Indonesia	65 000
13	Papua New Guinea	60 000
14	Chile	50 000
	Other countries	695 000
	World total (rounded)	2 860 000

In 2014, preliminary estimated gold production by the top publicly-traded and non state-owned gold mining companies amounted to 30 Moz, in line with the 2013 totals (figure 14.13).

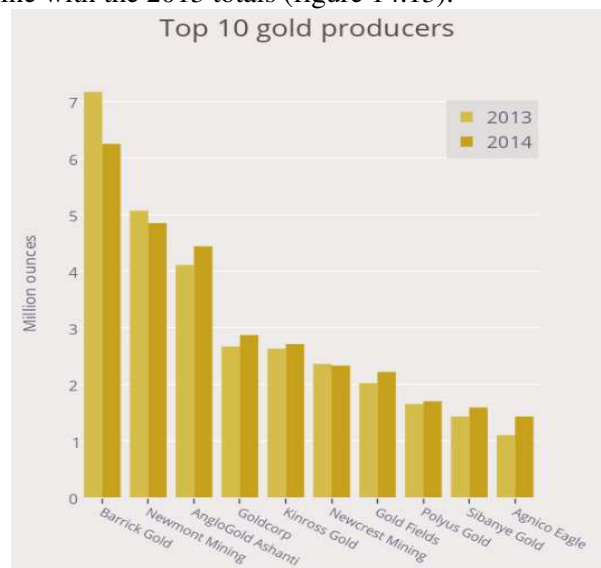


Figure 14.13 Top Gold producing countries

Three out of the 10 miners suffered a decline in their attributable gold output while six of them achieved growth.

With 6.25 Moz of gold produced in 2014, Canada's Barrick Gold Corp. (TSE:ABX) holds first place in global ranking, well ahead of its competitors.

4. Features of development of market of ferrous and non-ferrous metals in Kazakhstan.

Ferrous metallurgy is a large industry in history, and its share in the secondary industry amounts to 13 %. Ferrous metallurgy is a basis for development of engineering and metal work, its products are widely used in all spheres of economy. Development of primary sectors, engineering and construction provides a fixed demand on domestic market and macroregion markets.

Import capacity of domestic market and macroregion markets on priority commodity groups is 2,7 and 25,3 billion dollars respectively.

Production has increased by 6,2 % in real terms from 2008 to 2013 and amounted to 632 billion tenge. At the same time, the share of ferrous metallurgy within the secondary industry has decreased from 20 % in 2008 to 10,7 % in 2013.

Gross value added increased from 393,0 billion tenge in 2008 to 453,2 billion tenge in 2012. Number of employed people in the industry reduced by 28 thousand from 2008 to 2013. In 2013 labour productivity amounted to 89,9 thousand dollars and from 2008 to 2013 it increased by 1,2 times. Although, in 2012 the industry was still behind the average performance of the OECD countries (151,9 thousand dollars) at 37%. In 2013 exports of products of ferrous industry compared to 2008 decreased by 47,3 % and amounted to 3,4 billion dollars.

Today there are the following major players of the industry on the world market, included in the list of leading transnational companies in the world according to Forbes - Global 2000 magazine: Posco (South Korea), Arselor Mittal (Luxembourg), Evraz Group (Russia).

Priority activities:

- Production of cast-iron, steel and ferrous alloys;
- Production of pipes, pipelines, sections, steel fittings;
- Cold drawing (production of iron rod and solid billet);

- Cold rolling of strips and narrow strips;
- Cold moulding and folding;
- Production of wires by cold drawing.

From 2015 to 2019 the state policy on development of ferrous industry will be aimed at implementing priority areas for production of high quality raw materials to produce steel (granulated iron and hot briquetted iron, increase in production of new types of ferrous alloys), production of new types of steel (piped and corrosion-resistant, heat-resistant and hot-resistant, tool, ball bearing, rail and spring steel) and increasing product line of highly alloyed steel.

Non-ferrous metallurgy is a key sector of the secondary industry of the Republic of Kazakhstan, forming the country's export potential. Production of the sector is used in engineering, electrical engineering, construction, and electronics.

Import capacity of domestic market and macroregion markets on priority commodity groups is 111 and 6718 million dollars respectively.

The share of non-ferrous metallurgy within the secondary industry has increased from 19,6 % to 22,8% in 2012 compared to 2008, and decreased in 2013 by 19,2 %. Gross value added increased from 377,9 billion tenge in 2008 to 749,9 billion tenge in 2012. Production has increased by 1,7 times in nominal terms from 2008 to 2013. Number of employed people in the industry reduced by 22.2 thousand from 2008 to 2013. In 2013 labour productivity of non-ferrous metallurgy amounted to 107,8 thousand dollars. This performance of the OECD countries for the same period amounted to 147,5 thousand dollars on average, which is by 18,9 % than the same performance of Kazakhstan. In 2013 exports of non-ferrous products remained at the level of 2008 and amounted to 4,2 billion dollars.

Priority activities:

- Production of noble (precious) metals;
- Production of aluminium;
- Production of lead, zinc and stannum;
- Production of copper;
- Production of other non-ferrous metals.

From 2015 to 2019 the state policy on development of non-ferrous metallurgy of the country will increase production of base metals: copper, gold, titanium and aluminium; increase in production

of products: wire rods, wires, rolled stock, sectors and alloys, foils, jewellery, products for related industries.

Tasks for discussion:

- Tell about the economic trade of products of iron ores.
- Name the main consumers and importers of ores and metals.
- Tell about the economic trade of copper, copper ores and concentrates, aluminum, bauxites and alumina.
- Tell about the economic trade of lead, lead ores and concentrates, nickel and nickel ores.
- Tell about the and economic trade of zinc, zinc ores and concentrates, tin, tin ores and concentrates.
- Tell about the economic trade of gold metals.

THEME 15. MARKETS OF ENERGY RESOURCES: COAL, OIL AND GAS

1. The world market of fuel. The world market of oil and oil products: production and trade.
2. The world market of natural and artificial gas: production and trade. Electric power industry.
3. The world market of coal: production and trade.
4. Organization of the Petroleum Exporting Countries (OPEC) and the Republic of Kazakhstan.

1. The world market of fuel. The world market of oil and oil products: production and trade.

Fuel is any material that stores potential energy in a form that can be practicably released and used as heat energy. The concept originally applied solely to those materials storing energy in the form of chemical energy that could be released through combustion, but the concept has since been also applied to other sources of heat energy such as nuclear energy (via nuclear fission or nuclear fusion), as well as releases of chemical energy released through non-combustion oxidation (such as in cellular biology or in fuel cells).

The heat energy released by many fuels is harnessed into mechanical energy via an engine. Hydrocarbons are by far the most common source of fuel used by humans, but other substances, including radioactive metals, are also utilized.

Fuels are contrasted with other methods of storing potential energy, such as those that directly release electrical energy (such as batteries and capacitors) or mechanical energy (such as flywheels, springs, compressed air, or water in a reservoir).

Chemical fuels are divided in two ways. First, by their physical properties, as a solid, liquid or gas. Secondly, on the basis of their occurrence: *primary (natural fuel)* and *secondary (artificial fuel)*.

An oil is any neutral, nonpolar chemical substance, that is a viscous liquid at ambient temperatures, and is immiscible with water but soluble in alcohols or ethers.

Global trade is an ever-present influence on the economies of nations, and there is more trade internationally in crude oil or petroleum than in anything else. The oil trade refers to the extraction, transportation, and refinement of crude oil to be sold in markets all around the globe. Trade in crude oil and its products is a complex web of wells, offshore platforms, pipelines, tankers, and refineries. Oil, more than perhaps any other commodity, can have important worldwide political ramifications because of its very high importance as an energy source.

In the oil trade, as with others, products flow first to the markets that provide the highest value to the supplier. All else being equal, this will mean that the nearest markets receive the product first, because it costs the least for the supplier to get it there. After the nearest market's needs are met, the product goes to the next nearest, and so on.

This phenomenon is visible in the fact that while the Middle East exports vastly more oil than any other region, oil consuming countries in the Western Hemisphere, such as the United States, tend to rely more heavily on oil produced in other Western Hemisphere countries, such as Canada, Mexico, and Venezuela. It is worth noting, however, that there is real global dependence on Middle Eastern oil, especially in the countries of the Far East.

There are four main types of crude oil resources: conventional oil, heavy oil, extra heavy oil, and bitumen, a semi-solid form of crude oil such as is found in the Canadian oil sands. Conventional oil represents only about 30% of the world's oil reserves. Whereas conventional oil can be extracted using traditional oil well methods, the heavier oils and bitumen are sometimes so thick and heavy that they need to be heated or diluted before they will flow.

The petroleum industry generally classifies crude oil by the geographic location it is produced in (e.g. West Texas Intermediate, Brent, or Oman), its API gravity (an oil industry measure of density), and its sulfur content. Crude oil may be considered light if it has low density or heavy if it has high density; and it may be referred to as sweet if it contains relatively little sulfur or sour if it contains substantial amounts of sulfur.

The geographic location is important because it affects transportation costs to the refinery. Light crude oil is more desirable than heavy oil since it produces a higher yield of gasoline, while sweet oil commands a higher price than sour oil because it has fewer environ-

mental problems and requires less refining to meet sulfur standards imposed on fuels in consuming countries. Each crude oil has unique molecular characteristics which are understood by the use of Crude oil assay analysis in petroleum laboratories.

Barrels from an area in which the crude oil's molecular characteristics have been determined and the oil has been classified are used as pricing references throughout the world. Some of the common reference crudes are:

- *West Texas Intermediate (WTI)*, a very high-quality, sweet, light oil delivered at Cushing, Oklahoma for North American oil;
- *Brent Blend*, comprising 15 oils from fields in the Brent and Ni-nian systems in the East Shetland Basin of the North Sea. The oil is landed at Sullom Voe terminal in Shetland. Oil production from Europe, Africa and Middle Eastern oil flowing West tends to be priced off this oil, which forms a benchmark;
- *Dubai-Oman*, used as benchmark for Middle East sour crude oil flowing to the Asia-Pacific region;
- *Tapis* (from Malaysia, used as a reference for light Far East oil);
- *Minas* (from Indonesia, used as a reference for heavy Far East oil);
- *The OPEC Reference Basket*, a weighted average of oil blends from various OPEC (The Organization of the Petroleum Exporting Countries) countries;
- *Midway Sunset Heavy*, by which heavy oil in California is priced;
- *Western Canadian Select* the benchmark crude oil for emerging heavy, high TAN (acidic) crudes.

Two main types of transportation, tankers and pipelines, are essential in the oil trade. Tankers make possible the oil trade between continents, and are an efficient, low-cost way to accomplish this. Tankers of various sizes are employed, depending on the distance that the oil needs to be transported. Exports from the Middle East, for example, are typically of high volume and need to travel long distances. The tankers used for these exports can carry over 2 million barrels of oil per voyage.

On the other hand, pipelines are used to transport oil over land and across continents. Pipelines are almost always the most cost-effective method for oil transportation over land. In the United States

alone, there are roughly 200,000 miles (321,869 km) of oil pipelines crisscrossing the continent from regions that produce oil to those that consume it.

Refining is one of the final stages in the journey that is the oil trade. Crude oil refinement is also called distillation, because the oil is heated and put into a distillation column. As it is heated, different products, or “distillates,” boil off at different temperatures and are then recovered, transported, and sold as the products we use every day, such as diesel fuel, gasoline, and home heating oil.

Oil is one of the most important commodities in the world. It is an import source of energy in the world because it is precious and there are a lot of applications that depend on it. Oil is not distributed uniformly all over the world. According to a study conducted by IEA, the top 10 oil producing countries contribute more than 63% of the worldwide demand of oil.

We are going to mention the top 10 largest oil producing countries in 2015 (figure 15.1, table 15.1).

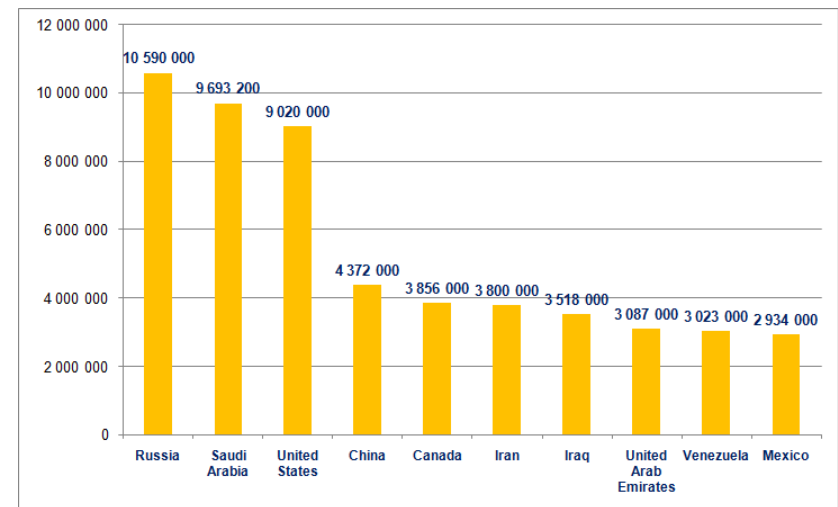


Figure 15.1 Top 10 Largest Oil Producing Countries in 2015

These numbers keep changing on yearly basis. In the list of top 10 largest oil producing countries in the world in 2014, Kuwait was on

10th place, but this year, it is on 11th place. Following list of top ten largest oil producing countries:

Table 15.1

List of top ten largest oil producing countries in 2015

Rank	Country	Barrels
1	Russia	10 590 000
2	Saudi Arabia	9 693 200
3	United States (US)	9 020 000
4	China	4 372 000
5	Canada	3 856 000
6	Iraq	3 800 000
7	Iran	3 518 000
8	United Arab Emirates (UAE)	3 087 000
9	Venezuela	3 023 000
10	Mexico	2 934 000

List of top ten largest oil producing countries:

1. Russia

Russia is the largest oil producing country in the world in 2015. Its current production reaches to 10,590,000 barrels of oil per day which helps in delivering 14.05% of the total oil needed the world. Even though Russia faced its biggest financial crisis in over a decade earlier this year, it still is at the number 1 spot in the list of top 10 biggest oil producing countries in the world 2015.

2. Saudi Arabia

Saudi Arabia is currently the biggest oil producing country in the Middle East. It is also the 2nd largest oil producing country in the world this year. With a total production of 9,693,200 barrels per day, Saudi Arabia contributes about 13.09% to the total oil produced in the world.

3. United States (US)

United States of America or USA currently is the 3rd largest oil producing country in the world. Its production is more than twice of what China is producing with a total of 9,020,000 barrels of oil per day. US have a 12.23% share in the overall oil production in the world.

4. China

China also belongs in the list of top 10 largest oil producing countries in 2015. The current oil production numbers of China are 4,372,000 barrels per day which gives it a fair share of 5.25% of the total production of oil in the world.

5. Canada

Some of you might not have expected Canada to be in the list and that too right in the middle of it but it is there as it produces 3,856,000 barrels of oil per day which helps in meeting the demand of oil in the world. Canada holds a share of 4.54% in the total oil produced in the world.

6. Iraq

Iraq holds the number 6 spot in the top ten biggest oil production countries in the world in 2015. It is currently contributing about 4.45% to the total oil production in the world. Iraq's oil production is 3,800,000 barrels per day. Iraq is still going through post war crisis and because of that, the production has slowed down over the past few years but the situation is getting better now and it is expected that Iraq will soon be recognized as the top 3 largest oil producing countries in the world.

7. Iran

Iran produces approximately 3,518,000 barrels per day and its share in the total oil production in the world is 4.14%. Due to various EU sanctions and other restrictions put on Iran due to its nuclear program, the oil production has slowed down and so is the oil exports as well but it still remains as the 7th biggest oil producing country in the world in 2015.

8. United Arab Emirates (UAE)

United Arab Emirates or UAE is also one of the biggest oil producing countries in the world ranked at number 8. UAE oil production is 3,087,000 barrels per day which gives it 3.32% share of the world's oil production. UAE has been an important part of the total oil production in the world since the 90s and continues to maintain a strong position in the list of top 10 largest oil producing countries in the world 2015.

9. Venezuela

Venezuela produces about 3,023,000 barrels of oil per day and is one of the top 10 largest oil producing countries in the world right now. The oil produced by Venezuela accumulates about 3.56% of the

total oil production in the world. Venezuela is also said to have the largest oil reserves in the world which means that its production will rise in the future.

10. Mexico

Mexico is currently the 10th largest oil producing country in the world 2015. Mexico produces about 2,934,000 barrels of oil per day. This production contributes to 3.56% of the total oil production in the world. With the rising economy of Mexico, Kuwait will find it hard to replace it in the upcoming years as well.

Oil companies used to be classified by sales as "supermajors" (BP, Chevron, ExxonMobil, ConocoPhillips, Shell, Eni and Total S.A.), "majors", and "independents" or "jobbers". In recent years however, National Oil Companies (NOC, as opposed to IOC, International Oil Companies) have come to control the rights over the largest oil reserves; by this measure the top ten companies all are NOC. The following table shows the *ten largest national oil companies* ranked by reserves and by production in 2015:

1. Saudi Aramco (Saudi Arabia)

Saudi Aramco, a fully integrated, global petroleum and chemicals enterprise, is the state-owned oil company of the Kingdom of Saudi Arabia. During their 80-year history they have become a world leader in hydrocarbons exploration, production, refining, distribution, shipping and marketing, and the world's top exporter of crude oil and natural gas liquids (NGLs).

2. Gazprom (Russia)

Gazprom is a global energy company with an average daily crude production of 9.7 million barrels per day. Its major business lines are geological exploration, production, transportation, storage, processing and sales of gas, gas condensate and oil, sales of gas as a vehicle fuel as well as generation and marketing of heat and electric power. The company holds the world's largest natural gas reserves. Gazprom accounts for 14 percent of the global and 74 percent of the Russian gas output, respectively.

3. National Iranian Oil Co. (Iran)

Since 1951, National Iranian Oil Company (NIOC) has been directing and making policies for exploration, drilling, production, research and development, refining, distribution and export of oil, gas,

petroleum products. NIOC, with a vast amount of oil and gas resources, is one of the world's largest oil companies. At the present time, it is estimated that the company holds 156.53 billion barrels of liquid hydrocarbons and 33.79 trillion cubic meters of natural gas. The company has an average daily crude production of 6.4 million barrels per day.

4. ExxonMobil (United States (US))

ExxonMobil is the world's largest publicly traded international oil and gas company. The company holds an industry-leading inventory of global oil and gas resources and has an average daily crude production of 5.3 million barrels per day. They are the world's largest refiner and marketer of petroleum products, and their chemical company ranks among the world's largest. They operate in most of the world's countries and are best known by the familiar brand names: Exxon, Esso, and Mobil.

5. PetroChina (China)

PetroChina Co. Ltd., is the largest oil and gas producer and distributor, playing a dominant role in the oil and gas industry in China. It is not only one of the companies with the biggest sales revenue in China, but also one of the largest oil companies in the world. PetroChina was established as a joint stock company with limited liabilities by China National Petroleum Corp. under the Company Law and the Special Regulations on the Overseas Offering and Listing of Shares by Joint Stock Limited Companies in 1999. The company has an average daily crude production of 4.4 million barrels per day.

6. BP (Great Britain)

BP is one of the world's leading international oil and gas companies with an average daily crude production of 4.1 million barrels per day. The company provides customers with fuel for transportation, energy for heat and light, lubricants to keep engines moving, and the petrochemicals products used to make everyday items as diverse as paints, clothes and packaging. Their upstream segment is responsible for activities in oil and natural gas exploration, field development and production. Their downstream segment is the product and service-led arm of BP, focused on fuels, lubricants and petrochemicals.

7. Royal Dutch Shell (Netherlands - Great Britain)

Shell is a global group of energy and petrochemical companies with an average daily crude production of 3.9 million barrels per day.

Their upstream segment is focused on exploring for new oil and gas reserves and developing major projects where their technology and know-how adds value to the resource holders. Their downstream emphasis remains on sustained cash generation from existing assets and selective investments in growth markets. The company has spent \$2.2 billion on developing alternative energies, carbon capture and storage, and CO₂-related R&D over the past five years.

8. Pemex (Mexico)

Mexico's state oil company Pemex is engaged in the exploration, production, transportation, refining, storage and sale of hydrocarbons and derivatives. The company produces an average daily crude production of 3.6 million barrels per day. Its products include petrochemicals, natural gas, liquid gas, sulphur, gasoline, kerosene, and diesel. Pemex operates 344 production fields; 6,382 production wells; 225 off-shore platforms; six refineries; eight petrochemical complexes; 7,896km of gas pipelines; 4,548km of oil pipelines; and 19 LPG distribution terminals.

9. Chevron (United States (US))

Chevron has an average daily crude production of 3.5 million barrels per day. Chevron had a global refining capacity of 1.95 million barrels of oil per day at the end of 2012. The company explores for, produces and transports crude oil and natural gas; refines, markets and distributes transportation fuels and lubricants; manufactures and sells petrochemical products; generates power and produces geothermal energy; provides renewable energy and develops research for advanced biofuels.

10. Kuwait Petroleum Corp. (Kuwait)

Kuwait Petroleum Corp. is the state-owned entity responsible for Kuwait's hydrocarbon interests throughout the world. The company has an average daily crude production of 3.2 million barrels per day. As part of the global energy industry, they supply the world with oil and gas needs by exploring for, producing, refining, transporting and marketing these precious natural resources both in their home country and internationally. They have plans to launch strategic projects such as the Nghi Son Vietnam Refinery and Petrochemical Complex, the Clean Fuel Project and the New Refinery Project, as part of their upstream activities.

2. The world market of natural and artificial gas: production and trade. Electric power industry.

One of the major energy sources in the world is natural gas. The popularity of natural gas as a source of energy has increased over the years leading to increase in its consumption. Consumption of natural gas is expected to grow significantly in the coming years.

Natural gas is an energy source often used for heating, cooking, and electricity generation. It is also used as fuel for vehicles and as a chemical feedstock in the manufacture of plastics and other commercially important organic chemicals.

Natural gas extracted from oil wells is called casinghead gas or associated gas. The natural gas industry is extracting an increasing quantity of gas from challenging resource types: sour gas, tight gas, shale gas, and coalbed methane.

An important feature of natural gas is that this fossil fuel plays a significant role in most sectors of the world economy (industrial, power generation, commercial and residential). Moreover, due to the fact that there are abundant reserves of natural gas in the world - that can be developed and produced without the need for large investments - the importance of gas is likely to expand in the future as nations want to cut back from reliance on expensive and environment-unfriendly energy sources such as oil. Currently, natural gas accounts for about 23 percent of global primary energy sources.

Natural Gas the most powerful factor in the world and used for many things production today. Today Natural Gas Producing countries are USA, Russia, Iran, Canada, China are one of the leading countries in the production of Natural Gas, they are creating electricity. These countries are working to find more resources.

Natural gas is one of the strongest forms of energy. We can say this for sure that it is as important for our lives as oil and electricity are. Natural gas plays a significant role in fulfilling most of our energy requirements. We use it to cook food. It is a form of cleanest burning fuel that is used in houses and offices for heating and cooking purposes. Obtaining natural gas is a critical phenomenon that requires a lot of equipment and proper methodologies. It is used as raw material in fertilizers and petrochemicals (figure 15.2).

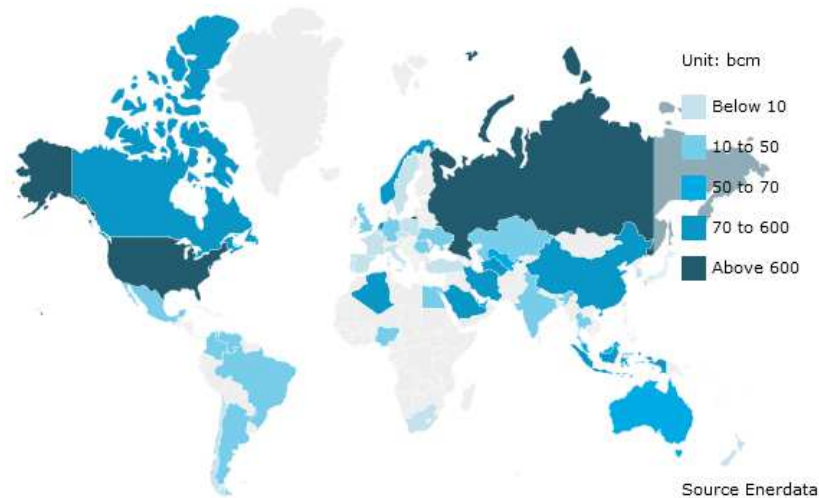


Figure 15.2 World Natural Gas Production in 2014

Let us check out the list of top 10 best gas producing countries in 2014 (table 15.2).

Table 15.2

List of top ten largest natural gas producing countries in 2014

Rank	Country	Trillion cubic feet
1	United States	681,4
2	Russia	669,7
3	Iran	162,6
4	Canada	143,1
5	Qatar	133,2
6	Norway	114,7
7	China	107,2
8	Saudi Arabia	103,2
9	Algeria	82,7
10	Netherlands	80,7

The two largest producers of natural gas (the USA and Russia) together account for almost 40 percent of total global gas production.

These are the 10 countries that have the highest proved reserves of natural gas as of the end of 2014, according to U.S. Energy Information Administration (EIA) data (figure 15.3):

Table 15.3

Top ten largest natural gas reserves countries in 2014

Rank	Country	Trillion cubic feet
1	Russia	1,688
2	Iran	1,187
3	Qatar	890
4	United States	308,4
5	Saudi Arabia	287,8
6	Turkmenistan	265
7	United Arab Emirates	215
8	Venezuela	195,1
9	Nigeria	182
10	Algeria	159,05

Top ten largest natural gas reserves countries:

1. Russia – 1,688 trillion cubic feet in proved reserves

Largest proved natural gas reserves is Russia, a country that has had a lot of scrutiny on its oil and gas sectors as the international community mounts wave after wave of increased sanctions on them. Gazprom, the state-run natural gas behemoth, is currently developing a massive natural gas pipeline for about \$70 billion that will generate an estimated \$400 billion+ in revenue for the nation over the course of 30 years. This project, and others like it, may prove increasingly important in geopolitics in the coming years with mounting Chinese gas demand providing a potential alternative to exporting in Europe.

2. Iran – 1,187 trillion cubic feet in proved reserves

In addition to the fourth largest proved reserves of oil in the world, Iran has the distinction of holding the second largest reserves of natural gas, which accounts for about 17 percent of the world's total proved reserves, according to the EIA. The country's natural gas sector has taken a substantial hit in recent years (though not quite as significant as crude oil) as international sanctions crippled the country's energy sector. The nation produced about 5.649 trillion cubic feet of natural gas.

3. Qatar – 890 trillion cubic feet in proved reserves

Very nearly all of Qatar's massive reserves of natural gas are in the North Field, part of a formation that the country shares with Iran. In addition to being the third largest natural gas producer in the world,

Qatar is also the second largest in the Middle East. It also has the distinction of being the world's largest exporter of LNG since its low energy demand allows it to export nearly all of its natural gas. Qatar produced about 5.523 trillion cubic feet of natural gas

4. United States – 308.436 trillion cubic feet in proved reserves

The U.S. has experienced an exponential increase in not only proved reserves, but overall production, as the shale revolution has fully utilized hydraulic fracturing to tap into formations previously thought inaccessible. While a domestic ban on the export of crude oil remains in place, natural gas has been available for international export for years with relatively few restrictions. This is particularly important not just because of what it means for the economy, but also for what it means to Europe. As tensions continue to rise (and sanctions pile up) over the Ukrainian-Russian crisis, European leaders are growing increasingly concerned by the prospect that Russia may turn off the supply of natural gas to Europe—of which it is the largest supplier. The U.S. produced about 24.282 trillion cubic feet of natural gas in 2013, making it the largest producer of natural gas in the world despite being fourth in proved reserves.

5. Saudi Arabia – 287.844 trillion cubic feet in proved reserves

Saudi Arabia is a country that has been synonymous with oil for decades, but despite its rather large proved reserves, it has fallen relatively short in natural gas. This is apparently an opinion shared by even the CEO of the state-run oil and gas producer Saudi Aramco, Khalid Al-Falih. In 2013, Saudi Arabia produced about 3.637 trillion cubic feet of natural gas and was one of only three of the highest reserve countries to also be in the list of top 10 producers.

6. Turkmenistan – 265 trillion cubic feet in proved reserves

A country that seems almost conspicuously absent from geopolitical discussion considering its vast natural gas reserves, Turkmenistan comes in at about 265 trillion cubic feet of proved natural gas reserves, something the EIA calls a “significant increase from 94 [trillion cubic feet] estimated in 2009.” Turkmenistan consumed about 1 quadrillion British thermal units of energy in 2008, with approximately 78 percent being supplied by natural gas, according to the EIA. The country produced about 2.492 trillion cubic feet of natural gas in 2012.

7. United Arab Emirates – 215.025 trillion cubic feet in proved reserves

A member of both the Organization of Petroleum Exporting Countries (OPEC) and the Gas Exporting Countries Forum (GECF), the United Arab Emirates (UAE) is becoming a major financial powerhouse in the Middle East with Dubai becoming almost synonymous with wealth, especially as it pertains to oil and gas. According to the EIA, domestic natural gas use is skyrocketing and will likely heavily affect the amount of natural gas that the nation is able to export in years to come. The UAE currently imports and exports liquefied natural gas (LNG) and shares gas pipelines with its neighbors Qatar and Oman. The country produced about 1.854 trillion cubic feet of natural gas in 2012.

8. Venezuela – 195.1 trillion cubic feet in proved reserves

Venezuela has struggled significantly since the death of long-time president Hugo Chavez. During the course of his presidency, Chavez tried to implement a series of sweeping socialist reforms with the goal of benefiting the people of Venezuela, including the nationalization of the oil and gas sector. Venezuela produced about 1.003 trillion cubic feet of natural gas in 2013.

9. Nigeria – 182 trillion cubic feet in proved reserves

Also highly regarded on EY's list is the African nation of Nigeria, which has the highest overall proved reserve of natural gas of any country in the continent. The nation produced about 3.053 trillion cubic feet of natural gas in 2012.

10. Algeria – 159.05 trillion cubic feet in proved reserves

Onshore Algeria was number one on Ernst & Young's (EY) recent list of the top 10 hotspots for African oil and gas exploration. While the country has grappled with its fair share of political and military strife over recent years, EY opines that the country has been stabilized to a significant extent by economic development (brought on primarily by the petroleum industry, according to the business intelligence company). The EIA has not published data on the 2013 production levels for Algeria, but the nation produced about 3.053 trillion cubic feet of natural gas in 2012.

Gas companies are the backbone for all industries in the globe. These companies are too much powerful and deserve to be called king makers in world economy. World economy totally depends upon these companies. These companies have made cartels to maximize the prices. No doubt oil and gas are the backbones of a country's economy.

Credit of all the wars and conspiracies goes to the ambition of gaining more and more oil and gas. Oil producing countries are nothing before the economic power of these companies. These companies are the monopolist due to their power. Here, we have prepared a list of the *top 10 oil and gas companies* in the world in 2015:

1. Gazprom (Russia)

Gazprom is a Russian oil and gas company. It is the major extractor of natural gas in the world. It was founded in 1989. Its head office is situated in Moscow, Russia. It deals in geological exploration, production and transportation, storage, processing and marketing of gas and hydrocarbons. It is give no. 1 in this list of Top 10 oil and gas companies in the world. It has the segments of Gas Production, Transportation, Distribution, Gas Storage and Production of Crude Oil.

2. Exxon Mobil (United States)

Exxon Mobil is an American global oil and gas company. It is headquartered in Texas, United States. Exxon Mobil explores, develops and distributes crude oil and natural gas. It also manufactures petroleum products. It is engage in manufacturing petrochemical products including olefins, aromatic petrochemical compounds, and polyethylene and propylene plastics. It has three businesses segments: Upstream, Downstream and Chemical. Its upstream segment operates to explore and produce crude oil and natural gas. Its downstream segment aids in manufacturing, and selling of petroleum products. Exxon's Chemical segment manufactures petrochemicals. It is give no.2 in this list of Top 10 oil and gas companies in the world. This segment is also responsible for marketing and selling it.

3. BP - British Petroleum (Great Britain)

This oil and gas company was founded in 1909. Its head office is situated in London, UK. BP is engaged in exploration, production, refining, distribution, marketing, and power generation. It also produces petrochemicals. It is also operating in sectors of bio fuels and wind power. Its upstream segment trades and markets natural gas, liquefied petroleum gas, power and natural gas liquids and oil and gas exploration. It is give no. 3 in this list of Top 10 oil and gas companies in the world. BP's downstream segment is involved in refining, manufacturing and supply of crude oil, petroleum and petrochemical products.

4. Chevron (United States)

Chevron Energy Company is headquartered in San Ramon, California. It was founded in 1906. It is operating in the field of oil and gas exploration, refining, development, marketing and transportation and geothermal energy industries. It also provides administrative, financial, management and technology support to America and international subsidiaries engaged in petroleum, chemical or mining operations, or power generation. It is give no. 4 in this list of Top 10 oil and gas companies in the world.

5. PetroChina (China)

PetroChina is a China National Petroleum Corporation (CNPC). It was founded in 1999. Its head office is situated in Dongcheng District, Beijing. This oil and gas company has the honor to be China's largest oil producer company. This company is involved in exploration, refining, development, production, natural gas, petroleum products, primary petrochemicals and sale of crude oil. It is give no. 5 in this list of Top 10 oil and gas companies in the world. It operates through the sections of Exploration & Production, Refining & Chemicals, Marketing and Natural Gas & Pipeline.

6. Shell (Netherlands - Great Britain)

Shell is Anglo-Dutch multinational oil and Gas Company. It was founded in 1907 and is headquartered in the Netherlands. It is engaged in oil and natural gas production, refining, distribution, shipping, petrochemicals, power generation and trading. Its major segments are, Upstreaming Downstreaming. The upstream segment concerns exploration and extraction oil and gas and wind energy generation. It is give no. 6 in this list of Top 10 oil and gas companies in the world. The Downstream segment concerns refining, production of fuels, lubricants, petrochemicals and bio-fuels.

7. Rosneft (Russia)

Rosneft is an oil and gas company headquartered in Moscow, Russia. It is majority owned by the Government of Russia. It is engaged in exploration, development, production, refining, transportation and sale of crude oil and gas, petroleum products, petrochemicals, etc. It operates two refineries, marine terminals, shipping and pipeline companies, among several others. It is give no. 7 in this list of Top 10 oil and gas companies in the world. It operates in the segments of Exploration & Production and Refining & Distribution.

8. Total (France)

TOTAL is considered to be one of the six “super major” oil companies in the globe. It was established in March, 1924. It is a French global company. It is headquartered in La defense, France. TOTAL explores, develops, produces and markets oil and gas. The company also deals in shipping and trading of crude oil and petroleum products. TOTAL is also a major chemicals manufacturer. It is give no. 8 in this list of Top 10 oil and gas companies in the world. Its major segments are, Upstream, Refining & Chemicals, marketing and Services. It is given no. 8 in this list.

9. Sinopec China Petroleum (China)

Sinopec China Petroleum is also known as China Petroleum & Chemical Corporation. This company was found in February, 2000. Sinopec is headquartered in Beijing, China. Its businesses comprises, oil and gas exploration, refining, production, marketing, sales of petrochemical and petroleum products, storage and pipeline, transportation of crude oil and natural gas, chemical fibers, chemical fertilizers, as well as research and development activities for the company. It is give no. 9 in this list of Top 10 oil and gas companies in the world.

10. PetroBras (Brasil)

PETROBRAS is a multinational oil and gas corporation. It is headquartered in Rio de Janeiro, Brazil. It was established in October 1953. It explores produces and distributes oil and gas. PETROBRAS is a world leader in advance technology for deep water and ultra deep water oil production. It is give no. 10 in this list of Top 10 oil and gas companies in the world. It operates through the several segments like Exploration, Production, Refining, Transportation, Marketing, Distribution, Gas and Power, Bio fuels, LNG and Electricity etc. Till 1997, it was a legal monopolist in Brazil.

Electricity market

Today life without electricity is hard to imagine. It has become the integral part of our modern and advanced world. It can be regarded as the most powerful, important and consumed technology so far. All of the world’s industries, schools, small and large businesses and factories can’t spend a day without the electricity. Electricity is one of the major parameters in determining the stability and success of any country in the world. It’s evident that the demand of electricity is increasing every passing day all over the world. In last two to three years the total

world’s electricity generation rate grew up by 4-5%. Some of the countries are able to meet the demand of electricity consumption while others cannot. It is being consumed more than the natural gas, coal or any other resources. Here take a look at the *List Of Top 10 Electricity Producing Countries 2014*:

1. China

China is the largest electricity consumer and producer in the world. We all know that the power industry of China has changed (in-fact increased) drastically in past few years and in 2011 it had even crossed United States in the consumption of electricity. Today China is producing almost 5361.6 TWh of electricity. China has huge amount of energy reserves. It has the third-largest coal reserves in the world along with massive hydroelectric resources. More than 79% of the electricity in China has been produced by coal. Rest of the need is fulfilled by the hydroelectric production. China is ever growing and improving nation with the highest population and having some of the best brand factories in the world. Fortunately China is successfully fulfilling its needs.

2. United States

United States is undoubtedly the most advanced nation in the world technologically. It is said that US produce most of the electricity from the conventional thermal power plants. It was mostly coal but now natural gas and other gases power plants have been seen producing the sufficient amount of electricity. About 70% of electricity is produced by the fossil fuels, 20% from the nuclear power, 7% from the hydropower sources and the rest of 3% from the other renewable energy sources. Currently US is producing 4260.4 TWh of electricity.

3. India

India is the country with world’s second highest population and rapidly growing economy. India’s 56% of the electric energy is produced by coal though it has the limited reservation of fossil fuels. Natural gas produces only 9%, the hydropower accounts for almost 19% of the electricity production and 12% is produced by the renewable energy resources. The energy policy of India is characterized by the increasing household income, limited fossil fuels reserves, and adverse impact on both the rural and urban area’s environment and ofcourse the economy as the social driving factors. India is producing 1102.9 TWh of the electricity occupying the third place in our top ten lists.

4. Japan

Japan electric power industry deals with all electricity generation, transmission, distribution and sale. Japan is producing almost 1088.1 TWh of electricity. Japan is the world's largest electricity equipment exporter in the world. Japan has the energy research and development program which checks the production and security of energy in the country. Japan produces 26% of the electricity from coal and 27% from the natural gas. 24% electricity is produced from Nuclear power, 8% from the hydropower accounts and 13% from the oil resources.

5. Russia

Russia is the largest nuclear power of the world. It is the country with fastest growing economy and is in fact the most advanced nation. The Russian government is working on many projects to increase the electricity production in the country to meet the increasing demand. About 50% of the electricity in Russia is produced by the natural gas. 19% of electricity is produced by the coal and peat. Currently electricity production in Russia is 1069.3 TWh.

6. Germany

Germany is one of the richest countries in the world. There are number of electricity projects on which the Germany is working on, to increasing the gross electricity production in the country. Like China and United States Germany is the third one to produce most of its electricity from coal. The solar power systems of Germany are famous all over the world that's also one of the most efficient ways of electricity production in the country. Germany is the world's largest electricity exporter. It exports 20% of its produced electricity to other countries. Today Germany is producing 633.6 TWh of electricity.

7. Canada

Canada is producing almost 626.8 TWh of electric energy. Most of the electricity generated in Canada is produced from hydro power. It's the second largest country in the world which is producing 58% of its electricity from water. The government of Canada since 1960 had focused on the increasing demand of electricity and had successfully completed many of the big electricity projects in the country. The projects in Newfoundland, Columbia, Quebec, Labrador and Manitoba have significantly increased the electricity production capacity.

8. France

France is a nuclear power. The major portion of the electricity is produced from the nuclear power and for many years country's electricity demands are being fulfilled this way. The electricity produced is cheap and pollution free. 10% of electricity is produced by fossil fuels and 14% from the renewable sources. Today France is producing 568.3 TWh of electricity.

9. Brazil

Brazil is called as the largest electricity market of South America. Brazil is also one of the largest water storage countries in the world. Most of the electricity produced in the country is from the water sources. Almost 80% of the country's electricity demands are fulfilled by the hydroelectric generation plants. The electricity production cost is therefore the lowest in Brazil. But there is a big disadvantage of hydroelectricity, which is the shortage of water in drought years. Brazil is producing 557.4 TWh of electricity.

10. South Korea

South Korea's electricity production rate is 534.7 TWh. The country's main attention was to generate the electricity from nuclear power. The first plant was installed in 1977 near Pusan. In 2008 country government setup a new budget that was to reduce the oil imports from the foreign countries and increasing the investment on renewable energy resources to produce the greater amount of electricity. The solar plans were also made to increase the production of electric energy.

3. The world market of coal: production and trade.

Coal mining is the process of locating and removing underground coal deposits. The coal mining industry refers to the publicly and privately owned companies in various countries that are involved in this process. Surface mining, most commonly in the form of so-called strip mining, and underground mining, when tunnels are dug far below the surface, are the two main ways of mining that the coal mining industry can access and remove coal deposits. The coal mining industry has its origins in the Industrial Revolution of the 18th century, when it provided an energy source for steam engines used to power trains, ships, and factory machines. Today, the coal mined by the coal mining industry is mainly used to produce electricity in power plants and in steel manufacturing.

Coal mining is an important industrial activity in many parts of the world, including the United States, China, Australia, India, Russia, and South Africa. The coal produced by the coal mining industry provides resources for other industries in the form of electricity and refined coal used in, for example, steel and cement making. Coal also provides electricity to the general public. In the United States, it is estimated that half the electricity generated is from coal-fueled power plants.

The coal mining and coal processing performed by the coal mining industry are expensive, large-scale industrial activities that require large investments in machinery and manpower. Providing a safe work environment for coal miners and limiting the environmental impact of the mining process can be costly and challenging for the coal mining industry. In some countries, like the United States, regulations often require companies to restore land affected by mining and provide a safe work environment for miners. Companies that operate in less developed regions are often less regulated, and there coal mines can have a devastating impact on the environment and be extremely hazardous workplaces.

At current rates of production (and if new reserves are not found), global coal reserves are estimated to last for around 112 years. The biggest reserves are found in the USA, Russia, China and India (figure 15.3).



Figure 15.3 World Coal Production in 2014

Global production of all primary coal types passed 3 Gigatonnes (Gt) in 1972, 4 Gt in 1983, 5 Gt in 2003, 6 Gt in 2006, 7 Gt in 2010 and 8 Gt in 2013.

Let us check out the list of top 10 best coal producing countries in 2014 (table 15.4).

Table 15.4

Top ten largest coal producing countries in 2014

Rank	Country	Million tonnes
1	China	1844.6
2	United States	507.8
3	Indonesia	281.7
4	Australia	280.8
5	India	243.5
6	Russia	170.9
7	South Africa	147.7
8	Colombia	57.6
9	Kazakhstan	55.3
10	Poland	55.0

Coal is the main source of electricity and heat in the recent world. Total amount of estimated recoverable coal is 861 billion tonnes. Among the countries around the world, 70 countries are found to be economically workable (table 15.5).

Table 15.5

Top Ten Countries with Largest Coal Reserves in 2014

Rank	Country	Million tonnes
1	United States	237.295
2	Russia	157.01
3	China	114.5
4	Australia	76.4
5	India	60.6
6	Germany	40.7
7	Ukraine	33.9
8	Kazakhstan	33.6
9	Colombia	6.7
10	Canada	6.5

Coal is traded all over the world, with coal shipped huge distances by sea to reach markets. Overall international trade in coal reached

1383 Mt in 2014; while this is a significant amount of coal it accounts for about 25% of total coal consumed (table 15.6).

Table 15.6

Top Coal Exporters and Importers in 2014

Rank	Country - Exporter	Million tonnes	Rank	Country - Importer	Million tonnes
1	Indonesia	410	1	China	292
2	Australia	375	2	India	239
3	Russia	155	3	Japan	199
4	United States	88	4	South Korea	131
5	Colombia	80	5	Chinese Taipei	67
6	South Africa	76	6	Germany	57
7	Canada	35	7	United Kingdom	41

Most coal is used in the country in which it is produced. Transportation costs account for a large share of the total delivered price of coal, therefore international trade in steam coal is effectively divided into two regional markets:

- The Atlantic market: Made up of importing countries in Western Europe, notably the UK, Germany and Spain.

- The Pacific market: This consists of developing and OECD Asian importers, notably Japan, Korea and Chinese Taipei. Indonesia remains the world's largest coal exporter. It exported 410 Mt of coal in 2014. Australia remains the world's largest supplier of coking coal - exporting 180 Mt of coking coal (as well as 194 Mt of steam coal).

4. Organization of the countries of producers and oil exporters (OPEC). Main objectives and OPEC tasks

OPEC is the Organization of the Petroleum Exporting Countries. Its mission is to secure a return to oil investors and an economic supply of oil to consumers (figure 15.4).



Figure 15.4 OPEC emblem

In accordance with its Statute, *the mission of the OPEC* is to coordinate and unify the petroleum policies of its Member Countries and ensure the stabilization of oil markets in order to secure an efficient, economic and regular supply of petroleum to consumers, a steady income to producers and a fair return on capital for those investing in the petroleum industry.

The Organization of the Petroleum Exporting Countries (OPEC) is a permanent, intergovernmental Organization, created at the Baghdad Conference on September 10–14, 1960, by Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. The five Founding Members were later joined by nine other Members: Qatar (1961); Indonesia (1962) – suspended its membership from January 2009; Libya (1962); United Arab Emirates (1967); Algeria (1969); Nigeria (1971); Ecuador (1973) – suspended its membership from December 1992–October 2007; Angola (2007) and Gabon (1975–1994). OPEC had its headquarters in Geneva, Switzerland, in the first five years of its existence. This was moved to Vienna, Austria, on September 1, 1965.

OPEC's objective is to co-ordinate and unify petroleum policies among Member Countries, in order to secure fair and stable prices for petroleum producers; an efficient, economic and regular supply of petroleum to consuming nations; and a fair return on capital to those investing in the industry.

The organizational structure of OPEC

The OPEC Secretariat is the executive organ of the Organization of the Petroleum Exporting Countries (OPEC). Located in Vienna, it

also functions as the Headquarters of the Organization, in accordance with the provisions of the OPEC Statute (figure 15.5).

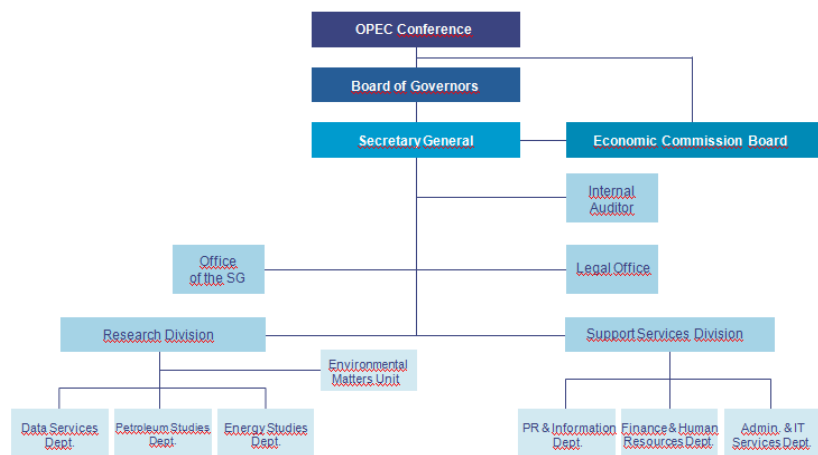


Figure 15.5 The organizational structure of OPEC

It is responsible for the implementation of all resolutions passed by the Conference and carries out all decisions made by the Board of Governors. It also conducts research, the findings of which constitute key inputs in decision-making.

The Secretariat consists of the Secretary General, who is the Organization’s Chief Executive Officer, as well as such staff as may be required for the Organization’s operations. It further consists of the Office of the Secretary General, the Legal Office, the Research Division and the Support Services Division.

The Research Division comprises Data Services, Petroleum Studies and Energy Studies departments. The Support Services Division includes Public Relations & Information, Finance & Human Resources and Administration & IT Services departments.

The Secretariat was originally established in 1961 in Geneva, Switzerland. In April 1965, the 8th (Extraordinary) OPEC Conference approved a Host Agreement with the Government of Austria, effectively moving the Organization’s headquarters to the city of Vienna on September 1, 1965.

The Secretary General is the legally authorized representative of the Organization and Chief Executive of the Secretariat. In this capacity, he administers the affairs of the Organization in accordance with the directions of the Board of Governors.

The Conference appoints the Secretary General for a period of three years, which may be renewed once for the same period. This appointment takes place upon nomination by Member Countries.

The Secretary General is assisted in the discharge of his duties by a team of officers and staff including two Directors responsible for the Research Division and Support Services Division, six Heads of Department, the General Legal Counsel, Head of the Office of the Secretary General and the Internal Auditor who independently ascertains whether the ongoing processes for controlling financial and administrative operations at the Secretariat are adequately designed and functioning in an effective manner.

The Office of the Secretary General is an executive office that provides full support to the Secretary General, enabling him to fulfil his duties. These include the overall management, planning, policy guidance and coordination of the activities of the Organization. It helps the Secretary General to maintain effective relations with Governments and their diplomatic representatives and with relevant international organizations. It also supports the protocol functions of the Secretariat and maintains close relations with relevant Austrian government and City of Vienna authorities, as well as with OPEC Member Countries.

OPEC consist of 12 members: Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates and Venezuela (table 15.7).

Table 15.7

<i>OPEC countries facts</i>	
	Data
1	2
Algeria facts	
Value of exports (million \$)	60 040
Value of petroleum exports (million \$)	40 639
Proven crude oil reserves (million barrels)	12 200
Proven natural gas reserves (billion cu. m.)	4 504
Crude oil production (1,000 b/d)	1 193

Table 15.7 continuation

1	2
Refinery capacity (1,000 b/cd)	651
Output of refined petroleum products (1,000 b/d)	651.0
Oil demand (1,000 b/d)	389
Crude oil exports (1,000 b/d)	623
Marketed production of natural gas (million cu. m.)	83 296
Exports of petroleum products (1,000 b/d)	583
Natural gas exports (million cu.m.)	44 190
Angola facts	
Value of exports (million \$)	63 908
Value of petroleum exports (million \$)	57 609
Proven crude oil reserves (million barrels)	8 423
Proven natural gas reserves (billion cu. m.)	308
Crude oil production (1,000 b/d)	1 654
Refinery capacity (1,000 b/cd)	39
Output of refined petroleum products (1,000 b/d)	44.0
Oil demand (1,000 b/d)	139
Crude oil exports (1,000 b/d)	1 608
Marketed production of natural gas (million cu. m.)	732
Exports of petroleum products (1,000 b/d)	31
Natural gas exports (million cu.m.)	-
Ecuador facts	
Value of exports (million \$)	26 604
Value of petroleum exports (million \$)	11 401
Proven crude oil reserves (million barrels)	8 273
Proven natural gas reserves (billion cu. m.)	11.00
Crude oil production (1,000 b/d)	557
Refinery capacity (1,000 b/cd)	191
Output of refined petroleum products (1,000 b/d)	201.0
Oil demand (1,000 b/d)	281
Crude oil exports (1,000 b/d)	422
Marketed production of natural gas (million cu. m.)	578
Exports of petroleum products (1,000 b/d)	8.0
Natural gas exports (million cu.m.)	-
Iran facts	
Value of exports (million \$)	98 981
Value of petroleum exports (million \$)	53 652
Proven crude oil reserves (million barrels)	157 530
Proven natural gas reserves (billion cu. m.)	34 020

Table 15.7 continuation

1	2
Crude oil production (1,000 b/d)	3 117
Refinery capacity (1,000 b/cd)	1 781
Output of refined petroleum products (1,000 b/d)	1 775
Oil demand (1,000 b/d)	1 846
Crude oil exports (1,000 b/d)	1 109
Marketed production of natural gas (million cu. m.)	212 796
Exports of petroleum products (1,000 b/d)	470.0
Natural gas exports (million cu.m.)	8 360
Iraq facts	
Value of exports (million \$)	85 298
Value of petroleum exports (million \$)	84 303
Proven crude oil reserves (million barrels)	143 069
Proven natural gas reserves (billion cu. m.)	3 158
Crude oil production (1,000 b/d)	3 110
Refinery capacity (1,000 b/cd)	900
Output of refined petroleum products (1,000 b/d)	480.0
Oil demand (1,000 b/d)	815
Crude oil exports (1,000 b/d)	2 516
Marketed production of natural gas (million cu. m.)	904
Exports of petroleum products (1,000 b/d)	9.0
Natural gas exports (million cu.m.)	-
Kuwait facts	
Value of exports (million \$)	104 165
Value of petroleum exports (million \$)	97 537
Proven crude oil reserves (million barrels)	101 500
Proven natural gas reserves (billion cu. m.)	1 784
Crude oil production (1,000 b/d)	2 867
Refinery capacity (1,000 b/cd)	936
Output of refined petroleum products (1,000 b/d)	918.0
Oil demand (1,000 b/d)	388
Crude oil exports (1,000 b/d)	1 995
Marketed production of natural gas (million cu. m.)	15 029
Exports of petroleum products (1,000 b/d)	751.0
Natural gas exports (million cu.m.)	-
Libya facts	
Value of exports (million \$)	15 186
Value of petroleum exports (million \$)	14 897
Proven crude oil reserves (million barrels)	48 363

Table 15.7 continuation

1	2
Proven natural gas reserves (billion cu. m.)	1 505
Crude oil production (1,000 b/d)	480
Refinery capacity (1,000 b/d)	380
Output of refined petroleum products (1,000 b/d)	135.0
Oil demand (1,000 b/d)	245
Crude oil exports (1,000 b/d)	41
Marketed production of natural gas (million cu. m.)	16 523
Exports of petroleum products (1,000 b/d)	15.0
Natural gas exports (million cu.m.)	4 962
Nigeria facts	
Value of exports (million \$)	83 897
Value of petroleum exports (million \$)	76 925
Proven crude oil reserves (million barrels)	37 070
Proven natural gas reserves (billion cu. m.)	5 111
Crude oil production (1,000 b/d)	1 807
Refinery capacity (1,000 b/cd)	445
Output of refined petroleum products (1,000 b/d)	57.0
Oil demand (1,000 b/d)	396
Crude oil exports (1,000 b/d)	2 120
Marketed production of natural gas (million cu. m.)	43 842
Exports of petroleum products (1,000 b/d)	49.0
Natural gas exports (million cu.m.)	26 778
Qatar facts	
Value of exports (million \$)	131 716
Value of petroleum exports (million \$)	56 912
Proven crude oil reserves (million barrels)	25 244
Proven natural gas reserves (billion cu. m.)	24 531
Crude oil production (1,000 b/d)	709
Refinery capacity (1,000 b/cd)	283
Output of refined petroleum products (1,000 b/d)	638.0
Oil demand (1,000 b/d)	166
Crude oil exports (1,000 b/d)	595
Marketed production of natural gas (million cu. m.)	174 057
Exports of petroleum products (1,000 b/d)	522.0
Natural gas exports (million cu.m.)	122 628
Saudi Arabia facts	
Value of exports (million \$)	372 829
Value of petroleum exports (million \$)	285 139

Table 15.7 continuation

1	2
Proven crude oil reserves (million barrels)	266 578
Proven natural gas reserves (billion cu. m.)	8 489
Crude oil production (1,000 b/d)	9 713
Refinery capacity (1,000 b/cd)	2 907
Output of refined petroleum products (1,000 b/d)	2 202
Oil demand (1,000 b/d)	3 163
Crude oil exports (1,000 b/d)	7 153
Marketed production of natural gas (million cu. m.)	102 380
Exports of petroleum products (1,000 b/d)	988
Natural gas exports (million cu.m.)	-
United Arab Emirates facts	
Value of exports (million \$)	380 347
Value of petroleum exports (million \$)	107 853
Proven crude oil reserves (million barrels)	97 800
Proven natural gas reserves (billion cu. m.)	6 091
Crude oil production (1,000 b/d)	2 794
Refinery capacity (1,000 b/cd)	707
Output of refined petroleum products (1,000 b/d)	402.0
Oil demand (1,000 b/d)	719
Crude oil exports (1,000 b/d)	2 497
Marketed production of natural gas (million cu. m.)	54 245
Exports of petroleum products (1,000 b/d)	760.0
Natural gas exports (million cu.m.)	15 302
Venezuela facts	
Value of exports (million \$)	80 663
Value of petroleum exports (million \$)	77 776
Proven crude oil reserves (million barrels)	299 953
Proven natural gas reserves (billion cu. m.)	5 617
Crude oil production (1,000 b/d)	2 683
Refinery capacity (1,000 b/cd)	1 891
Output of refined petroleum products (1,000 b/d)	1 151
Oil demand (1,000 b/d)	752
Crude oil exports (1,000 b/d)	1 965
Marketed production of natural gas (million cu. m.)	21 878
Exports of petroleum products (1,000 b/d)	312.0
Natural gas exports (million cu.m.)	-
where, b/d - barrels per day, cu. m. - cubic metres, b/cd - barrels per calendar day.	

THEME 16. INTERNATIONAL TRADE OF INDUSTRIAL GOODS. MARKETS OF MACHINES AND EQUIPMENT

1. The essence and types of manufactured, consumer (nonfood) goods.
2. International trade of consumer electronics. The largest producers, exporters and importers of consumer electronics.
3. International trade of vehicles (cars). The largest producers, exporters and importers of vehicles, cars.
4. World markets of machineries and equipments.

1. The essence and types of manufactured, consumer (non-food) goods.

In economics, any tangible commodity which is produced and subsequently consumed by the consumer, to satisfy its current wants or needs, is a *consumer good or final good*.

Consumer goods are goods that are ultimately consumed rather than used in the production of another good. For example, a microwave oven or a mixer grinder which is sold to a consumer is a final good or consumer good, whereas the components which are sold to be used in to final good those goods are called intermediate goods. For example, tires for automobile industry or copper which can be used to make some further goods.

When used in measures of national income and output, the term 'final goods' only includes new goods. For instance, the GDP excludes items counted in an earlier year to prevent double counting of production based on resales of the same item second and third hand. In this context the economic definition of goods includes what are commonly known as *services*.

Manufactured goods are goods that have been processed in any way. As such, they are the opposite of raw materials, but include intermediate goods as well as final goods.

Final goods can be classified in to the following categories:

1. Durable goods;
2. Non-durable goods;
3. Services.

Consumer durable goods usually have a significant life span which tends to be a minimum of 1 year based on guarantee or warranty period and maximum life depends upon the durability of the product or good. Whereas for capital goods which are tangible in nature, such as machinery or building or any other equipment which can be used in manufacturing of final product, these are durable goods with limited life span determined by its manufacturer before selling. The longevity and the often higher cost of durable goods usually cause consumers to postpone expenditures on them, which makes durables the most volatile (or cost-dependent) component of consumption.

Consumer non-durable goods are purchased either for the immediate use or to keep it for very short span of time. Generally the life span of non-durable goods may vary from a few minutes to up to three years. Few examples of such goods are food, beverages, clothing, shoes, and gasoline.

Consumer services are the intangible in nature i.e. they cannot be seen, felt or tasted by the consumer but still they give satisfaction to the consumer. They are also inseparable and variable in nature which means they are produced and consumed simultaneously. Examples of consumer services are haircuts, auto repairs, landscaping etc.

By consumer's buying habits, final goods can be classified into the following categories, which are determined by the consumer's buying habits:

1. Convenience consumer goods;
2. Shopping consumer goods;
3. Specialty consumer goods;
4. Un-sought consumer goods.

Convenience consumer goods are goods which are easily available to consumer, without any extra effort are convenience goods. Generally convenience goods come in the category of non-durable goods such as fast foods, cigarettes and tobacco with low value. Convenience goods are mostly sold by wholesalers or retailers, so as to make them available to the consumers in good or large volume. Convenience goods can further be categorized into:

- Staple convenience consumer goods;
- Impulse convenience consumer goods.

Staple convenience consumer goods are those kinds of goods which come under the basic necessities of the consumer. These goods

are easily available and in large quantity. Examples include milk, bread, sugar etc.

Impulse convenience consumer goods are the goods which do not belong to the priority list of the consumer. These goods are purchased without any prior planning just on the basis of the impulse are called impulse convenience goods. Examples include potato wafers, candies, ice creams, cold drinks etc.

Shopping consumer goods are the goods which take lot of time and proper planning before making purchase decision; in this case consumer does a lot of selection and comparison based on various parameters such as cost, brand, style, comfort etc, before buying an item. Shopping goods are costlier than convenience goods and are durable in nature. Consumer goods companies usually try to set up their shops and show rooms in active shopping area to attract customer attention and their main focus is to do lots of advertising and promotion so that to attract more customer. Example include clothing items, televisions, radio, footwear, home furnishing, etc.

Specialty consumer goods are unique in nature; these are unusual and luxurious items available in the market. Specialty goods are mostly purchased by the upper-class of the society as they are expensive in nature and difficult to be afforded by the middle class or lower class people. Companies advertise their goods keeping in mind upper class as their targeting segment. These goods don't fall under the category of necessity; rather they are purchased on the basis personal preference or desire. Brand name, uniqueness and special features of an item are major attributes which attract customer and make them to buy such products. Example are antiques, jewelry, wedding dresses and cars.

Un-sought consumer goods are such goods which neither belong to the necessity group of consumer goods list nor to specialty goods. These are the kind of goods which are available in the market all the time but are purchased by very few consumers, either based on their interest or their need for some specific reasons. The general public does not purchase such goods often. Examples are snowshoes, fire extinguishers, etc.

2. International trade of consumer electronics. The largest producers, exporters and importers of consumer electronics.

The electronics industry is one of the most diversified industries in the world and it could be fragmented into a number of different sectors depending on its scale of production. The industry's principal function is to manufacture different electronic devices by assembling together basic components like capacitors, inductors, resistors and other electronic parts through a multi-step process. These devices are then further built into the various types of consumer appliances meant for personal and industrial uses to aid in development, entertainment, and further production. Once each piece is fully assembled and ready to be sold, a number of marketing tactics take place at the retail level to encourage consumers to buy these products.

Most of the growth of the electronics industry can be attributed to large-scale technological advancements and the speed at which society has accepted these changes. As a process, electronics production can be segregated into manufacturing units like factories, workshops, and industrial hubs which rely heavily on constant innovation and product research. The smaller segments within this industry create base components like microchips and motherboards which serve as the basis for any application. Larger companies purchase these parts and use them to create complex digital devices, ranging from programmable coffee makers to high-tech consumer devices like cellular phones and tablet computers.

There are electronic components in numerous consumer items, and each one of them may be created with multiple parts that were made by many different manufacturers. For example, something as simple as a television remote control usually has one company that makes the circuit board, another that makes the laser diode light, and a third company that creates the outer casing. Then, it is all assembled by a name-brand manufacturer to be sent to a retail store. Along the way, that single remote control may pass through a few distributors, several warehouses, and thousands of storefronts before it actually reaches the consumer.

Without each facet of the electronics industry driving global sales, that remote control would never reach the hands of a consumer within a reasonable time frame. That is why marketing is another huge

aspect of the electronics industry; it creates a demand for consumer goods before they ever reach retail stores. By convincing worldwide customers to invest in the latest technological advancements, the electronics industry is able to continue planning new products while staying well ahead of supply and demand.

Consumer electronics are electronic equipment intended for everyday use, most often in entertainment, communications and office productivity. Later products include personal computers, mobile and telephones, audio equipment, televisions (TV), digital cameras and players and etc. Increasingly these products have become based on digital technologies, and have largely merged with the computer industry in what is increasingly referred to as the consumerization of information technology such as those invented by Apple Inc. and MIT Media Lab.

One overriding characteristic of consumer electronic products is the trend of ever-falling prices. This is driven by gains in manufacturing efficiency and automation, lower labor costs as manufacturing has moved to lower-wage countries, and improvements in semiconductor design. Semiconductor components benefit from Moore's Law, an observed principle which states that, for a given price, semiconductor functionality doubles every two years.

While consumer electronics continues in its trend of convergence, combining elements of many products, consumers face different decisions when purchasing. There is an ever increasing need to keep product information updated and comparable, for the consumer to make an informed choice. Style, price, specification and performance are all relevant. There is a gradual shift towards e-commerce web-storefronts.

Many products include Internet connectivity using technologies such as Wi-Fi, Bluetooth or Ethernet.

There are over one billion PCs used in the world nowadays. This number expected to double by 2014. Developing markets show the largest growth in computer sales. The current PC sales dynamic in the world allowed analysts to predict that the number of computers installed all over the world would double and reach two billion by 2014. Users in the USA, Japan and Europe own 58 percent of all computers (table 16.1, figure 16.1).

Table 16.1

Top 5 vendors by number of units shipped, 2014

Rank	Manufacturer	Market value
1	Dell	21%
2	Lenovo	17.3%
3	HP	11.2%
4	Asus	10.8%
5	Acer Inc.	5.7%
	Other	34%

The annual worldwide market share of personal computer vendors includes desktop computers, laptop computers and netbooks, but not tablet computers.

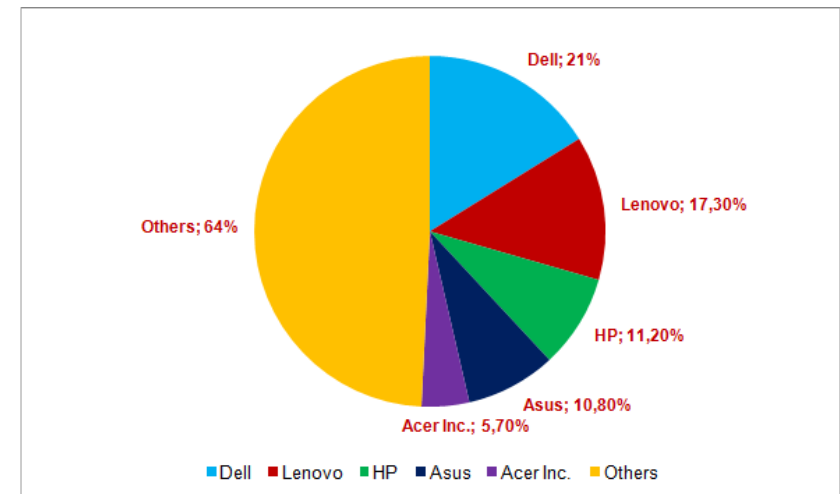


Figure 16.1 PC market value, 2014

Sales volume worldwide grew rapidly in the late 1990s but declined during the early 2000s recession. Sales increased again for the rest of the decade though more slowly in the late 2000s recession. After a substantial growth into 2010, sales volume has remained fairly stable, until a substantial dip starting in 2013 caused by the switch to pads (table 16.2).

Table 16.2

Unit sales to global PC market

	2008	2009	2010	2011	2012	2013	2014
Units (M)	302.2	305.9	351	352.8	352.7	316	315.9
Growth (pct.)	11.4	1.2	14.7	0.5	0.0	-10.4	-0.2

Worldwide PC shipments totaled 83.7 million units in the fourth quarter of 2014, a 1 percent increase from the fourth quarter of 2013, according to preliminary results by Gartner, Inc. These results indicate a slow, but consistent improvement following more than two years of decline.

PC shipments in Europe, Middle East and Africa (EMEA) totaled 26.5 million units in the fourth quarter of 2014, a 2.8 percent increase from the fourth quarter of 2013. The slight growth in EMEA was driven by Western Europe with good consumer notebook shipments during the holiday season. The low prices of these devices were enough to take attention away from Android devices, but had a negative impact on average selling prices (ASPs) and vendor margins. Given relative price-points, users were attracted to notebooks and two-in-ones instead of tablets. These two-in-one hybrid devices performed very well, as users looked at replacing some older tablets and notebooks with these new devices that combine features of both.

The Asia/Pacific PC market showed a modest recovery as PC shipments totaled 26.6 million units in the fourth quarter of 2014, a 2 percent increase from the fourth quarter of 2013. Though as a region the news is positive, there are still growth variations by country. The overall trend is towards a slowdown of declining growth with mature markets in Asia/Pacific leading the recovery. This bottoming out of the market suggests that the installed base is stabilizing, and replacement demand is recovering.

However, consumers continue to be attracted to smartphones, especially in emerging markets such as China and India where it is increasingly difficult for PC vendors to convince consumers to put priority on PC purchases. Users here are more focused on content consumption or on specific tasks where functions can be handled by a smartphone. Coupled with limited disposable income, these buyers are

delaying PC purchases if they do not see the need, therefore making the consumer market more lackluster than what it used to be.

Lenovo and HP were in a virtual tie for the overall lead in PC shipments in 2013. In 2014, Lenovo extended its lead as the top vendor based on worldwide shipments, as it accounted for 18.8 percent of units shipped (table 16.3 and table 16.4). HP was the No. 2 vendor as its units represented 17.5 percent of shipments in 2014.

Table 16.3

*Worldwide PC Vendor Unit Shipment Estimates for 2014
(Thousands of Units)*

Company	2014 Shipments	2014 Market Share (%)	2013 Shipments	2013 Market Share (%)	2014-2013 Growth (%)
Lenovo	59,446.6	18.8	53,493.6	16.9	11.1
HP	55,286.8	17.5	51,251.0	16.2	7.9
Dell	40,487.3	12.8	36,825.0	11.6	9.9
Acer Group	24,914.0	7.9	25,309.2	8.0	-1.6
Asus	22,841.6	7.2	20,852.5	6.6	9.5
Others	112,890.1	35.7	128,733.5	40.7	-12.3
Total	315,866.3	100.0	316,464.7	100.0	-0.2

Data includes desk-based PCs, notebook PCs, premium ultramobiles and all Windows-based tablets.

Table 16.4

Top worldwide notebook shipments in 2014

Name	Country	Product lines	Market share
1	2	3	4
Acer	Taiwan	TravelMate, Extensa, Aspire, Gateway, Packard Bell	10.0%
Apple	United States	MacBook Air, MacBook Pro, Macbook	9.3%
Asus	Taiwan	Asus Eee, Zenbook, ROG Series, Asus N, Asus X, Asus Chromebook	11.0%
Dell	United States	Inspiron, Latitude, Precision, Studio, Vostro, XPS, Studio XPS, Alienware	12.3%

Table 16.4 continuation

1	2	3	4
Lenovo	China	ThinkPad, IdeaPad, 3000 series	17.5%
HP	United States	HP Pavilion, HP Omnibook, HP Elitebook, HP Envy, HP OMEN, HP Mini	20.1%
Toshiba	Japan	Dynabook, Portege, Tecra, Satellite, Qosmio, Libretto	6.6%

Dell Inc. is an American privately owned multinational computer technology company based in Round Rock, Texas, United States, that develops, sells, repairs, and supports computers and related products and services. Bearing the name of its founder, Michael Dell, the company is one of the largest technological corporations in the world, employing more than 103,300 people worldwide. Dell sells personal computers (PCs), servers, data storage devices, network switches, software, computer peripherals, HDTVs, cameras, printers, MP3 players, and electronics built by other manufacturers. Dell was listed at number 51 in the Fortune 500 list, until 2014. After going private in 2013, the newly confidential nature of its financial information prevents the company from being ranked by Fortune. In 2014 it was the third largest PC vendor in the world after Lenovo and HP. Dell is currently the #1 shipper of PC monitors in the world. Dell is the sixth largest company in Texas by total revenue, according to Fortune magazine. It is the second largest non-oil company in Texas - behind AT&T - and the largest company in the Greater Austin area. It was a publicly traded company (NASDAQ: DELL), as well as a component of the NASDAQ-100 and S&P 500, until it was taken private in a leveraged buyout which closed on October 30, 2013.

Lenovo Group Ltd. is a Chinese multinational computer technology company with headquarters in Beijing, China, and Morrisville, North Carolina, United States. It designs, develops, manufactures and sells personal computers, tablet computers, smartphones, workstations, servers, electronic storage devices, IT management software and smart televisions. In 2014, Lenovo was the world's largest personal computer vendor by unit sales. Lenovo has operations in more than 60 countries and sells its products in around 160 countries. Lenovo is listed on the

Hong Kong Stock Exchange and is a constituent of the Hang Seng China-Affiliated Corporations Index, often referred to as "Red Chips."

The Hewlett-Packard Company (commonly referred to as HP) was an American global information technology company headquartered in Palo Alto, California. It developed and provided a wide variety of hardware components as well as software and related services to consumers, small- and medium-sized businesses (SMBs) and large enterprises, including customers in the government, health and education sectors. Major product lines included personal computing devices, enterprise and industry standard servers, related storage devices, networking products, software and a diverse range of printers and other imaging products. HP marketed its products to households, small- to medium-sized businesses and enterprises directly as well as via online distribution, consumer-electronics and office-supply retailers, software partners and major technology vendors. HP also had services and consulting business around its products and partner products.

Television (TV) is a telecommunication medium for transmitting and receiving moving images that can be monochrome (black-and-white) or colored, with or without accompanying sound.

The TV production industry has been forced to evolve as the television and entertainment industries have changed. New TV viewing platforms, such as IPTV have emerged alongside other forms of entertainment using tablets, smartphones and other fast-growing platforms.

At the same time, southern countries such as Italy and Spain, has weathered an economic crisis which has put great pressure on industry revenues.

TV production has responded by becoming more international and more creative in exploring ways to derive revenue from its content – while maintaining creativity in producing new hit shows. The industry is currently going through a wave of consolidation, both within production and between production companies and broader media groups (figure 16.2).

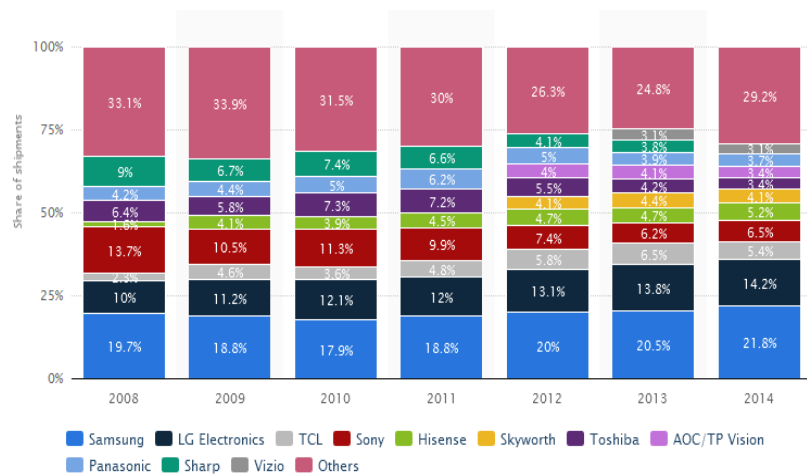


Figure 16.2 Global market share held by LCD TV manufacturers from 2008 to 2014

This statistic shows the global market share held by LCD TV manufacturers from 2008 to 2014 (measured from shipments). In 2011, with respect to LCD TV shipments, Samsung held a worldwide market share of 18.8 percent.

In 2014, Samsung was the market leader in the manufacture of LCD TVs in terms of its share of global shipments. The South Korean company held over 20 percent of worldwide LCD shipments in 2014, 7 percent more than the share of its closest competitor, LG Electronics. As a result of Samsung's continued success in this market, as well as its significant share in the smartphone market, the company's global revenue exceeded 200 billion U.S. dollars for the first time in 2013 and again in 2014 (table 16.5).

Table 16.5

Worldwide LCD Television market share in 2013

Manufacturer	Market value
Samsung Electronics	20.8%
LG Electronics	14%
TCL	6.5%
Sony	6.3%
Hisense	4.8%
Others	38.8%

Although Sony remains amongst the largest LCD manufacturer, it has seen its market share more than halve from 13.7 percent in 2008 to 6.5 percent in 2014. Yet LCD TVs remain a key segment for Sony as the company sold 16 million units in 2014. This made LCD TVs the second largest sector for Sony in its consumer electronics business segment.

Sales of LCD TVs worldwide were worth almost 100 billion euros in 2013, a figure that is projected to fall to 93.7 billion euros by 2015. Asia/Pacific was the largest market for LCDs as over 74 million units were sold in the region in 2013 and China alone accounted for 42.5 million of these units. This meant that almost 20 percent of all LCD TVs sold worldwide throughout the year were sold in China. North America was the second largest market for LCDs as 41.8 million units were sold there in 2013, 33.7 million of which were purchased in the United States.

The main manufacturer of the TV:

Samsung Electronics Co., Ltd. is a South Korean multinational electronics company headquartered in Suwon, South Korea. Samsung Group is the world's largest information technology company by revenue since 2009. Samsung Electronics has assembly plants and sales networks in 80 countries and employs around 370,000 people. Samsung has been the world's largest manufacturer of LCD panels since 2002, the world's largest television manufacturer since 2006, and world's largest manufacturer of mobile phones since 2011. Samsung Electronics displaced Apple Inc. as the world's largest technology company in 2011 and is a major part of the South Korean economy.

LG Electronics Inc. is a South Korean multinational electronics company headquartered in Yeouido-dong, Seoul, and a member of the LG Group, employing 83,000 people working in 119 local subsidiaries worldwide. With 2013 global sales of USD 53.1 billion (KRW 58.14 trillion), the company operates its business through five divisions: Home Entertainment, Mobile Communications, Home Appliance, Air Conditioning and Energy Solution, and Vehicle Components. Since 2011, LG Electronics was the world's second-largest television manufacturer.

A mobile phone is a telephone that can make and receive calls over a radio-frequency carrier while the user is moving within the service area.

From 1983 to 2014, worldwide mobile phone subscriptions grew to over 7 billion, penetrating 100% of the global population and reaching the bottom of the economic pyramid. In 2014, the top mobile phone manufacturers were Samsung, Nokia, Apple, and LG.

In 2014, the top 10 manufacturers were Samsung (20.6%), Nokia (9.5%), Apple Inc. (8.4%), LG (4.2%), Huawei (3.6%), TCL Communication (3.5), Xiaomi (3.5%), Lenovo (3.3%), ZTE (3.0%) and Micromax (2.2%) (table 16.6).

Table 16.6

Top Five Worldwide Total Mobile Phone Vendors in 2014

Rank	Manufacturer	Market value	Annual sales
1	Samsung	20.9%	392.546 million
2	Apple Inc.	10.2%	191.426 million
3	Microsoft	9.9%	185.660 million
4	Lenovo, Motorola	4.5%	84.029 million
5	LG	4%	76.096 million
	Other	50.5%	-

Smartphone sales grew 36 percent in the fourth quarter of 2014 and accounted for 57.6 percent of overall mobile phone sales in the fourth quarter, up from 44 percent year over year. This increasing contribution of smartphones was led by growth in Latin America, the Middle East and Africa, Asia/Pacific and Eastern Europe, where smartphone sales grew by more than 50 percent in the fourth quarter of 2014. With a 166.8 percent increase in the fourth quarter of 2014, India exhibited the highest smartphone sales growth among the countries, and Latin America saw the strongest growth among all regions (96.1 percent) in the fourth quarter. China also contributed significantly to worldwide smartphone sales as sales grew 86.3 percent in 2014 (figure 16.3).

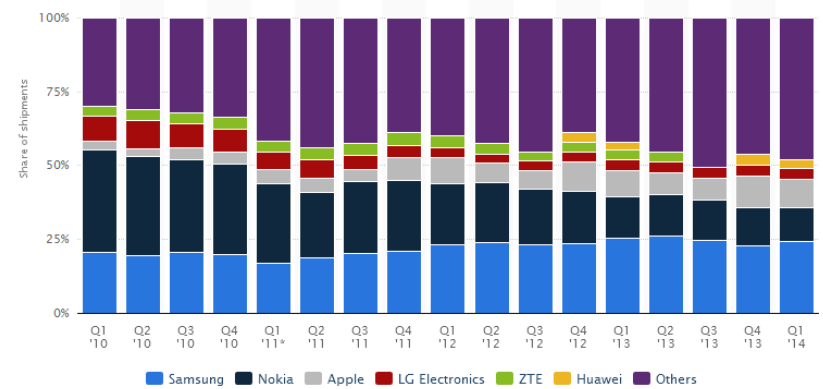


Figure 16.3 Global market share held by mobile phone vendors from 1st quarter 2010 to 1st quarter 2014

Top Smartphone Vendor Analysis:

Apple Inc. is an American multinational technology company headquartered in Cupertino, California, that designs, develops, and sells consumer electronics, computer software, and online services. Apple is the world's largest information technology company by revenue, the world's largest technology company by total assets, and the world's third-largest mobile phone manufacturer. On November 25, 2014, in addition to being the largest publicly traded corporation in the world by market capitalization, Apple became the first U.S. company to be valued at over US\$700 billion. The company employs 115,000 permanent full-time employees as of July 2015 and maintains 453 retail stores in sixteen countries as of March 2015; it operates the online Apple Store and iTunes Store, the latter of which is the world's largest music retailer.

Apple's worldwide annual revenue totaled \$233 billion for the fiscal year ending in September 2015. The company enjoys a high level of brand loyalty and, according to the 2014 edition of the Interbrand Best Global Brands report, is the world's most valuable brand with a valuation of \$118.9 billion.

Microsoft Mobile is a multinational mobile phone and mobile computing device manufacturing company headquartered in Espoo, Finland, and a wholly owned subsidiary of Microsoft. It is a legal body that oversees and legally represents the activities in the design, devel-

opment, manufacture and distribution of mobile phones, smartphones, tablet computers, related accessories and services.

3. International trade of vehicles (cars). The largest producers, exporters and importers of vehicles, cars.

A vehicle is a mobile machine that transports people or cargo.

Most often, vehicles are manufactured, such as wagons, bicycles, motor vehicles (motorcycles, cars, trucks, buses), railed vehicles (trains, trams), watercraft (ships, boats), aircraft and spacecraft.

In 2014, more than 22 million commercial vehicles and approximately 68 million passenger cars were produced globally. According to a forecast by PwC, in 2017 a total of 102 million vehicles will be manufactured worldwide.

The biggest production plants can be found in China, the United States and Germany. China's global market share in auto production was more than 24 percent in 2014.

In the U.S., the number of commercial vehicles produced has continuously increased since 2010. Approximately 6.7 million commercial vehicles were manufactured in 2013, while passenger car production totaled 4.4 million units in 2013.

In 2014, Volkswagen topped the list as the world's largest automobile producer. The German automobile manufacturer produced more passenger cars than Ford, Renault and Suzuki together. In 2014, Asia was the largest market for heavy truck production. Some 2.9 million units were built here in 2014.

In 2013, 865 million passenger cars were in use worldwide, and over 65 million units were produced in the same year. Worldwide, passenger car sales are expected to continue to increase to about 100 million units in 2017. Car sales started falling dramatically during the 2008-2009 economic crisis. Today, the volume of automobiles sold is back to pre-crisis levels thanks to increased demand, especially from Asian markets. China is ranked as the largest passenger car manufacturer in the world, having produced more than 18 million cars in 2013, and making up for more than 22 percent of the world's passenger vehicle production.

Figure 16.4 displays worldwide automobile production from 2000 to 2014. In 2005, some 47 million cars were produced worldwide. In 2000, about 41 million such vehicles were produced globally.

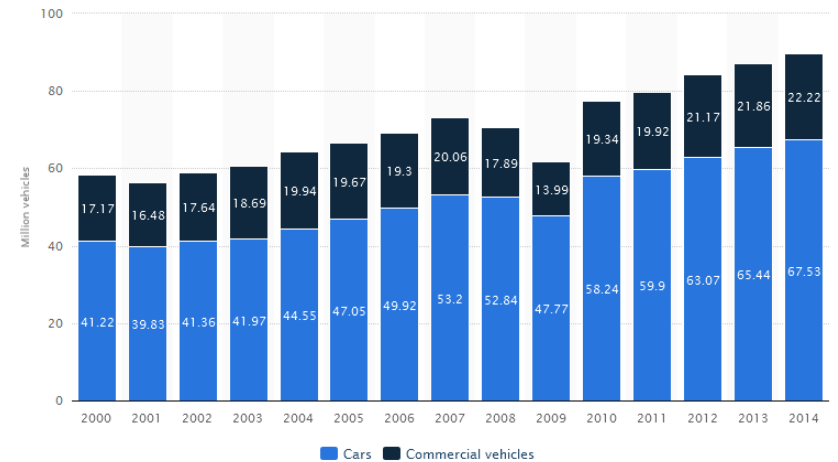


Figure 16.4 Worldwide automobile production from 2000 to 2014 (in million vehicles)

China's largest car manufacturing company is the joint venture between General Motors and SAIC Motor Corporation Limited, known as Shanghai General Motors Company Ltd or simply Shanghai GM. Shanghai GM produces and sells passenger vehicles under the Chevrolet, Opel and Cadillac brands, among others. Aside from manufacturing cars, the company also produces engines and transmission systems. Founded in 1997, Shanghai GM has a total of nine production plants across China. The Shanghai-headquartered company's domestic sales amounted to a little over three million units in 2013.

In 2014, the United Kingdom produced around 1.5 million such vehicles. According to the source, passenger cars are motor vehicles with at least four wheels, used for the transport of passengers, and comprising no more than eight seats in addition to the driver's seat (figure 16.5).

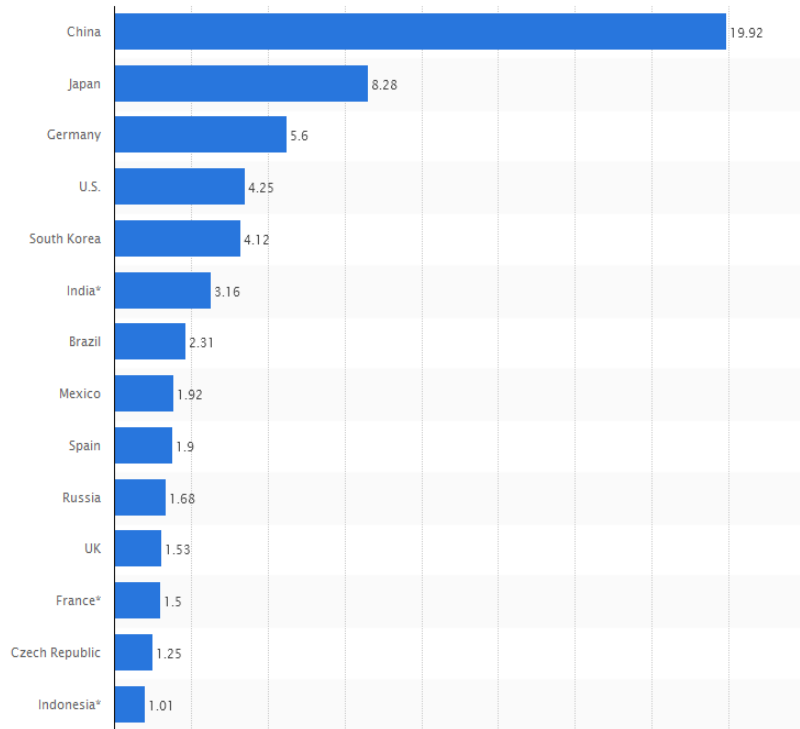


Figure 16.5 Worldwide automobile production from 2000 to 2014 (in million vehicles)

In 2015, the ranking of the world's most valuable car brands was topped by Toyota. The brand is a subdivision of the Toyota Motor Company, which was founded in the late 1930s. The Japanese manufacturer is one of the largest companies within the global automotive industry. It is active in a variety of segments, including SUVs and crossovers, trucks and motorcycles. Furthermore, Toyota invests heavily in the research and development of hybrid electric vehicles, as well as plug-in and full-electric vehicles. In addition to its operations in the automotive manufacturing industry, Toyota is involved in various other areas, including robotics and aerospace projects (figure 16.6).

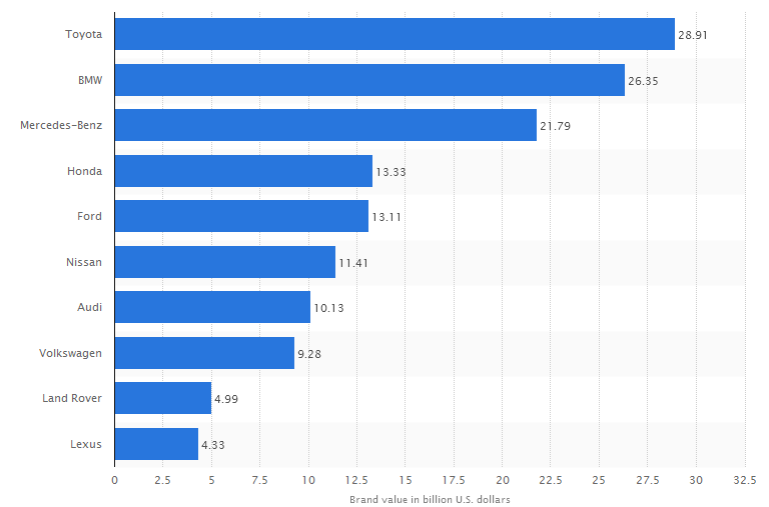


Figure 16.6 Most valuable brands within the automotive sector worldwide by brand value (in billion U.S. dollars), 2015

Beside Toyota, automotive brands such as BMW, Mercedes-Benz and Ford also made it into the list of the most valuable car brands worldwide. Germany's Mercedes-Benz (a division of Stuttgart-based car and truck maker Daimler) manufactures luxury and crossover automobiles, buses and trucks. In 2014, the car manufacturing subdivision, Mercedes-Benz Cars had total revenue of around 73.6 billion euros.

Of the Big Three U.S. automakers, General Motors and Chrysler sell automobiles under a variety of brands, while Ford sells vehicles under its namesake Ford brand and the Lincoln brand. The Michigan-based company reported having sold more than 6.3 million Ford and Lincoln vehicles worldwide in 2014. That same year, Ford's revenue amounted to around 144 billion U.S. dollars.

In June 2014 the CKD (Complete Knock-Down) assembly of Toyota Fortuner was launched in Kostanay, Kazakhstan. The expected annual output makes around 3,000 cars: 250 a month. The Kazakhstan's car industry was developing rapidly in 2014 producing \$2 billion worth of products annually. By 2018 the car industry in Kazakhstan is expected to reach 190,000 cars per year.

4. World markets of machineries and equipments.

Machine is a tool that consists of one or more parts, and uses energy to achieve a particular goal. Machines are usually powered by mechanical, chemical, thermal, or electrical means, and are frequently motorized.

Tool is any physical item that can be used to achieve a goal, especially if the item is not consumed in the process. Informally the word is also used to describe a procedure or process with a specific purpose.

In 2014, Chinese machinery manufacturing company Sany sold equipment to the value of around 5.42 billion U.S. dollars, and was ranked 9th.

Caterpillar of the United States and Komatsu of Japan were two of the largest construction machinery manufacturers in 2014, generating around 28 billion U.S. dollars and some 17 billion U.S. dollars, respectively, in equipment sales. In the United States alone, the construction machinery manufacturing sector is expected to generate 56 billion U.S. dollars in revenue in 2014, an increase from the 27.24 billion U.S. dollar revenue in 2009. China's market is expected to rise up from around 33 billion U.S. dollars in 2010 to just under 44 billion U.S. dollars in 2015. The number of sales of most common construction equipment is expected to increase. Lift truck sales to customers in China are projected to reach 290,000 units by 2015. Globally, the construction equipment market is expected to rise from around 109 billion U.S. dollars in 2008 to 145.3 billion U.S. dollars in 2015.

The BRIC countries are predicted to experience major growth especially due to large investments in roads, ports, and other related infrastructure. The Brazilian market has also significantly increased due to political stability and economic growth. Mergers such as Caterpillar's 2011 acquisition of Bucyrus are examples of a consolidating market. Despite predicted growth, emission regulations, trade restrictions, and emerging market competitor pressures are strong challengers to growth in the construction equipment market.

Here's a listing of the world's *top 5 construction equipment manufacturers* in 2014:

1. Caterpillar (United States)

Even with an US\$11 billion decrease in 2013 revenue, the well-known yellow giant still managed to hold on to the number one spot in the annual ranking survey. Heavily dependent on earthmoving equipment sales – specifically, excavators, loaders, bulldozers, crawler dozers, scrapers, and shovels - Caterpillar couldn't avoid the impact of a softening mining sector. Orders for mining equipment decreased worldwide as commodity prices fell yet again in 2013 and mine owners switched their focus from building infrastructure and opening new mines to increasing production in order to make up for the shortfall. The only good news for US-based Caterpillar came from back at home, where North American sales of Caterpillar equipment increased slightly over the previous year (figure 16.7).



Figure 16.7 Caterpillar products, 2015

2. Komatsu (Japan)

As economic growth stagnated in China, so did sales for Komatsu construction equipment in one of Komatsu's biggest regional market. But a depreciating Yen helped Komatsu boost exports to other regional markets. Overall, Komatsu managed a slight +2.3% increase for the year, making it one of the year's biggest winners.

3. Volvo Construction Equipment (Sweden)

In 2013, Volvo launched a two-year strategy aimed at "increasing the probability and market share of road equipment". As part of this strategy, Volvo Construction Equipment purchased Terex Corporation. The acquisition added five models of rigid haulers and three articulated haulers to Volvo's line-up, giving the company a boost to the

number 3 position and increasing its sales of equipment to the general construction, oil and gas, and road building sector.

4. Hitachi Construction Machinery (Japan)

As was the case with its fellow Japanese construction equipment manufacturer Komatsu, Hitachi's construction equipment sales revenue also increased thanks in part to a fluctuating yen and an increase in exports. Another helpful boost came from a continued strong demand for Hitachi hydraulic excavators in China and Japan during the third quarter of 2013. However, Hitachi's position could prove precarious as a drop-off in domestic demand, a continuing economic slump in China and slow mining equipment sales threaten any potential gains in 2014.

5. Liebherr (Germany)

Despite a slight fall in construction machinery revenue – specifically for earthmoving, mobile cranes and tower crane sales – Liebherr managed to move from the number 7 spot on the Yellow Table to number 5, ousting Sany who dropped to 8th place. For 2014, Liebherr plans to grow its 4.6% market share through investments in a new logistics center in Germany; an expansion of its Adelaide, Australia location; and the addition of a new hydraulic production plant for hydraulic excavators, wheel loaders and material handling equipment in Dalian, China.

Delivery is the process of transporting goods. Most goods are delivered through a transportation network. Cargo (physical goods) are primarily delivered via roads and railroads on land, shipping lanes on the sea and airline networks in the air. Certain specialized goods may be delivered via other networks, such as pipelines for liquid goods, power grids for electrical power and computer networks such as the Internet or broadcast networks for electronic information.

The general process of delivering goods is known as distribution. The study of effective processes for delivery and disposition of goods and personnel is called logistics. Firms that specialize in delivering commercial goods from point of production or storage to point of sale are generally known as distributors, while those that specialize in the delivery of goods to the consumer are known as delivery services. Postal, courier, and relocation services also deliver goods for commercial and private interests.

Tasks for discussion:

- Name the purposes, tasks and principles of market of machines and equipment in the foreign trade.
- Name the main consumers and importers of industrial goods and machines, equipment.
- Tell about the economic trade of machines and equipment.
- Tell about the economic trade of industrial goods.

REFERENCES

Basic literature:

1. Christopher Hill. Foreign Policy in the Twenty-First Century: научное издание / C. Hill. - Second edition. - New York: Palgrave Macmillan, 2015. - 400 p.
2. David Cadier, Margot Light. Russia's Foreign Policy. Ideas, Domestic Politics and External Relations: научное издание / D. Cadier, M.Light. - New York: Palgrave Macmillan, 2015. - 272 p.
3. Gunther Hellmann, Knud Erik Jørgensen. Theorizing Foreign Policy in a Globalized World: Relations: научное издание / G. Hellmann, K.E. Jørgensen. - New York: Palgrave Macmillan, 2015. - 272 p.
4. Keukeleire S. The Foreign Policy of the European Union: научное издание / S. Keukeleire, T. Delreux. - Second edition. - New York: Palgrave Macmillan, 2014. - 390 p.
5. Trebilcock M. The Regulation of International Trade: научное издание / Michael Trebilcock, Robert. Howse, Antonia Eliason. - Fourth edition. - London; New York: Routledge, 2013. - 948 p.
6. Oatley T. International Political Economy / Thomas Oatley. - fifth edition - Boston: Longman, 2012- 416 p.
7. Pugel T.A. International Economics: / Thomas A. Pugel - fifteenth edition - New York: McGraw-Hill, 2012 - 770 p.
8. Regulating Trade in services in the EU and the WTO: научное издание / ed.: Ioannis Lianos, Okeoghene Odudu. - First published 2012. - Cambridge; New York; Melbourne: Cambridge University Press, 2012. - 489 p.
9. Liberalising Trade in the EU and the WTO: a legal Comparison / ed.: Sanford E. Gaines, Brigitte Egelund Olsen, Karsten Engsig Sorensen. - First published 2012. - Cambridge; New York; Melbourne: Cambridge University Press, 2012. - 503 p.
10. A handbook on the WTO TRIPS Agreement: научное издание / World Trade Organization) ; ed.: Antony Taubman, Hannu Wager, Jayashree Watal. - First published 2012. - Cambridge; New York; Melbourne: Cambridge University Press, 2012. - 385 p.
11. Thompson H. International Economics Global Markets and Competition: научное издание / H. Thompson. - 3rd Edition. - London: World Scientific, 2011. - 437 p.
12. King P. International Economics, Globalization and Policy: a reader / Philip King, Sharmila King - fifth edition - New York: McGraw-Hill, 2009.
13. Международный рынок услуг: Учебник / Под ред. В. А. Черненко. — СПб.: Нестор-История, 2011. - 212 с.
14. Международная торговля : учебник для бакалавриата и магистратуры / под ред. Р. И. Хасбулатова. — М. : Издательство Юрайт, 2014. — 489 с.
15. Katsioloudes M.I. International Business: a Global Perspective / Marios I. Katsioloudes, Spyros Hadjidakis. - Oxford: Elsevier, 2008. - 705 p.
16. Krugman P.R. International Economics: theory and policy: / Paul R. Krugman – seventh edition- Boston: 2006
17. Kegley Cr.W. American Foreign Policy: pattern and process / Kegley Cr.W. – 2009
18. Program for the development of services in the Republic of Kazakhstan until 2020
19. State program "Informational Kazakhstan – 2020"
20. Klemperer, Paul. 2004. Auctions: Theory and Practice. Princeton University Press.
21. Krishna, Vijay. 2002. Auction Theory. Academic Press.
22. Nissanoff, Daniel. 2006. FutureShop: How the New Auction Culture Will Revolutionize the Way We Buy, Sell and Get the Things We Really Want. Penguin Press.
23. Smith, Charles W. 1990. Auctions: Social Construction of Value. University of California Press.
24. Tleuberdinova, A. T. Prices and pricing: tutorial / A. T. Tleuberdinova, A. S. Mukashev ; Karaganda State University after academician E.A. Buketov (Karaganda)). - Karaganda : Pub. KarSU, 2010. - 122 p.
25. Foreign Policy Concept for 2014 – 2020 Republic of Kazakhstan - <http://mfa.gov.kz/index.php/en/foreign-policy/foreign-policy-concept-for-2014-2020-republic-of-kazakhstan>
26. Исмаилова Г.А. International organizations and integration into the world economy. - Алматы: Қазақ университеті, 2005. - 96 с.
27. Мировая экономика и международные экономические отношения: [в 2 ч.] Ч. 1 : учебник / под ред. чл.-корр. РАН, д-ра

экон. наук, проф. Р. И. Хасбулатова. — М.: Гардарики, 2006. - 671 с.

Additional literature:

1. Appleyard, Field, & Cobb. (2006). *International Economics* (5th ed.). McGraw–Hill Irwin.
2. Francisco Rodriguez, Dani Rodrik (1999): "Trade Policy and Economic Growth: A Skeptic's Guide to Cross-National Evidence"; NBER Working Paper No. W7081, available online at: <http://www.nber.org/papers/w7081>
3. Kala Krishna, Ataman Ozyildirim, Norman R. Swanson (1999): *Trade, Investment, and Growth: Nexus, Analysis, and Prognosis*; NBER Working Paper No. W6861; available online at: <http://www.nber.org/papers/w6861>
4. Yoon D.R. *The G20 and the Role of Asia in the Future // Asian Responses to the Global Financial Crisis. The Impact of Regionalism and the Role of the G20* / J. Park, T.J. Pempel, G. Xiao (eds.). Cheltenham: Edward Elgar Publishing Limited, 2012.
5. Aggarwal, V.K. (2000). *APEC as an International Institution*. In Yamazawa, I. (Eds.), *APEC: Its Challenges and Tasks in the 21st Century* (pp. 298-324). New York: Routledge.
6. Krugman, Paul and Maurice Obstfeld, *International Economics: Theory and Policy*, Addison-Wesley, 1997.
7. MEASURING TRADE IN SERVICES A training module produced by WTO / OMC Update includes changes in the Manual on Statistics of International Trade in Services. - November 2010
8. Dietrich Barth. *The Prospects of International Trade in Services*. - New York, 2014.
9. *The European Union Trade Policy 2015*. European Commission Trade Paper

Periodicals:

1. Krugman, Paul (1992), "The Move Towards Free Trade Zones"
2. Krugman, Paul R. and Maurice Obstfeld (1997), *International Economics: Theory and Policy*, Addison-Wesley, Reading, MA.

3. Mundell, Robert A. (1957), "International Trade and Factor Mobility", *American Economic Review*, 47, 321-335.
4. Mundell, Robert A. (1960), "The Pure Theory of International Trade", *American Economic Review*, 301-322.
5. Negishi, Takashi (1972), *General Equilibrium Theory and International Trade*, North-Holland, Amsterdam.
6. P. Krugman, "Space: the final frontier", *Journal of Economic Perspectives*, 12:161-74, Spring 1998
7. Skvarya L.V., & Zakharova. E.V. (2012). 'Economical integration of developing countries in globalization period', available at <http://www.m-economy.ru/author.php?nAuthorId=1384>, retrieved on 20 June 2014.
8. Razumnova, L.L. (2012). The problems of integration mechanism of developing countries. *Proceedings of MGLU*, №542, 40-52.
9. Samuelson, Paul A. (1948), "International Trade and Equalization of Factor Prices", *Economic Journal*, 58, 163-184.
10. Samuelson, Paul A. (1962), "The Gains From International Trade Once Again", *Economic Journal*, 72, 820-829.
11. Samuelson, Paul A. (1971), "An Exact Hume-Ricardo-Marshall Model of International Trade", *Journal of International Economics*, 1(1) 1-18.
12. Долгова М.В. Рынки наукоемких и высокотехнологичных отраслей: российский и международный // Российский университет дружбы народов http://www.rae.ru/fs/?article_id=10003961&op=show_article§ion=content
13. Calder, K., & Ye, M. (2004). Regionalism and Critical Junctions: Explaining the "Organization Gap" in Northeast Asia. *The Journal of East Asian Studies*, 4(2), 191-226.
14. The ASEAN Charter // The ASEAN Official Web Site. URL: <http://www.aseansec.org/publications/ASEAN-Charter.pdf> (date of access: 15.10.2012).
15. Baogang H., Takashi I. Introduction to Ideas of Asian Regionalism // *Japanese Journal of Political Science*. 2011. Vol. 12. No. 2.
16. Ivana Termansen. Harmonization of MERCOSUR statistics // A chapter in *Proceedings of the SARB/IFC seminar on "Economic*

and financial convergence en route to regional economic integration: experience, prospects and statistical issues amidst global financial turmoil", Durban, South Africa, 14 August 2009, 2010, vol. 32, pp 59-82 from Bank for International Settlements.

Internet sources and the optional list of electronic sources:

1. Database of Scientific library of KarSU: ELSEVIER, EBS-CO, Science, Thomson Reuters, Springer
2. www.foreignpolicy.com
3. www.oxfordreference.com
4. www.en.wikipedia.org
5. www.un.org
6. www.fao.org
7. www.ec.europa.eu
8. www.springer.com
9. www.wto.org
10. www.wto.gov.kz
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26. www.economy.gov.kz
27. www.minfin.gov.kz

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The textbook

**Khussainova Zhibek Seitovna
Zhartay Zhanibek Maratuly
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