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Essentials of
International Finance:
Questions & Answers

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On the basis of consideration of the essence of international finance and patterns of development of the global financial and monetary system, the answers to questions about functioning of the international financial markets in the context of globalization, international taxation and specifics of international financial management are given.

For students and academics

ISBN

BRIEF CONTENTS

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PREFACE

An important feature of our time is the growing interdependence of the economies of different countries, the transfer from the internationalization of economic life to the globalization of production processes and financial environment.

The global financial sector, which is the most influenced by the globalization, is the most important element of the global economy. It is a global system of accumulation of financial resources with distribution and redistribution between the world's economic subjects based on the principles of competition, which also became global. The financial spheres, which previously were each more distinct (currency and credit markets, securities markets, financial management, taxation) are becoming increasingly integrated, due to the introduction of new financial instruments, innovative financial engineering and multinational approach to decision making in financial management.

The global financial environment is changing as a result of the globalization process, Eurocurrency market growth, the development of a common European market, the growing role of transnational corporations and international debt crisis.

The aim of the manual is the systematization and unification of the legitimacies, conditions, principles and processes which are occurring in the global financial environment.

The structure of this book is processed by reviewing the principles of the functioning and development of the international finance. The book consists of six sections.

PART 1 gives the answers to questions about the role of international finance in the modern world's economy, the establishment of the global financial system and global financial market, features and principles of functioning of the global monetary system, the stages of its development.

In **PART 2** the answers to questions about features of international payments as a form of monetary and financial relations, electronic systems of international interbank payments are given.

The answers to questions about theoretical aspects of the balance of payments and the basic approach to its regulation are presented in **PART 3.**

The questions concerning the nature, structure and specificity of the international financial markets: currency, credit and securities markets are considered in **PART 4.**

In **PART 5** the answers to questions about the trends of the development and functioning of international taxation, differences in the tax systems of different countries of the world, issues of international taxation in connection with the money laundering and international organized crime are given.

PART 6 gives the answers to questions about the problems of international financial management, the nature and characteristics of the financial management of transnational corporations and their investment activity, the risks in international activity of a company.

We hope that this manual will enable students to make the maximum use of international experience of research in international finance.

PART 1. INTERNATIONAL FINANCE IN THE WORLD MONETARY AND FINANCIAL ENVIRONMENT

Chapter 1. International finance: basic concepts and purpose

1.1. What is the economic nature of the international finance?

International finance is defined as the set of relations for the creation and using of funds (assets), needed for foreign economic activity of international companies and countries.

Assets in the financial aspect are considered not just as money, but money as the capital, i.e. the value that brings added value (profit). Capital is the movement, the constant change of forms in the cycle that passes through three stages: the monetary, the productive, and the commodity. So, finance is the monetary capital, money flow, serving the circulation of capital. If money is the universal equivalent, whereby primarily labor costs are measured, finance is the economic tool.

The definition of international finance as the combination of monetary relations, that develop in process of economic agreements - trade, foreign exchange, investment - between residents of the country and residents of foreign countries, is not exhaustive. It does not reflect all the essential features, that are generated by the set of conditions outside the company (i.e. the external environment of the international business), which effect on their activity in practice.

These specifics lie in the fact of the relation between the international finance actions and the set of temporary and spatial risk factors (currency, credit, investment, political) caused by uncertainty and fluctuations in exchange rates of securities, the comparative difference in inflation and interest rates in different countries, the uncertainty of the economic policy of the country. Uncertainty and increased risk are exacerbated by the fact, that international company has a small effect on the business areas in which it operates. However, while choosing alternative financial decisions in the international business area, we cannot dispense with the analysis of the value of future costs and revenues of time (term commercial transactions), space (geographically remote) and the uncertainty caused by the need to work with a large number of currencies, taking into account the differences in interest rates and inflation, legislation and political systems in many countries.

This feature of international finance is represented in such determination. International finance, as a subject of special disciplines, reflect the economic aggregate of time and uncertainty, regarding the decisions, that touches several different countries, taking into account that every sovereign country has the own currency, business laws and political systems

International finance is one of the main subsystems of the world economy, which makes a decisive impact on the national and global economy. At the same time, the international finance functions as an integral system, whose elements are:

- the international monetary system, which is characterized by the components: the national and reserve currencies, international collective currencies, the conditions of mutual convertibility, currency parity, exchange rate, national and international regulatory mechanisms of exchange rates;

- international payments that serve the movement of goods and factors of production, financial instruments, and the balance of payments, which reflect all the transactions related to international payments;

- international financial markets and the mechanisms of trading by specific financial instruments – currency, loans, securities;

- international taxation, as the method of mobilization of funds;

- international financial management of TNC, where international investment, risk management, transnational financing etc. take the main place [Fig. 1.1].

The main functions of international finance are as follows:

- Distribution function. Its essence is that through the mechanism of international finance the cash distribution and redistribution of world product are carried out. Due to the international finance cash funds are created, distributed and used, and different needs of the world economy are met.

Distribution function is intended to promote the organization of the balanced and efficient global production and development of all the sectors of the world economy with the aim of the most complete satisfaction of necessities of the world community;

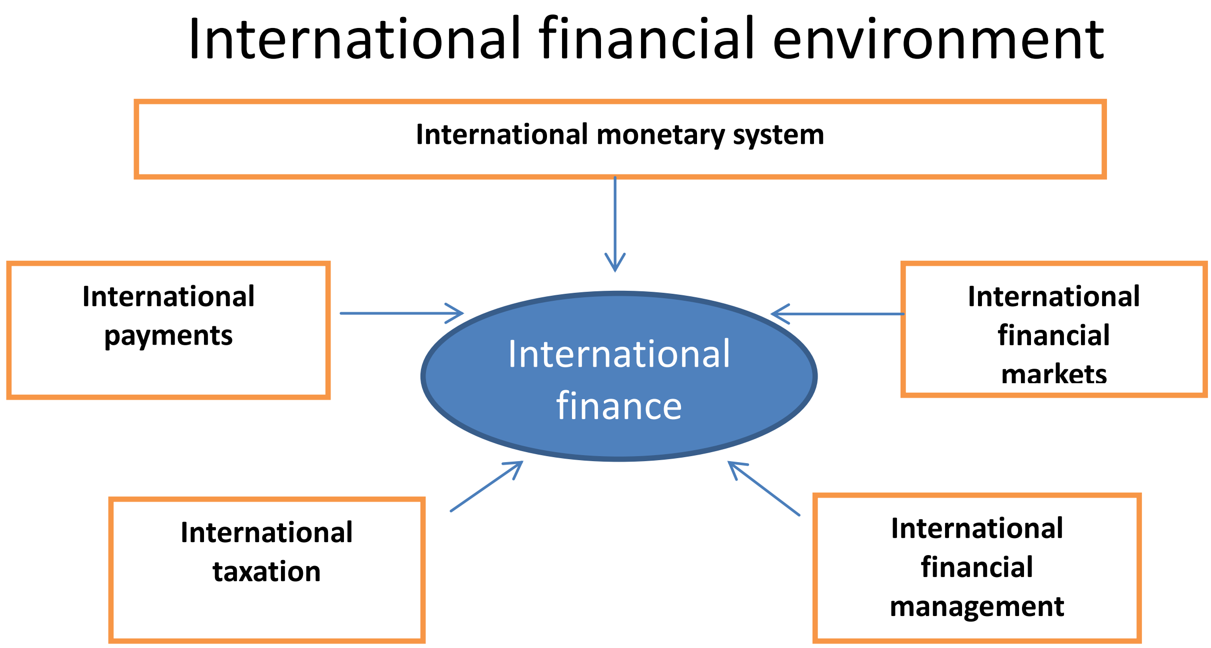

Fig. 1.1 Components of International Financial Environment

- Control function. Its general essence is the monitoring the production and distribution of world social product in money form by recording and analyzing its movement. The result of this function is making decisions on international finance and development of current and strategy international financial policy;

- Regulatory function is associated with the intervention of international monetary and financial institutions with the help of finance in the process of production;

- Stabilizing function. Its essence is to create stable conditions for economic and social relations in the global economic system.

International financial transactions are carried out in the international financial markets and solve the problems of organizing and managing money relations in the formation and using of the funds within the global financial environment. The objects of financial operations are the various financial assets: national and foreign currency, securities, real estate, precious metals. The major international financial transactions are money transfer operations, operations with capital, investment and speculation operations.

International transactions develop dynamically in modern conditions, transforming the financial systems of individual countries as well as the links between financial systems of these countries.

The competences of international finance are:

- analysis of the financial sphere on a global scale;
- determination of the interaction of financial transactions on a global level and consideration the international financial transactions as a continuous process with regular changes;
- the development of new financial methods, that affect the regional financial systems and facilitate theirs integration;
- the analysis of financial activities at different levels: national, regional, global.

International finance contributes to the internationalization of social-economic and monetary relations on the accumulation, distribution and redistribution of internationalized financial resources and international financial flows. The influence of international financial relations on the development of economic relations is carried out through the internationalization of all the set of structural parts of trade, currency and credit relations system, the mechanism of securities and investments. The proportions of international exchange are formed on this basis, so internal unity of components of the global market and a unified system of international monetary-financial and credit relations is achieved.

1.2. What is meant by international financial flows?

There is always movement of capital from one country to another in the global economy, creating global financial flows.

International financial flows are the set of financial transactions. The subject of these transactions is the money capital. These flows serve international trade in goods and services, and capital reallocation between countries. Financial flows contribute to the expansion of the types of currency transactions, foreign investment, activation of securities transactions and other financial instruments, providing international redistribution of financial resources.

The movement of cash flows is defined by relationships between economic agents of different countries, state and foreign governments and international organizations. The mechanism of this movement is established on the basis of international agreements, as well as the influence of economic laws.

The types of international financial flows can be classified according to the following criteria: the type of economic activity according to the structure of the balance of payments, the economic relationships between the non-residents, the terms of financial transactions, the form of ownership of the sources of financial flows (Fig. 1.2) [9, p. 14].

The main channels of financial flows are:

- monetary and credit and settlement services of sale of goods and services;

-foreign investment in fixed and working (floating) capital (FDI);

- transactions with securities and different financial instruments;

-currency transactions;

- assistance to developing countries, and state contributions to international organizations.

The volume and directions of financial flows depend on various factors:

1) the condition of the global economy. The economic recessions in developed countries usually causes a decline in the rates of growing of world trade, and vice versa. Thus, the economic development of countries in recent years, especially of developing countries, became the reason for the annual global GDP growth, and the growth of the volume of world trade;

2) the reduction of trade barriers;

3) different rates of economic development of the countries (synchrony or asynchrony in the major countries' economies);

4) the restructuring of the country's economy

5) the differential gap of inflation's rate and the level of interest rates between the countries;

6) the faster increase of international capital flows comparatively to the international trade. It affects sizes of international financial markets;

7) the transition of industrialized countries from labor-intensive to high-tech production;

8) growth of the diversification of TNCs activities, including international investments in joint ventures;

9) the increase of balance of payments' deficits due to the imbalance of international payments.

International financial flows are directed to those spheres and regions of the world, where there are: the highest demand for them and the opportunity to get the highest profit.

Movement of financial flows (in the money form, in the form of various financial and credit instruments) carried out by banks, specialized financial and credit institutions, stock exchanges that form the global financial market.

Financial flows reach enormous proportions. It is estimated that the daily global financial markets' operations are 50 times more then the operations of world trade.

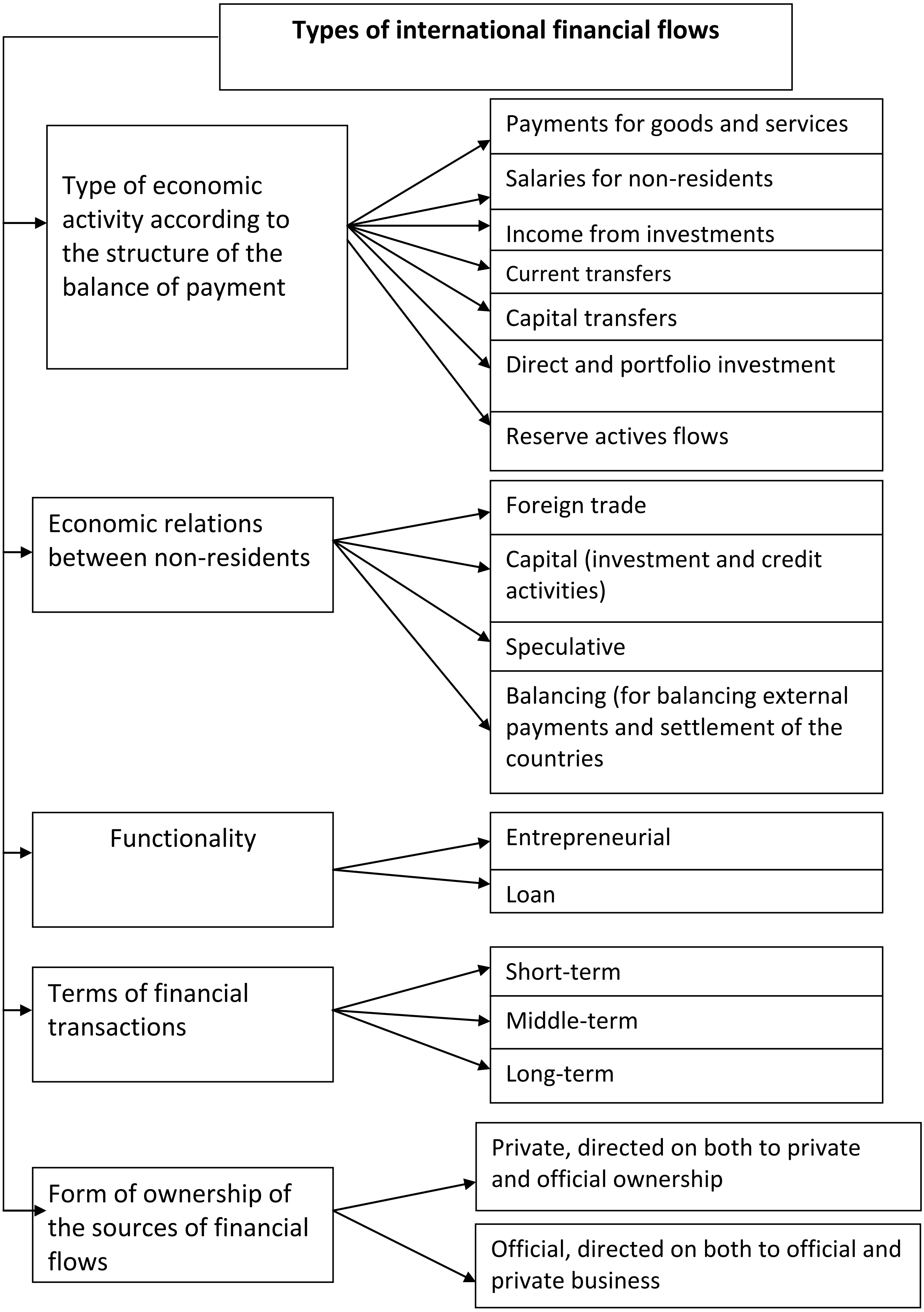

Fig. 1.2. Types of international financial flows

1.3. What is the essence of the world financial market?

The world financial market is the system of market relations, which provides the accumulation and redistribution of international financial flows. The world financial market is traditionally divided into the international foreign exchange markets, international debt markets, international securities markets, each of which includes Euromarkets (the markets of euro deposits, the markets of euro credits, the markets of euro shares, the markets of euro bonds and euro bills). There is another model of the financial market, when according to the criterion "the terms of realization of property rights" the financial market is divided into the money market (short-term obligations, which have high liquidity) and capital market or the stock market (long terms of securities' sale).

The simplified structure of international financial market is given below, in the Fig. 1.3.

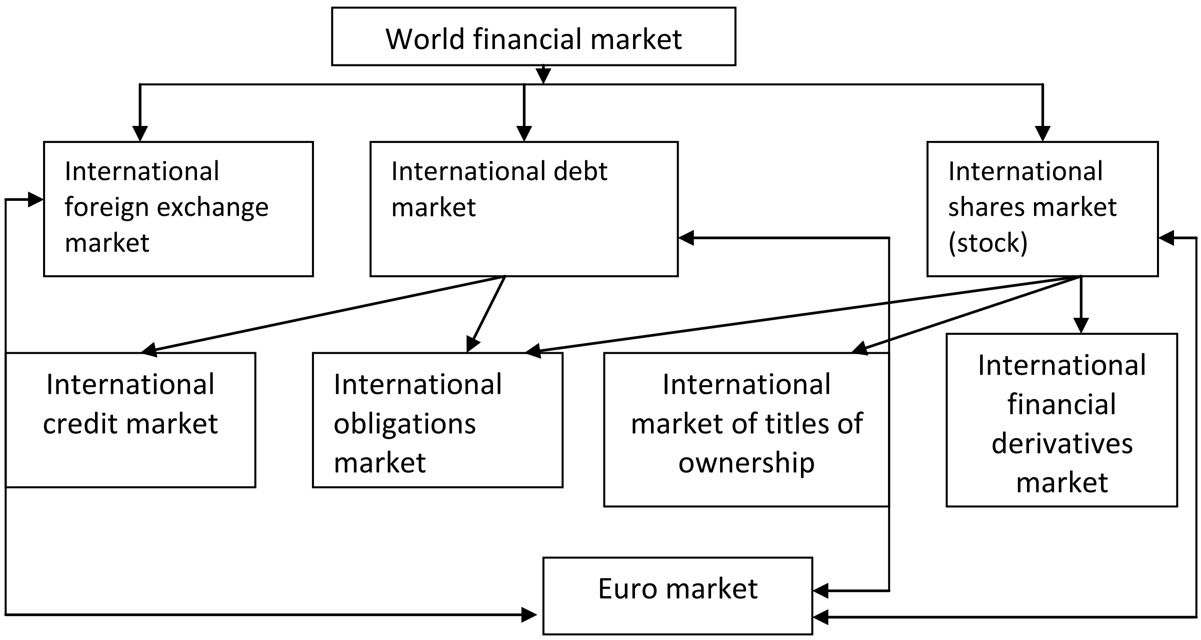

Fig. 1.3. Structure and interconnection of financial market parts

The structure of the world financial market is very complicated and it is not always possible to draw a clear line between its components. Thus, the international bond market is the part of the international securities market according to the first criteria, and is the part of the international debt market – according to the second; international market of property titles is an element of the international securities market and the part of international capital market at the same time.

The purpose of the international financial markets is to ensure the efficient allocation of the available amount of free capital between the final users (investors). Financial markets are the mechanism that connects those, who offer money, and those, who are looking for them, to make a deal. There are the financial institutions – the intermediaries between lenders and borrowers, which help to increase the efficiency of distribution of free cash flow. They (institutions) offer services in a professional manner, related to a combination of demand and supply of capital. They offer such services to firms, citizens and governments and they operate in a definite legal and fiscal space. It should be noted, that in the narrow sense under the financial institution we can understand financial organizations. And in the wide sense we can understand normative order, the system of currency and financial transactions of these organizations.

The modern world financial market is characterized:

- by significant amount of financial resources and transactions on a twenty-four hour basis, mostly standardized. It involves subjects with high ratings;

- by elimination of restrictions on financial flows across the national borders, such as capital controls and limiting of circulation of foreign currencies. For example, OECD countries liberalized almost all types of capital flows, including short-term transactions, carried out by companies and individuals according to "The code of liberalization of capital movements" operating in the territory of countries - members of the OECD;

- by the high level of information technologies' usage, which reduces transaction costs between countries;

- by the use of various financial instruments.

International capital flows are more than the international flows of goods and services by 5 times. International capital mobility intensifies the instability of exchange rates as a result of the more quickly cash moving than changes in interest rates. Exchange rates have become more volatile in the national macroeconomic policy. The high mobility of capital has led to increased interdependence of national economies, has weakened the autonomy of national policies, despite the existence of floating exchange rates.

1.4. What are the main tendencies in the world financial market?

The following features characterize main tendencies that are observed in the world financial market:

1. Creation of currency unions around the major currencies. The currency *union* is a group of countries based on the monetary and economic prevailing of the states that head this union, by fixing the currencies of participating countries of union to their currency.

Such factors influence on the creation of currency unions:

-trade (a country, that heads a union is the main trade partner of other member countries);

- financial (most member countries are the debtors of the country that heads the union, or of the third countries, or have mutual debts);

- economic (a country that heads the union is most industrially developed);

- political that was folded historically and firmly linked the participating countries of currency union.

A dollar currency union was created in 1933. The economically dependent from the USA countries of Latin America and Canada entered to it. With the implementation of euro in 1999 there was created a currency union of euro. However, countries of euro and the USA were not interested in the expansion of the spheres of turnover of the currencies. That is why they restrain the integration intentions of countries with relatively weak currencies, the unstable banking and financial systems, and with not enough developed financial and stock markets.

There is the possibility to form the new currency union in Southeast Asia. It can be organized by means of the joining around the Japanese Yen, or Chinese Yuan, or by the combining of several currencies to create an "Asian euro".

2. The structure of financial market instruments changes in favor of the real instruments sector - corporate securities and their derivatives. Currency loses self-importance, as an instrument of financial markets. Daily turnover of transactions on the international foreign exchange market increased by 4.5 times in 2011 compared to 1990, and in the bond market - 8 times. There is the rapid growth in the sector of corporate securities.

3. Stock markets are the key structure-creation factors of the financial sector. The banking sector has the second role after the mechanism of redistribution of financial resources on stock market. Thus, according to the "Financial Time", banks' loans accounted for only 25 % of the funds, which have been involved in business and by governments all over the world.

4. The growth of the relationship between finance and the real sectors of economy. The issue of securities is the primary way of mobilizing funds (investment funds) for new industrial companies. Due to the further improvement of the functioning of the financial market, its mechanisms provide redistribution of funds in favor of the most profitable and promising companies. The 60 % of the annual investment in the economy is invested in companies in the field of information technology in the USA.

Stock market turns to the technological progress catalyst in the real sector and provides the growth of labor productivity. The shares of the companies, that are related to Internet technology has the greatest demand in the stock market. Such companies develop modern means of communication and information systems assurance programs for biotechnology, pharmaceuticals, and genetic engineering firms and so on.

5. *The scale's growth of technological upgrading of the financial markets based on internet technologies that erase* the national boundaries and actively promote set of the direct links between investors and issuers, regardless of their nationality

6. Changes in the ideology of the activities of international financial institutions. These organizations are focused on increasing of the responsibility of developing countries, for the stability of national markets and refuse to carry out the role of the guarantor of stability on their financial markets.

7. The sharp increase and dominance of speculative operations in world financial markets. The speculative operations constitute over 95% of all the financial transactions.

Chapter 2. The world financial system

2.1. What are the structure and participants of the world financial system?

The combination of financial markets and financial institutions, which operate in a legal and tax environment of international business, create the global financial system (Fig. 2.1).

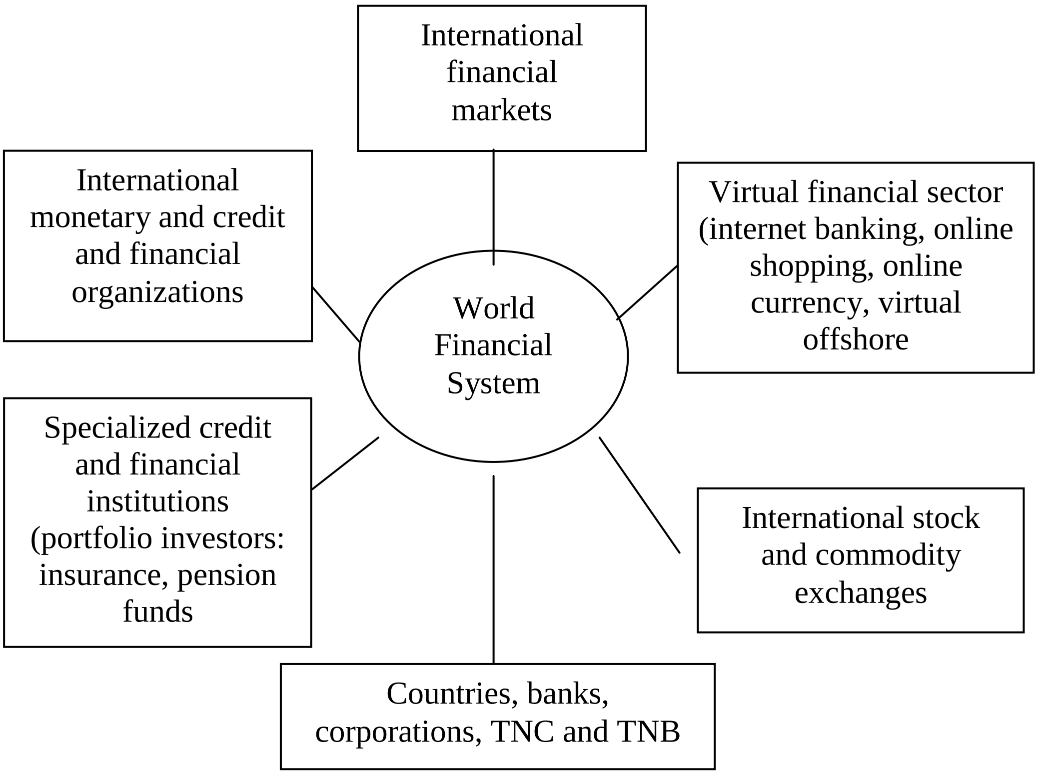

Fig. 2.1 The main components of world's financial system

The participants of the global financial system that intermediate the main part of international financial flows are:

- national participants - corporations, banks, specialized credit and financial institutions, including insurance and pension companies , stock and commodity exchanges, government ;
- international participants - international corporations, multinationals , international banks, TNB, specialized credit and financial institutions , large stock and commodity exchanges, international monetary and financial institutions.

The commercial banks take the central role in the global financial market, due to the broad sphere of financial activities. Liabilities of banks consist mainly of deposits with different maturities of assets: loans (by the corporations and states), deposits in other banks and bonds.

Corporations (especially TNCs) conduct operations to attract foreign sources of capital to finance their investments: sale of equities, loans, sale of debt funds of the corporation in the international capital market. Corporation bonds, denominated not in the foreign currency of the financial center, in which these bonds are sold, are called euro bonds.

Non-bank financial institutions conduct operations to diversify their portfolios of foreign assets.

Central banks are included to the global financial markets through the means of currency intervention. Government bodies borrow funds abroad, produce government bonds. The governments of developing countries, as well as companies owned by the state, take loans from the commercial banks of foreign countries.

2.2. What is the essence of financial globalization?

The current global financial system operates and develops in conditions of financial globalization. Financial globalization is an objective process of the integration of a large part of capital of different countries, strengthening of their interdependence. Its main features are: the availability of huge financial resources of TNCs and TNBs; high intensity of cross-border financial transactions of the global financial system's members; the emergence of new mechanisms and instruments of international financial transactions and the formation of the world financial market. The international market and off-market redistribution of financial resources is carried out through the world financial market.

The driving forces of financial globalization are the deepening of international financial integration, the formation of international financial institutions' system, development of financial innovations.

International financial integration is the process of unification of financial services, banking operations; liberalization of customs procedures; unification of the system of coordination through the international financial and credit institutions, electronic system of payment instruments; movement toward global monetary system with unified world money. The aim of international financial integration is removing of the barriers to the movement of financial capital. In the last years significant legal restrictions were eliminated on the way of the capital movement. The financial markets of developed countries integrated to the global financial system, which allows them to direct increasingly large amounts of capital not only to their economies, but to the economies of developing countries and transition economies. EU has the major progress in financial integration. Its concept of single financial area includes:

- total liberalization of payments and capital movements
- open access to market of banking, insurance and other financial services of partner countries to the companies and individuals of EU's countries;
- the harmonization of banking, tax and other legislation on the investment;
- the increase of control over the activities of the national credit and financial institutions and protection of the interests of investors
- the ensure of publicity and transparency of existing law

The formation of the EU's single financial market is the reason of the increasing the intensity of intra-regional capital migration. Consequently, the ratio of total cross-border private capital flows (the sum of the import and export of capital, including direct, portfolio and other investment) and GDP in the EU according to the World Bank is 40 %. This value over all developed countries is 30 % [9, p. 23].

Financial integration with the opening of financial markets is profitably to countries:

- broader sources of investment finance are proposed to the countries to supplement domestic savings;
- open capital markets contribute to the growth of effectiveness of domestic financial institutions and the conduct of reasonable macroeconomic policy
- reducing financial constraints, open capital markets give the time to the countries to implement the settlement of payments in order to correct imbalances, caused by external shocks;
- creditor countries have more opportunities for diversification of investment and risks;
- the system of multilateral trade is supported, as the range of possibilities expands for diversification of the portfolio of securities and for the effective placing of global savings and investments.

Now there is no single method to measure financial openness, but it must take into account differences between inflexibility of control and types of transactions. Such method was offered by the specialists of institute of the World Bank.

The measuring of financial openness includes adjusting or/and limitation of both operations with checking accounts and by the accounts of capital flow (27 operations in general, information about these operations is contained in the annual report of IMF). The basis of the calculation of the index of financial openness is a 5 level scale with a range from 0 to 2 for each item that indicates the degree of openness ("0" - a high degree of regulation, and "2" - a high level of liberalism), defined as follows:

0,0 - laws, regulations that impose quantitative or other regulatory restrictions on the specific operation (such as licensing or requirements on redundancy), which means a total prohibition on such operations;

0,5 - laws rules that impose quantitative or other regulatory restrictions on the specific operations that imply a partial prohibition on such operations;

1,0 - laws, regulations, which require that the conduct of a particular transaction was approved by the authorities, or provide, under certain conditions, its taxing on a large scale;

1,5 - laws, regulations that require registration, but not necessarily approval of a particular transaction by the authorities and, under certain conditions, its taxation;

2,0 - rules do not require the approval or registration of a specific operation by the authorities or its release from taxation under the law.

The removal of barriers between national and international financial markets, free movement of international capital from the domestic to the global financial market and vice versa, the development of relationships between these sectors of the market are the hallmarks of international financial integration.

In terms of financial integration, financial institutions establish their branches in major financial centers to perform the borrowing, lending, and investment and for the provision of other financial services. Financial integration provides significant benefits both investors and borrowers, but they are subject to risk. Therefore, investors are more oriented to sectors of the world market with high yield and leave the regions with tight regulation, low profit margins, and intense competition.

International financial institutions are the branched network of international currency and credit and financial institutions. The preconditions for the creation of them were: strengthening of internationalization of economic life, the development of transnational corporations and TNB; development of international forms of regulation of currency and credit relations; increasing instability of currency and financial system.

The main objectives of the international financial institutions are: the stabilization of the world economy and international finance; realization of international currency and credit and financial regulation; development and coordination of strategies and tactics of the international monetary and financial policies. These organizations give loans, develop the principles of functioning of the global monetary system, assist in solving of international financial problems. Their financial resources form considerable part of the flows of official international assistance.

The system of international financial institutions includes world-class organizations (IMF, World Bank Group, which includes the International Bank for Reconstruction and Development, International Finance Corporation, International Development Association, etc.), regional financial institutions.

The globalization of financial markets is characterized by the development of *financial innovations,* that is the creation of new financial instruments (euro-dollar certificates of deposit, foreign exchange swaps, zero-coupon eurobonds, syndicated loans in the euro currency, euro notes etc.) and the introduction of new technologies.

Technological innovations improve the quality and speed of international financial transactions and their amounts. Telecommunications help banks to attract savings from all over the world and send money to the borrower under the terms of the highest profits and lowest cost. Investment banks have the opportunity to sign contracts in bonds and in foreign currency, through the system SWIFT. Commercial banks can send letters of credit through electronic systems of payments from their headquarters to foreign offices.

The growth of global capital flows enhances financial competition between countries, affects the reduction of government interference in the operation of domestic financial markets, and leads to the liberalization of international capital movements. Thus, the global financial system is almost independent of governmental control and regulation. Less than 30% of securities market of G7 countries are controlled by the state or are subordinated to the state interests. More than 3 trillion dollars per month move from country to country on the world financial market. Among them 2 trillion dollars are the money that are not controlled by the state or other official institutions. The private capital has more resources than the central banks of major developed countries. Therefore, private capital defines the situation on the world financial market, rather than national governments. Private capital, according to the International financial institute, mostly directed to the developing market economies. Thus, in 2011, private capital flows to these countries amounted to more than 50 % of all global investments. Especially significant capital inflows observed in China and Russia.

The growth of revenues to China is connected with the expectation of the rejection of fixed exchange rate of the yuan to the dollar, and move to the floating exchange rate, and in Russia – with Russian banks interest in foreign loans in order to strengthen the ruble.

A positive characteristic of the inflow of private capital into developing market economies is that a half of the funds is presented as direct investments, i.e. investments in industrial objects, equipment, and business development. This half is not presented as portfolio investment in securities.

In 2011 the largest recipients of private investment were: Europe (425.7 billion dollars), Southeast Asia (343.7 billion dollars), Latin America (216.4 billion dollars), United States (210 billion dollars) [15, p.44].

2.3. What is the specificity of main global financial centers?

The national currency, credit and equity markets, that are closely interconnected with the similar global markets, take part in the operations of the world financial market The global financial centers were formed on the base of the huge domestic markets. They conduct international operations. These centers are: New York, London, Zurich, Luxembourg, Frankfurt am Main, Singapore, Hong Kong, Bahamas, Panama, Bahrain and others. International banks, consortiums of banks, the stock exchanges, which engaged in international foreign exchange, credit, transactions with securities and gold are concentrated in these centers.

Global financial centers (GFC) occur in the countries where there are:

- sustainable monetary and economic position;
- the developed credit system and well organized exchange;
- moderate taxation;
- preferential currency legislation, that allows access of foreign borrowers and securities to exchange quotation;
- comfortable geographical location:
- relative stability of the political regime;
- standardization and high degree of information technologies of paperless operations are on the base of the use of the newest computers.

2.3.1. What are the financial centers in developed countries?

The largest global financial centers are New York, London, Tokyo [15, p.44].

Feature of **New York** as a financial center is that it is only the international capital market and the basic source of Eurodollars. The main place among components of this financial center belongs to the market of the bank credits. The international activity of large American banks is connected not only with credit transactions, but also with investment. They offer their clients various transactions with securities, place securities in primary market, operate as brokers in the secondary market.

The efficiency of the New York capital market is achieved by issuing of new bonds by internal financial institutions at lower price in comparison with other foreign markets.

The foreign exchange market is developed poorly, but in accordance with such indicators as "the volume of turnover", "number of circulating currencies" it is considered as the world largest center on trade in currency.

The important place is taken by the securities market, which connects the American financial markets with the international financial markets. On the New York Stock Exchange are turning 2768 equities of companies with a total value of 19.8 trillion dollars, and the daily trading volume is around 50 trillion dollars. In 2012 net income of the stock exchange was 2324 million dollars, that increase of 13% compared to 2011 [31]. In this market large variety of financial instruments is presented: equities, bonds, mutual fund shares, depository receipts, convertible debt papers, index shares, forwards, swaps, warrants, etc.

The securities market of New York, as well as the general stock market of the USA, is attractive to investors of the whole world by absence of the taxation for nonresidents of the USA. Where the resident will pay 35%, the nonresident won't pay anything. The most significant feature of the stock market is the adjusted mechanism of the regulative legislation. It is the most effective and the most rigid in the world. Investment companies and funds are constantly regulated by the organizations granting licenses. The market of gold doesn't play a significant role.

London is a financial center of Europe. It is the greatest national financial center in the world with the equally well developed markets of the short-term credits and long-term loans, the powerful exchange, the high-organized insurance and freight business.

A characteristic feature of London is the domination of actually international components over national ones. In contrast to national ones, the foreign exchange market and the loan capitals market are the basis of its financial power. One of the features is considered the ability of banks, the exchanges, bill brokers to react quickly to any new situation and financial innovations. London as world financial center includes four markets: gold, currencies, short and medium-term crediting, insurance.

The market of gold is valid from 1919 that was a consequence of gold demonetization. Gold received property to be a mainly usual good with the price which is expressed in credit and paper money.

The London foreign exchange market is the largest in the world. 30% of all contracts with the currency pass through its currency exchange, and the volume of foreign exchange transactions is about 1000 billion dollars a day. Each year, the foreign exchange market increases by 39% (New York by 8%). Transformation of London into the leading world exchange market was promoted by the maximum freedom of currency transactions. Restriction of such freedom in other world financial centers didn't allow the exchange markets to develop to competitive level.

The market of the bank credits takes a leading place in the world. In London a large number of foreign banks is located, and English banks have a wide network of the foreign branches. Due to concentration of large banks of the world in London, this financial center became the main one of credit operations where borrowers can receive any sums. The main borrower of the London international credit market is Great Britain.

English firms and the companies receive from the American banks in London 4 times more foreign currency, than from clearing English banks. Orientation of the London international credit market to needs of Great Britain causes its specialization in the area of mainly shortly – and medium-term crediting. In the sphere of international trade in securities London successfully competes with other markets. It was provided by transformation of the London stock exchange into the international stock exchange in 1986. The London stock exchange plays a role of the quotation center in the international sphere.

The London stock exchange is the most international stock exchange in the world by number of the foreign companies trading on it: more than 445 international companies from 63 countries have listing in London. London Stock Exchange includes some markets: market of governmental securities, the equity market and the bond market of local firms and companies, the market of foreign securities, the market of the South African gold-mining companies, etc.

The total trading volume with the assistance of the international companies exceeds volumes of the leading world exchanges, including the New York stock exchange. The average trading volume makes 199 thousand transactions daily, and the average day turnover reaches 22,5 billion dollars [1, p.239]. 70% of the secondary bond market and almost 50% of the derivatives market accounts for London.

The volume of transactions in mergers and acquisitions ("M & A") amounted to 1.15 trillion dollars in 2011. FDI inflow into private British companies was 246 billion dollars, and outflow - was 974 billion dollars.

Tokyo becomes the international financial center after 1970. The strengthening of its positions was promoted by:

- growth of issue of the government bonds that caused development of their secondary market;
- bonds issue by foreign borrowers in Tokyo in yens, and later – in foreign currency;

- liberalization of the markets of yen and the capital that gave the chance to foreign banks and the companies on trade in securities actively to work at securities market;
- increase in foreign capital investments in Japanese bonds and equities;
- growth of openness of the money market. The greatest activity of foreign participants is observed in the market of on-call loans (it is the short-term commercial credit which is paid by the borrower for the first requirement of the creditor), deposit certificates and short-term commercial bills.

Tokyo is a financial center of the Asia-Pacific Region (APR). Tokyo is the large international foreign exchange market due to the large daily turn of foreign currency, especially in transactions yen/dollar.

The Tokyo stock exchange is one of the largest exchanges of the world, but as the trading place it gradually loses popularity. The total number of registered companies doesn't change for decades. Foreign investors consider that listing rules on the stock exchange are too rigid and observance of rules of the publication costs very expensive. As a whole the exchange carries out functions of the quotation of securities.

Authorized Japanese banks (foreign exchange banks) and foreign banks operate in Tokyo. These banks are engaged to crediting of the industry and trade in yens and foreign currency, granting the credits to the foreign Japanese enterprises through the parent banks, the accounting of export bills, etc. Foreign and Japanese banks carry out the operations in accordance with the situation in the international market of euro currency, in the markets for long-term and short-term lending.

However, greater focus on the domestic market, strong market regulation, protection of national banks, high levels of taxation; prevent further development of Tokyo, as GFC.

2.3.2. What are the financial centers of developing countries?

Asian centers such as Hong Kong, Singapore, Shanghai, Dubai, Qatar rapidly expand the scope of activities and investment. The government policy is the reason of it.

Hong Kong became an international financial center of China in 1997. There were such conditions for this: high level of autonomy, granted by the government; adoption of legislation which are the foundations of monetary and fiscal policy, of the capital flows, and were directed to support and develop the city as a financial center; the development of telecommunications and information technologies (introduction of electronic money, the using of SWIFT); creation of the unified trading system by the combining of the Stock and the Emergency Exchanges (2000), the regulatory framework of securities and derivatives (in 2001) gave Hong Kong the opportunity to become a free economic zone, opened for foreign investments.

Hong Kong takes the 9th place in the world by the size of the economy, 11th – in the list of the largest exporters of services, the fourth - in terms of shipping.

GDP per capita is higher than in the UK, Canada and Australia. Hong Kong is an independent customs area, an international center of commerce, finance and information. Foreign assets of the banking sector occupied fifth place by volume in the world. Hong Kong ranks 6th place in the world by the volumes of currency exchange. The stock market is the largest in Asia after Japan by the level of capitalization. Hong Kong is attractive because of the official position regarding FDI, liberal tax system, the relative simplicity of corporate law requirements. Small transaction costs, low interest rates, a small risk of changes in exchange rate, free capital movement are typical for Hong Kong.

Singapore is the financial center with international reputation, which focuses its work on the Asia Pacific region. The factors of its development are: Tokyo market deregulation in the mid-1980s; creation of an efficient business infrastructure, price competition; qualified personnel; strategic location allows the investors to make transactions with financial centers of the Asia-Pacific region as well as with European and American centers around the clock. In 1968 Singapore became one of the first financial centers in the world that allowed foreign banks to operate as offshore banking units.

There are many largest and most respected world financial institutions in Singapore. It is an important center of capital management and it ranks the fourth place among the main currency trading centers in the world after London, New York and Tokyo.

Singapore banks provide not only traditional banking activities, but other activities that are regulated by the financial authorities of Singapore (Monetary Authority of Singapore - MAS). For example, they provide accounting and consulting services, carry out insurance mediation, serve the clients in the stock market. There are about 30 activities, they are fixed in the relevant legislative act and the banks don’t need to obtain a separate license.

Recent years have seen rapid growth and spread of the securities market. Singapore is the second among the largest centers of OTC securities trading in Asia. It takes second place in the trade by the derivatives securities and the 1st place on derivatives commodities on OTC.

The bond market is represented by government securities and foreign bonds. Industrial bond market is one of the largest markets in the rapidly developing. In Singapore Exchange were listed and traded securities of more than 200 international companies.

Singapore is the regional center for primary and secondary insurance. It is also very attractive for foreign investors. The largest after Japan's real estate investment fund in Asia operates in Singapore. Investments are made in industrial trusts in the area of air transport, maritime traffic, and infrastructure assets. The progressive regulatory framework, robust macroeconomic foundation, secure political climate, easy access to Asian growth markets contributes the investments.

In general, the activities of the financial center is characterized by the effective cooperation of representatives from all levels of government and business , no economic barriers for non-residents , low tax rates , the effective regulation of the banking sector, the high level of telecommunications networks. The level of professionalism and the value of costs so attractive, that the execution of certain operations could be transferred from Europe to Singapore.

In recent years Singapore has entered into many international bilateral agreements: free trade agreements with the U.S., Japan, Korea, Australia, New Zealand, India, and the agreements about the avoidance of double taxation with more, than 60 countries.

Shanghai can obtain the status of international financial center. This can occur while maintaining the current rate of economic growth in China and use the status and benefits of a free economic zone. Shanghai is the city of China, where the largest numbers of financial transactions are conducted. Total volume of trading transactions on stock exchanges, bond markets, markets of futures, currencies and gold amounted to more than 386 trillion yuan in 2010 that is 11 times more than in 2005. Now the price of a variety of deals and trades operations in the futures market in Shanghai are important «reference " material for other global financial centers.

Foreign companies can carry out the listing of its shares on the Chinese stock exchanges in the near future. Shanghai is gradually turning into a main financial center of the Asia-Pacific region. National Commission for Development and Reforms of China developed the program of transformation of Shanghai into international financial center. The program provides to double the volume of trading on the financial markets of the city, improve the transparency of operations with derivatives. Over the past two years, China has lowered barriers to foreign capital, weakened the control over the yuan, and has allowed greater use of national currencies in international trade and finance. However, experts think, the pace of liberalization remains slow.

It is predicted that the volume of trading on the Chinese stock exchanges (excluding transactions with foreign currency) will reach 158 trillion dollars by 2015; Shanghai interbank market of transactions with bonds is going to come to the three world largest centers , by the volume of securities in circulation (in 2005, it ranked the 5^{th} place in the world). Shanghai market of financial derivatives could be one of the five largest in the world. Chinese currency is getting an international status. The building of World Financial Center will be based on the yuan, indicating the internationalization of the Chinese currency.

Leading international financial center of the Middle East is **Dubai.** Its rapid development started from 1966, when the oil was discovered in this area. However, the economy is based not just on oil, but also on tourism, financial services, e-commerce. Dubai is compared to Shanghai by the pace of development. The policy of tax exemption and avoid bureaucracy, the full support of development and the advantageous location - between European and East Asian financial centers contribute to the economic growth of Dubai. Representative offices of the leading international banks and local banks provide all types of internationally accepted services in the of investment sphere, corporate and private banking; asset management and fund registration; insurance and so on. Dubai is a regional information center. It takes the third place between the most important re-export centers and is located after Hong Kong and Singapore in the list.

The free economic zone (FEZ) Dubai International Financial Centre (DIFC) began to work in September 2004. The financial industry became the main course of DIFC. Creation of FEZ is one of the most successful measures to attract foreign investments, and to develop trade and industry.

It has all the advantages for the establishment of offshore companies, but the company, which is registered in the FEZ, does not classified as offshore, and this increases their status and facilitate business. DIFC has more than 800 companies, including 6 major global banks, 8 major international asset management companies, 4 largest insurance companies in the world. Activity of companies, that are registered in the DIFC, increased by 11 % in 2011.

DIFC offers its customers the following benefits: 100% foreign ownership right, zero tax on income and profits, no restrictions on the movement of capital, export earnings, foreign currency exchange, and import duties for goods. Companies also benefit from modern infrastructure operational support and uninterrupted business operations with persistent high standards of operation. International Financial Exchange (DIFX) started its work in Dubai in September 2005. The DIFX became the venue for the trading of stocks, bonds, instruments of Islamic financial system, derivatives, and indices. An IPO (Initial Public Offering) are actively held in Dubai, as well as in Hong Kong and in Singapore, which marked the beginning of the policy of non-intervention in the economy and market liberalization throughout the region. World financial market links the leading financial centers of different countries, and strengthening the contacts between them caused the financial revolution.

2.4. What is the place of offshore zones in the system of world financial centers?

There are the offshore zones among the financial centers. Offshore zones are the non-national financial centers which are carrying out considerable volumes of crediting and financing in currencies of other countries (Eurocurrencies). They are the redistributive element of global financial flows and they allow evading existing national and state legislation.

There are such characteristics of the offshore zones:

- liberal monetary and credit legislation, that protects the interests of investors without imposing unnecessary restrictions on financial institutions (low taxes, small government intervention);

- carrying out of monetary and credit transactions mainly with foreign currency for this country;

- legislative admittance of selling currency at the official price, when the official exchange rate is below market rate and of buying currency when the official exchange rate is higher than on the market .

The main feature of offshore centers is low taxation or absence of taxes. In addition, their deposited capital does not lie without movement, and is intended for investment in the high profitable fields with low-tax abroad.

There are many criteria for the classification of offshore centers. The basis of the main criteria used by representatives of the business world in the selection of such centers in order to minimize tax liabilities, is the summarized volume and the nature of the privileges offered to clients.

In this approach, offshore centers are usually divided into two main types.

The first one is actually offshore territories officially recognized in the world and jurisdictions that are "tax harbors". These are mainly the countries with a small population and small land area. According to the terminology, used in the UN, they are called mini- states. They are characterized by the absence of income tax for foreign "preferential" companies. But this advantage is largely devalued in the eyes of customers because of so serious disadvantage as the lack of tax treaties with other countries and, in particular, agreements on avoidance of double taxation. This type of jurisdiction includes a large number of offshore centers in the world, such as the Isle of Man, Gibraltar, Panama, the Bahamas, Turks, and other.

The second type includes the jurisdiction of the “moderate” level of taxation. These states are not considered as typical offshore areas, although some of them in some cases are included in the "black list" of tax harbors. "Moderate" (and sometimes very significant) income tax is often collected here. But this "defect" (in terms of wishing to minimize their tax liability) is completely compensated by the fact of tax treaties with other countries.

There are also provided significant benefits for companies of a certain type of activity: holding, financial and license activities. These companies are used as intermediate points for the interstate transfer of income and capital. At the same time, offshore company acts as the end point of the transfer, registered in well-known tax harbors.

Quite "respectable" states of Western Europe - Switzerland, Holland, Austria, Ireland, and Belgium are usually considered as the zones of “moderate” taxation. There is also a number of "combined" jurisdictions, which combines features of these two types. They include such "optimum" jurisdiction as Cyprus and Ireland.

However, not all offshore centers of the first type “are separated” completely from the possibility of a tax agreements. Some of them have agreements on avoidance of double taxation with certain countries (such offshore jurisdictions include Madeira, Dutch Antilles, Mauritius, British Virgin Islands). This creates one more convenient “evasion” to hide income and capital from taxation.

If we consider only offshore centers in terms of the fiscal situation, i.e. the specifics of the various benefits and advantages for different categories of taxpayers, these centers are divided into several groups.

These countries and territories have their outstanding characteristics:

- there are no taxes for their residents (Andorra or the Bahamas) ;
- there are taxes only on income, obtained in the country, but there are no taxes on the revenues, coming from abroad (Costa Rica, Hong Kong);
- there is no taxable income, obtained within the country, but there is taxable income derived from abroad (Monaco);

- there is taxable income, obtained abroad, but the tax rates are very low - less than 1% (Island of Guernsey or Jersey Shark);
- tangibles (accumulated wealth) are taxable, current income is not taxable (Uruguay);
- there is the possibility to use different combinations of favorable tax rules that create particularly favorable conditions for individuals. Their income is fully exempt from taxes, or some types of income have the tax privileges. Andorra, Ireland, Monaco, Kampone in Italy - are the European centers of this type. Bahamas, Bermuda, Kaymanov Islands, French Polynesia or Islands of St. Bartholomew – are non European centers of this type.

Chapter 3. Global monetary system and the principles of its functioning

3.1. What is the essence of currency and what are the types of currency?

Currency is any product that is able to function as a medium of exchange in international payments. In the narrower sense – currency is the cash, which passes from hand to hand in the form of banknotes and coins.

Currency provides communication and interaction of national and world economies. Currencies are divided into national currency, foreign and international (regional) - depending on the origin (status).

The national currency is the legal means of payment of the country: money in the form of banknotes, coins and in the other forms. The money, that are in circulation and are legal tender in the country, as well as vouchers or other securities (equities, bonds, their coupons, bills of exchange (drafts), promissory notes, letters of credit, checks, bank orders, certificates of deposit, savings books, and other financial and banking instruments) denominated in the currency of that country.

The national currency is the basis of the national monetary system.

Foreign currency is banknotes of foreign countries, credit and payment resources that denominated in foreign currency and are used in international payments.

International (regional) currency is international or regional unit of account, the resource of payment and reserve. For example, SDR (SDR - Special Drawing Rights), which are the international means of payment, are used by the IMF for the cashless international payments. SDR could be used by means of the notation in special accounts, and by the unit of account of the IMF; Euro is the regional international unit of account, which was introduced within the European Monetary System in 1999. Euro is the accounting unit of the EU.

There is a **reserve currency** in relation to foreign exchange reserves of the country. Central banks of different countries accumulate and save reserves for international settlements in foreign trade and foreign investments in reserve currency.

There are **strong and weak (soft) currencies** in relation to the exchange rates of other currencies. Strong currency has a stable exchange rate. The concept of hard currency is often used as the synonym for convertible currency.

There are **cash** and **non-cash currencies** in relation to the material form.

According to the principle of building there are **"basket" type and common (ordinary) currencies**. Currency basket is the method of commensurability of weighted rate of one currency in relation to a specific set of other currencies. The determination of the parts of currency basket, the size of exchange components, i.e. the number of units of currency in the set are the important factors of currency basket's calculation.

3.2. What is convertibility of currency?

The degree of currency convertibility is important characteristics of currency. Currency convertibility is the ability of residents and non-residents to exchange national currency to foreign currency freely and unlimitedly and the ability to use the foreign currency in transactions with real and financial assets. The degree of convertibility is inversely proportional to the volume and hardness of exchange restrictions that are practiced in the country. On this basis (usage mode) currencies can be fully convertible, partly convertible and non-convertible.

Freely convertible are the currencies of the countries that completely canceled currency restrictions and exchange them for all other currencies.

Partly convertible are the currencies of the countries, which keep currency restrictions for a certain range of foreign exchange transactions.

Non-convertible are the currencies of the countries that completely keep currency restrictions for all operations as for non-residents and residents.

Currency restrictions are different acts of official bodies, which directly lead to a narrowing of opportunities, to increasing of costs or to the appearance of undue delay in the implementation of foreign exchange and payments in accordance with international agreements. The main principles of foreign exchange restrictions include:

- ❖ centralization of foreign exchange transactions in central and authorized banks;
- ❖ licensing of foreign exchange transactions;
- ❖ complete or partial blockage of currency accounts;
- ❖ limitation of convertibility of currencies.

The degree of currency convertibility depends on the sphere of currency restrictions: convertibility by the current account of balance of payments or by capital account.

Convertibility by current account is the lack of restrictions on international transactions, which are related to trade in goods, services, income transfers and transfers.

The following forms of currency restrictions are used by current account transactions of the balance of payments:

- the freezing of earnings of foreign exporters, which were obtained from the sale of goods in the country, limiting of their opportunities for disposal of these assets;
- the mandatory sale of foreign currency earnings of exporters in whole or in part to the central and authorized banks;
- limited sale of foreign currency to importers;
- the restrictions on forward purchases of foreign currency by importers;
- the prohibition of sale of goods abroad in national currency;
- the prohibition of payment for imports of certain goods in foreign currency;
- the regulation of the terms of payments for exports and imports, etc.

Convertibility by capital account is the lack of restrictions on international transactions that are related to the movement of foreign direct and portfolio investment, capital grants. The currency restrictions, that limit the export of capital and stimulate capital inflows to support the exchange rate, are used in case of the passive balance of payments.

These are the limiting of the export of national and foreign currency, gold, securities, credit granting, control of credit and financial markets; limiting of the participation of national banks in providing international loans in foreign currency; forced removal of foreign securities owned by residents and selling these securities for currency; total or partial termination of the repayment of external debt or the opportunity to pay in national currency without the right to transfer abroad etc.

There are some measures, which could be done in case of active balance of payment, to inhibit the capital flows into the country and to increase the exchange rate of the national currency. These measures are: deposition of new foreign banks' liabilities to interest-free account at the central bank; ban on sales of investments and non-residents of domestic assets by foreigners; the mandatory conversion of foreign currency loans in the national central banks; the prohibition on interest payments on fixed-term contributions of foreigners in local currency; introduction of negative interest rates on deposits of non-residents in domestic currency (interests are paid by depositors of the bank or bank that is interested in attracting deposits in foreign currency, the bank pays them itself to the state monetary institution); the restrictions on the import of foreign currency to the country; the restrictions on the forward sales of national currency to foreigners [10, p. 175].

The convertibility of the currency is not purely technical category of possibility of its exchange. In fact, it is a special nature of the relationship between the national and world economy, deep integration of the first into the second. Convertibility of national currency provides long-term benefits for the country. The country could take these benefits in case of the participation in the multilateral world trade system and investments, including:

- the free choice of the most profitable markets within the country and abroad by producers and consumers at any given moment;
- empowerment to attract foreign investment and to invest abroad;
- the stimulating effect of foreign competition on efficiency, flexibility and adaptability of firms to changing business conditions;
- the pulling up of domestic production to international standards, regarding prices , costs and quality;
- the possibility of international payments in national currencies;
- at the level of the economy as a whole – specialization, taking into account the relative advantages, optimal and economical consumption of material, financial and human resources.

The convertibility of currency is divided into internal and external, depending on the ratio of residents and non-residents to the currency. Residents are allowed to purchase and carry out operations with currency and bank deposits denominated in foreign currency inside the country – this is internal convertibility.

Internal convertibility covers current and capital transactions. All developed countries have this type of currency convertibility. So, foreign currency is the means of payment, if the seller and the buyer agree with this fact. Residents have the right to implement foreign currency transactions with nonresidents – this is external convertibility. Local currency can be externally convertible by current or capital transactions.

3.3. What is the essence of exchange rate?

The main feature of the theory and practice of international finance is the large number of currencies, which operate in this area. Each country has its own currency, the currency, which is the basis of the monetary system of the country (dollar, yen, ruble, hryvna, etc.). Currency may have one name but different value in different countries. For example, the dollar is the currency in Canada and the United States, but the U.S. dollar and Canadian dollar have different values.

Due to the fact that each country uses its outstanding currency in the circulation, and this currency differs from currencies of other countries, all international transactions - trading, credit and so on – realize on condition that the exchange of two currencies takes place. International flows of goods, services and capital in one direction provide the movement of currency in reverse.

Currencies tend to be exchanged not just to each other, but in a ratio that is determined by their relative value - exchange rate.

Currency exchange rate - is:

- the number of units of one currency needed to purchase a unit of another currency;
- market prices of one currency, expressed in another currency;
- set of the prices of currencies which are interconnected by tripartite arbitration.

The exchange of one country's currency for another one is the content of the currency transaction. Each national currency has a price, expressed in the currency of another country. It is called the exchange rate. Prices of the freely convertible currency are determined in the foreign exchange market, are based on supply and demand for the currency. The price of the currency is set by the central bank in countries with partially convertible currency. Thus, currency or exchange rate, characterizes by the quantitative determination, which is the ratio of exchangeable currencies.

The exchange rate is the means of internationalization of monetary relations, the formation of the world money system; it facilitates analyzing the structures of individual countries, conditions and results in productivity, wages, rates of economic growth; it is the means of comparing domestic prices and domestic production conditions; it is the means of redistributing of the national product between countries, engaged in foreign economic relations; it is the means of promoting sustainable development and unification of the financial markets. Therefore, it is considered like an important macroeconomic indicator and a tool of macroeconomic policy.

The determination of exchange rates is called the quotation. There are two methods of the quotations of foreign currency to the national one: direct and indirect (reverse). The course of unit of foreign currency is expressed in domestic currency (1 USD = 5.0 UAH) – it is the ***direct quotation***. Exchange rate of the national currency unit expressed in foreign currencies - it is ***indirect quotation*** (1 UAH = 0.20 USD).

The base currency and the quote currency are set in the exchange quotation. *Base currency* is a currency against which the other currencies are quoted, i.e. the currency which is compared with a given currency. *Currency of the quotation is* a currency that is quoted to the base currency, i.e. the currency, exchange rate of which is determined. Typically, all currencies (except the pound sterling and a basket of currencies) are compared to the U.S. dollar. The use of the dollar as the base currency reflects the role of the U.S. currency as a universally accepted unit of account.

The quotation method is used for the analyzing of the dynamics of exchange rates. The exchange rate is the price of money, so its changes mean appreciation or depreciation of money. The national currency appreciates, when the exchange rate determined by direct quotation, is reduced: was 5.4010 UAH for 1 USD, became 5.1210 per 1 USD, the growing purchasing power of the hryvna growth from 0.1851 dollars for 1 UAH (1:5,4010) to 0. 1953 dollars for 1 UAH (1:5,1210). It depreciates in case of the growth in the exchange rate.

The procedure of the quotation in the form of fixing, where interbank exchange rate is determined and recorded, in the way of the consistent comparison of supply and demand for each currency, is used on many foreign exchange markets. The rates of purchase and sale, or the average course between them that is recorded as official are determined by using of data, which was noticed in previous sentence.

3.3.1. What types of exchange rates exist?

Several accounting types of the exchange rates are used to assess the rate of economic development.

1. The nominal exchange rate. This is the rate between two currencies, i.e. the relative price of two currencies (the offer to exchange one currency into another). For example, the nominal exchange rate of the dollar to pound equals 2.00 dollars / 1 pound.

Determination of the nominal exchange rate is consistent with the general definition of the exchange rate and is set on the foreign exchange market. It is used in exchange contracts. It is the simplest and most basic definition of the exchange rate. However, it is not convenient for long-term forecasting, because the cost of foreign and local currency changes in case of the change in the general price level in the country.

2. **Real exchange rate.** This is the nominal exchange rate, adjusted for relative price levels in our country and in the country to whose currency the national currency is quoted.

The real exchange rate is a comparison of the purchasing power of two currencies.

This is the formula, which is used for its calculation: (3.1)

$$S_r = S_n \frac{P^1}{P}$$

where Sr - the real exchange rate;
Sn - nominal exchange rate;
P1 - price index of the foreign country;
P - price index of our country.

The real exchange rate is the ratio of the consumer basket abroad, converted from foreign currencies into national currency, using the nominal exchange rate (the nominal exchange rate, multiplied by the price index for foreign countries) and consumer price basket of the same goods in our country.

Index of real exchange rate shows its change, adjusted for inflation in both countries. If the inflation rate in the country is higher than in the foreign country, the real exchange rate will be higher than the nominal one.

3. **Nominal effective exchange rate**. It is calculated as the ratio between the national currency and the currencies of other countries, weighted according to the proportion of countries in currency transactions of the country. It is expressed by the formula:

$$S_n^e = \sum_i (P_n^s \times W_i), \qquad (3.2)$$

where,

S_n^e - Nominal effective exchange rate;

$\sum_i$ - summation sign of indexes for ***i*** countries;

I - the country, which is a trading partner

$P_n^S = \frac{S_{n_1}}{S_{n_0}}$ - the index of the nominal exchange rate of the current year (S_{n_1}) compared to the base year (S_{n_0}) of each country's trading partner;

$W_i = \frac{X_i + IM_i}{X_{total} + IM_{total}}$ - the share of each country in the trade turnover of the country with countries, that are major trading partners.

The nominal effective exchange rate shows the averaged dynamics of the movement of national currency in relation to several currencies, and reflects the change in price levels in each country.

4**. Real effective exchange rate**. This is the nominal effective exchange rate, adjusted for changes in price levels or other indicators of production costs, which shows the dynamics of the real exchange rate of the country to the currencies of countries - major trade partners.

It is expressed by the formula $S_r^e = \sum_i (P_r^s \times W_i)$ (3.3)

where – S_r^e the real effective exchange rate;

$P_r^s = \frac{S_{r_1}}{S_{r_0}}$ - the index of the real exchange rate of the current year compared to the base year of each country, which is the trading partner.

The index S_r^e is considered like a major indicator that characterizes the generalized dynamics of major currencies rates. Trends of their development are projected on the index S_r^e.

If S_r^e of the national currency rises, exports become more expensive, its values are reduced, and imports became cheaper and its size increases, i.e. the competitive position of the country deteriorates in the global market. So S_r^e is the indicator of the competitiveness in the global market.

3.3.2. Why is it necessary to know the cross-rate and tripartite arbitration?

Every currency has more, than one exchange rate, but so much, how many currencies there are in the world. Exchange rates having different numerical expression are connected by tripartite arbitration. A tripartite arbitration is an exchange operation of two currencies through the third one, with the aim of getting income by using a difference between the exchange rate and cross-rate.

The cross-rate is the exchange rate of two currencies (A and B) through the third currency (C). We can determine cross-rate by the conversion of the currency "A" at first in the currency "C", and then – the currency "C" in the currency "B".

$$(A/C) \times (C/B) = A/B \qquad (3.4)$$

The actions of arbitrageurs create additional supply of one currencies and additional demand on other currencies. A competition between arbitrageurs results in the fact, that an income from the arbitration is so small, that the exchange rate and cross-rate are practically equal. At the same time a tripartite arbitration creates the mechanism, which balances demand and supply on currency in all foreign exchange markets. In consequence of this**,** an export always promotes the rising of currency cost in the country in case of its measuring in currencies of other countries. An import reduces the cost of currency, regardless of the direction of exports and of the country, an import comes from.

Cross-rates are the secondary indexes. We can calculate them through the basic courses of currencies in relation to the dollar. There are three methods of cross-rate calculation, taking into account the type of quotation to the dollar (direct or indirect) [11, p. 19].

The 1st method: the calculation of cross-rate for currencies with direct quotation to US dollar (a dollar is the base of quotation for both currencies). We must divide an exchange rate of the currency, which is the currency of quotation, on the currency, which we use as the base of quotation for the calculation of the cross-rate. For example, it is needed to find the cross-rate of the Canadian dollar and Japanese yen (CAD/JPV). The quotation of the Canadian dollar for US dollar (USD/CAD) equals 1, 5658, and the Canadian dollar to yen (USD/JPV) - 107,34. The cross-rate of CAD/JPV will be: $\frac{107,34}{1,5658} = 68,52$

The 2nd method: the calculation of the cross-rate for currencies with direct and indirect quotations for US dollar, where the dollar is the base of quotation only for one of currencies. For the calculation of the cross-rate we need to multiply the dollar exchange rates of these currencies.

For example, if we needed to find the cross-rate of pound sterling to the Ukrainian UAH (GBP/UAH). The exchange rate of GBP/USD=1,5890 (indirect quotation), the exchange rate of USD/UAH=5,4250 (direct quotation). The cross-rate of GBP/UAH= =1,5890×5,4250=8,6203.

The 3rd method: the calculation of the cross-rate for currencies with indirect quotations for US dollar, where a dollar is currency of quotation for both currencies. For the calculation of the cross-rate we need to divide the exchange rate of the basic currency into the exchange rate of quotation currency. For example, it is needed to define the cross-rate of the pound of sterling to the Australian dollar (GBP/AUD). The exchange rate of GBP/USD=1,5820, exchange rate of AUD/USD=0,7596.

Cross-rate GBP/AUD = $\frac{1,5820}{0,7596} = 2,0827$.

There are cross –rates, which are the most popular: pound sterling to Japanese yen, euro to Japanese yen, euro to the Swiss franc. The market of cross-rates in Ukraine is presented by a few currencies: pound sterling to the UAH, Russian ruble to the UAH, euro to the UAH. The determination of other cross-rates is not popular, because the trade contracts consist mainly in the dollars of the USA.

3.3.3. What are the regimes of the exchange rates?

There are three main regimes of the exchange rate in international practice: fixed, floating (flexible), compromise.

The regime of the fixed exchange rates is the system, which characterizes by the features: the exchange rate is fixed, and its changes, which are the results of the changes of demand and supply, could be eliminated by the stabilization measures of the state. The classic form of the fixed rates is the "gold standard" currency system, where every country installs the gold content of the monetary item. The exchange rates are the fixed ratio of gold content in currencies.

The fixed exchange rate can be fixed in different ways:

1. Fixation of the national exchange rate to the exchange rate of the most important currencies of the international payments.

2. Using of the currencies of other countries as legal means of payment.

3. Fixation of national exchange rate to the currencies of other countries - general trade partners.

4. Fixation of national exchange rate to collective currency units, for example, to SDR.

There are the advantages of fixed exchange rate:

- stable exchange rate provides a safe basis to the company for planning and pricing;

- it limits a domestic money and credit policy;

- it positively influences on the financial markets and financial instruments, which are not sufficiently developed.

There are the disadvantages of fixed exchange rate:

- if it is not trustable, it may be involved in speculations, which could be the reason to stop the using of fixed exchange rate

- there is no safe method to define whether the chosen exchange rate is optimal and stable;

- a central bank must be ready to provide currency interventions for the support of fixed exchange rate.

On the whole, the system of the fixed exchange rates allows settling the short-term problems, related first of all to the high rate of inflation and instability of national currency. This currency regime is unacceptable in a long-term period, because the divergences in the growth rates of production productivity do not find an adequate reflection in relative price changes and allocation of resources between the different groups of commodities and services. As a result disproportions are accumulated in the structure of national economy.

As a rule, the market (floating) exchange rates operate in countries with a market economy and high level of profit.

Flexible or free floating exchange rates regime is the regime, when the exchange rates of currencies are determined by the demand and supply. The market of currencies is counterbalanced by means of price, i.e. rates mechanism.

The advantage of market exchange rates is their ability to be automatically corrected in the way, which gives the opportunity to remove unbalanced payments. This process is happened due to free fluctuations of demand on currency and its supply; speculators do not have the opportunity to get an income due to a central bank; there is no necessity to carry out currency interventions by the central bank.

The disadvantages are:

- work of markets couldn’t be ideally efficient all the time, so there is the risk of not predictable level of exchange rate;

- uncertainty of future exchange rate may create difficulties for company in the field of planning and pricing

- the freedom of independent domestic monetary policy could be broken (for example, if the government hasn’t tools to stop decrease in the exchange rate, it can lead inflation, fiscal and monetary policy).

Compromise exchange rates regime is the regime, where the elements of fixing and of free floating exchange rates are combined, and the regulation of foreign exchange market is carried by the movement of exchange rates only partly. It can be:

- ✓ the maintain of fixed rate through insignificant changes in the economy, and in case of their insufficiency – by the devaluation of currency and establishment of the new official fixed course;
- ✓ managed float of currencies, when the authorities change the exchange rate gradually, while a new parity will not be attained. It can be: a) "sliding peg" is daily devaluation of national currency on the earlier arranged and declared size; b) "crawling peg" is a decline of the exchange rate on the defined size with earlier declared periodicity; c) the "dirty float" is daily devaluation on the not earlier declared size. The government takes measures to adapt the economy to the new situation.

When the proposal does not meet the demand in terms of the set official rate, the currency trade is illegally, the exchange rates of black market are used. The offshore exchange rate refers to the unofficial value of the managed currencies, operation with them are conducted in offshore zones.

The choice of the regime of exchange rates depends on the aim of economic politics. In the situation, when the achievement of full employment belong a primary purpose, and inflation does not get the special importance, advantage can be devoted to the floating exchange rates. When the avoiding of inflation is the main aim, the exchange rates are often fixed. Essentially, the problem of comparative advantages of the fixed and floating exchange rates is the problem of optimal combination of unemployment and inflation.

The degree of depending of the national economy from the processes taking place in the global economy influences on the chosen of currency regime. If a country in a large measure yields to the threat of internal instability and in a less measure depends on external one, the best exchange rates for such country are fixed exchange rates. In the case when the economy of country in a considerable measure depends on a world market, and internal economic situation and national macroeconomic politics are relatively stable, the best option is the floating exchange rate.

Countries with the deficit of balance of payments are more interested in flexible exchange rates then the countries, which prefer independence of their monetary and fiscal policy. The flexible exchange rates are recommended for the countries that are specialized on the export of narrow set of foods, demand on that depends on economic position of importing countries.

It is possible to say in the most general view, that we must pay much attention to the optimal combination of the evaluation of currency policy in the modern world. The currency policy is an instrument of economic integration and is the tool of protection from the negative and destructive influence of the world economy on the national economy.

3.4. The equilibrium exchange rate

3.4.1. How does the demand and supply for foreign currency appear?

A concept of **the equilibrium exchange rate** is important in the study of mechanism of determination of exchange rate. The analysis of exchange rate is carried out by using the instruments of the demand and supply of foreign currency at the foreign exchange market.

Demand for foreign currency arises as a result of necessity to buy commodities and services abroad. Demand for the currency of any country at the foreign exchange market means, that there is the demand of foreigners for goods and services of this country. The size of demand on currencies depends on a price of the offered commodity. More customers will buy the commodity, when the price of this commodity will reduce.

The currency of a selling country is needed by the buyers, who want to get foreign commodity in the exchange for national currency, at the market price, i.e. at the exchange rate. Demand of the currency of the seller of commodity depends on the currency price (exchange rate). Supply of currency from the side of selling country is the result of necessity to buy commodities (i.e. the demand of the commodity) from the country-buyer of commodities.

In a market economy the price of currency fluctuates under the influence of demand and supply. If the exchange rate is too high, the currency supply is higher, than demand of currency and the price on currency is low. If the price is too low, the demand of the currency is more, than the supply, so the exchange rate is higher. As a result of such fluctuations, the price of equilibrium of currency or market price is created. A market price is the exchange rate at which when the supply of currency and the demand are equal on the foreign exchange market (Fig. 3.1)

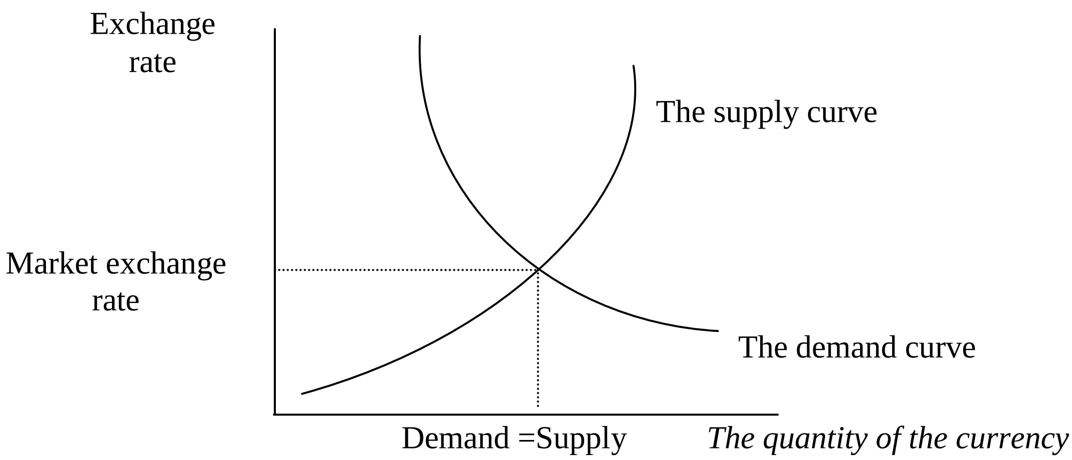

Fig.3.1. The determining of the market value of currency (equilibrium exchange rate)

3.4.2. Do the prices depend on the exchange rate changing?

Understanding of essence of exchange rates and of types of their quotation allows to compare the export price of commodity to the price of internal market and to find out, if the sale of that or other commodity or service at the certain foreign market is advantageous, or not.

Devaluation of national currency reduces the costs of national commodities, that is shown in foreign currency (commodities for foreigners become cheaper). It assists the height of export, which becomes more competitive. At the same time prices on foreign commodities, that are denominated in national currency rise and the imports of them decrease. The national commodities, with prices expressed in foreign currency, become more expensive as a result of the appreciating exchange rate on the national currency (commodities are more expensive for the foreigners). Their export goes down and becomes less competitive. The prices of foreign commodities, which are expressed in the national currency, fall down and their import grows at the same time.

3.5. Forecasting the exchange rate
3.5.1. What factors can affect the exchange rate?

Long-term fundamental factors, that determine the path of exchange rates, are processes, which take place in the field of a national production and turnover. It is, first of all, the comparative (in relation to world level) labor productivity, and, accordingly, production costs, long-term growth rate of GDP, place and role of country in world trade and capital exports.

Relatively more rapid increase of the labor productivity in a separate country (relative increase of the labor productivity) in a long-term plan results in the increase of relative purchasing power of national money in relation to commodities and in accordance with the increase of rate of exchange of this country. This circumstance gives an opportunity to forecast long-term development of exchange rates.

When there is the growing of the charges of production (lower labor productivity) compared with world, import grows more rapidly, compared with export. This process is the reason of depreciation of national currency, and vice versa. This factor got the name "parity of purchasing power" (PPP) of currencies. Currencies are compared according to the international price of the determined amount of commodities and services, represented by one or another currency.

During international and world economic relations such correlation of both currencies is set. According to this correlation the certain sum of money can be changed on identical by composition and volume "market basket" of commodities and services in both countries. It is the parity of purchasing power of currencies, i.e. such level of the exchange rate of two currencies that equalizes the purchasing power of each of them, if other things are equal.

The increase of national income of country results in the increase of demand for the imported goods generates demand of the currency of country-importer and tendency to depreciation of national currency. And the increase of export, related to the increase of national income in other country, generates a tendency to the increase of currency national exchange rate of country-exporter.

Inflation is one of the factors of the turnover sphere, which determine the long-term tendencies of movement of exchange rate. The rates of inflation comparatively with the rates of depreciation of leading currencies are very important. Higher national inflation rates, if everything else being equal, is the reason of the decline of exchange rate of this country in relation to countries that have relatively not high rates of depreciation of money. In case of inflation the change of exchange rate is quite nominal, unlike the real change of exchange rate in case of relative change of the labor productivity.

If in first case, the monetary policy can influence the exchange rate toward its increase (reduction of emission of money, increase of rate of the borrowed interest etc.), then in the second case - the facilities, sent to the increase of the labor productivity to the level that provides a competitiveness in the world market, can influence the exchange rate toward its increase.

One of factors that determine the movement of exchange rates is a relative level of the real interest rates, i.e. of nominal interest rates adjusted for the inflation rate.

The relative level of the real interest rates regulates the flows of capitals between countries. The increase of interest rates make the country attractive for investing, as a result supply of foreign currency and demand of the national currency increase. Low interest rates limit or cause the outflow of capital, demand of foreign currency increases, as a result. Accordingly exchange rate behaves. In the first case it tends to the increase, in the second - to the decline. Thus, strong inflation and low real interest rates result in depreciation of currency.

The state of the balance of payments effects on the exchange rate. As a rule, passive of balance worsens the position of that or other currency in the world market, because the demand on foreign currency exceeds its supply. An asset improves the situation, as supply of foreign currency exceeds the demand of it.

The short-term fluctuations of exchange rates depend on a psychological factor - market "expectation" of participants of foreign exchange market (disserting of bankers, dealers about the prospects of dynamics of currencies exchange rates, currency interventions etc.). Market "expectation" generates different sort of speculation on foreign exchange markets, including speculative capital flows. Expectation of further decline (increase) of exchange rate leads to the stronger decline (increase) of the exchange rate.

Currency intervention, i.e. interference of central banks and treasuries in currency operations, is conducted both with the aim of increase and with the aim of decline of exchange rate of the country or foreign exchange rate. If the aim is the increase of currency national exchange rate, banks and treasuries use massive sale of foreign currency and purchase of national currency. If a country is interested in the decline of the currency exchange rate, then there is reverse process – massive purchase of foreign and sale of national currency. Currency intervention can influence the movement of exchange rates only temporally. The degree of its efficiency depends on the volume of financial assets of the specially created currency funds.

The decline of currency national exchange rate assists the discharge export of commodities. However the currency dumping brings additional revenue only when there is the external currency depreciation, i.e. reducing its exchange rate, ahead of internal devaluation, i.e. a fall in purchasing power of money in the country Only in this case, selling a commodity at previous price (or lower) in foreign currency, exporter change this currency for the greater amount of the national currency as a result of fall in the exchange of the last. It allows buying more equipment, raw material, labor force at the internal market for the expansion of production.

Forecasting exchange rates is carried out by banks, firms, TNCs. The aim of forecasting is an improvement of insurance of currency risks and increase of efficiency of decisions in international financial management.

3.5.2. How is the exchange rate forecasted?

The forecasting of tendencies of changes of exchange rates can be carried out, first of all, on the basis of PPP, which binds prices in national currency with the exchange rates (PPP - is equality of purchasing power of different currencies at the constant level of prices in each of countries). There are theories of absolute and relative purchasing power parity.

It becomes firmly established in the **theory of absolute purchasing power parity**, that the exchange rate between currencies of two countries equals the ratio of price level in these countries:

$$R_{d/f} = \frac{P_d}{P_f}, \qquad (3.5)$$

where $R_{d/f}$ – an exchange rate

P_d – level of domestic prices (the price of the consumer basket in your country)

P_f – price level abroad (the price of the consumer basket in a foreign country)

The theory of relative purchasing power parity asserts that the change of exchange rate between currencies of two countries is proportional to the relative change in price levels in these countries, so inflation is taken into account.

$$R^1_{d/f} = R^0_{d/f} \times \frac{P^1_d / P^0_d}{P^1_f / P^0_f}, \qquad (3.6)$$

where $R^0_{d/f}$ and $R^1_{d/f}$ - exchange rate in the base and current year;

P_d^0 and P_d^1 - level of domestic prices in the base and current year;

P_f^0 and P_f^1 - price level abroad in the base and current year.

Another way to determine the exchange rate on the basis of the theory of relative purchasing power parity is the comparison of the difference of inflation rates within the country (id) and abroad (if) with the change of the national currency exchange rate :

$$i_d - i_f = \frac{R^1 - R^0}{R^0} \qquad (3.7)$$

The expected changes in exchange rate due to the changes of interest rates depend on those forces that influence the interest rates. First of all it concerns the inflation.

Irving Fisher, an American economist, proved the relationship between interest rates and inflation in detail. According to his theory, the growing of inflation rate leads to the proportional growing of interest rates and vice versa. This pattern is called the "Fisher effect".

The "Fisher effect"- the ratio between the nominal interest rate (p), the real interest rate (P) and inflation rate (i) in the country:

$$(1 + p) = (1 + P) \cdot (1 + i) \qquad (3.8)$$

Generalized Fisher effect is used for two or more countries. Generalized Fisher effect: the difference in inflation rate between the two countries equals to the difference in their nominal interest rates, i.e.:

$$i_d - i_f = p_d - p_f \qquad (3.9)$$

The “international Fisher effect” explains the moving from interest rates to exchange rates. The “international Fisher effect” shows that the expected percentage change of the exchange rate is a function of different interest rates in two countries.

The “international Fisher effect” is presented by the equation:

$$\frac{R^1}{R^0} = \frac{1 + p_d}{1 + p_f}, \qquad (3.10)$$

where p_d — interest rate for domestic currency;

p_f — interest rate for foreign currency;

$\frac{R^1}{R^0}$ - percentage change in the spot exchange rate.

Fisher's theory demonstrates the direct relationship between the nominal interest rate, inflation and the exchange rate (see formulas 3.7, 3.9) [15, p. 41]:

$$p_d - p_f = i_d - i_f = \frac{R^1 - R^0}{R^0} \qquad (3.11)$$

Higher inflation rate in the country, than abroad, compels local banks to set higher percent rates in comparing to foreign ones, because inflationary expectation is incorporated in them. It conduces to depreciation of national currency.

We must understand, that the increase of interest rate can leads to the increase of exchange rate and to decline of it. It depends on the reason of interest rate increase.

As it is known, the nominal interest rate equals the sum of the real interest rate and expected inflation rate. (p= P + i)

The inflation rate and the change of the real interest rate can influence the level of nominal interest rate – this comes from the above formula. An exchange rate of national currency increase or decrease depending on the constituent of formula (P or i), which influences the change of nominal interest rate. If the increase of the real interest rate influences the increase of nominal interest rate, then it conduces to the increase of exchange rate of national currency. If an inflation rate influences the increase of nominal interest rate, then it will be the reason of fall in the exchange rate of national currency

The forecasting of exchange rate is facilitated by the analysis of balance of payment. This forecasting is based on forecasting of changes in receipt and expenditure of foreign exchange reserves; detection of differences between expected receipts and expenditures. International trade influences on the exchange rates through the correlation of import and export.

There are the key factors that influence the changes of exchange rates. These are: the factor of trust to reliability of currency, the spread between an official exchange rate and market exchange rates and the set of technical factors, such, as a publication of national statistics, seasonal demand for currency, some strengthening of currency after its continued weakening, and vice versa.

3.6. What is the essence of currency regulation and currency policy?

The important instrument of expansion of world economic connections is currency policy, i.e. the set of economic, legal and organizational measures and forms that public, central bank and financial institutions, international currency-credit organizations use in the field of currency relations.

Currency policy is determined by a currency legislation, that includes a set of legal rules on the regulation of the procedure for operations with currency values in the country and abroad as well as foreign exchange transactions on monetary problems(bilateral and multilateral) between the countries.

The basic element of monetary policy is the currency regulation. The system of the currency regulation is the regulation of the regime of realization of currency operations, international settlement, determination of general principles of the currency regulation, the powers of state bodies and functions of banks and other credit-financial institutions in regulation of currency operations, rights and obligations of subjects of currency relations, procedure of currency control, responsibility for violation of currency legislation.

The currency regulation is carried out on interstate, regional and national levels.

The necessity of the currency regulation on interstate and regional levels is caused by the processes of integration and transnationalization, by the development of international economic relations, by the formation of world division of labor. The interstate and regional currency regulation is oriented on:

- the coordination of monetary and financial politics of the individual countries and economic integration organizations;
- the development of general measures to overcome the currency crises;
- the development of common approaches to the monetary policy making.

Coordinated interstate and regional currency regulation helps to reduce the degree of autonomy of national economic policies and to increase interdependence of monetary spheres of different national economies.

The currency regulation on the national level takes into account the requirements of IMF and regional associations, which are the included to the separate states. Its strategy and tactics are fixed in normatively-legal and methodical documents.

The systems of the national currency regulation, as a rule, determine the subjects of the currency regulation, the procedure for operations with currency values, the status of currency and exchange rate, the powers of state bodies and functions of the banking system in the sphere of the currency regulation and currency control.

The national systems of the currency regulation divide all participants of currency relations into:

a) residents, these are all institutional units that are constantly on the territory of this country, regardless of their citizenship or belonging of capital

b) non-residents, which are all institutional units that constantly on the territory of the foreign states, even if they are the branches of institutional units of this country.

The objects of the currency regulation in accordance with the procedure of regulation are currency turnover abroad, inside the countries and with foreign countries. Under currency turnover, we must understand operations with currency values that are used by the subjects of the currency regulation. National and foreign monetary units, payment documents and securities, issued by a non-resident, and bank metals, belong to the currency values.

3.7. What are the forms of currency policy?

Currency policy, depending on its aims and forms, is divided into current and long-term [16, p.163].

Current currency policy is the set of the measures, aimed at daily, operative regulation of exchange rate, currency operations, activity of foreign exchange market, also by means of discount and foreign currency policy.

The aim of current currency policy is providing of the normal functioning of international and national mechanisms of the world monetary system, support of equilibrium of balances of payments.

Long-term (structural) currency policy envisages the long-term structural measures concerning consistent change of currency mechanism.

International negotiations and agreements are used for its realization, primarily within the IMF and on the regional level. Also currency reforms, that include the measures, sent to the change of key elements of the currency system, such, as an order of the international settling, mode of exchange rates and parities, use of gold and key currencies, international means of payment, functional tasks of international and regional currency-credit and bank organizations, are used for the realization of long-term currency policy.

The forms of monetary policy are: the discount currency policy and foreign exchange intervention policy.

Discount (accounting) currency policy is the system of economic, legal and organizational measures concerning the use of discount rate for the regulation of investments and balancing of payment obligations, exchange rate regulation.

Foreign currency policy is the system of regulation of the exchange rate by the purchase and sale of foreign currency by the state bodies. The currency intervention, currency restrictions, diversification of foreign exchange reserves, regulation of degree of convertibility of currencies, exchange rate regime, devaluation, revaluation are the forms of foreign currency policy.

Two tendencies fight in the currency policy. From the one side - aspiring to the more close continuous concordance, collective control under an aegis IMF on the macroeconomic indexes of development of national economies for the achievement of stability and "predictability " of exchange rates. Such aspiration exists objectively as a reaction on the growing interdependence of national economies, generated by internationalization and integration of production and capital. On the other hand there is the desire to protect against external interference (mainly from IMF and the USA) in internal economic development, to save an independent course in the national economic policy, to prevent the infringement of sovereignty. [1]

These tendencies appear with different force in different countries and regions. The possibility and effectiveness of a particular currency regime determined largely by the tendencies of the currency policy. It is impossible to define currency policy, which would be the best for all countries. There is the question of the right choice of concrete politics in concrete situation, depending on tasks (problems), which stand before a country or groups of countries.

1 For example, the United States seeks to shift the main burden of organizing the international monetary and financial situation in other countries, which is only natural that resist. IMF in deciding the loan requires currency devaluation, wage freeze, the abolition of government subsidies for basic goods, reduction in government loans and so on.

3.8. What is the evolution of the world monetary system?

World monetary system (WMS) is the concrete form of organization of monetary relations. It is the functional form of organization of international monetary relations, i.e. the set of methods, instruments and organs (institutes), which are used for international settlements. There are the basic elements of WMS: national reserve and supranational (collective) currency units; conditions of mutual convertibility of currencies; standardized mode of currency parities; regulation of exchange rate regimes; interstate regulation of currency limitations; unification of the international payments; the regimes of world foreign exchange markets and markets of gold; interstate regional and supranational organs, which regulate currency-financial connections and relations.

There are the main tasks of WMS: the regulation of international payments and foreign exchange markets, mediation of payments for export and import of commodities, services, capitals and other types of international economic activity, creation of favorable terms for development of world production, international specialization and international productive co-operation.

The evolution of the world monetary system is determined by the development and necessities of national and world economy, by changes in the world economy and by periodic world currency crises. Currency crises may cause the explosion of currency contradictions, the dysfunction of WMS. It appears in disparity of structural principles of world currency organization mechanism to the new terms of production and world trade. These crises are accompanied by: the violation of exchange rates stability, the redistribution of gold-value reserves, currency limitations, worsening of international currency liquidity.

The development of the world monetary system passed several stages, each of which had occupied long historical period of time. The main difference between world monetary systems depended on the asset, which was considered as a reserve. The equilibrium of balance of payment was reached by this asset (in different time it was: gold, dollar, exchanged into gold at a fixed exchange rate, the other currency, which played the role of international means of payment).

3.8.1. What are the features of the gold standard and gold exchange standard?

The first world currency system is the Paris currency system. It was legalized by the international agreement on the conference in Paris in 1867. The conference recognized gold the only form of world money. A gold-coin (gold) standard was the basis of the currency system. The gold parities were established to their gold contents (the ratio of currencies of different countries on their gold content). All national currencies had their fixed gold contents by the system of "gold standard". For example, English pound had its gold content, which equaled 7,322385 g. of gold (since 1821), 1 German mark - 0,385422 g. of gold (since

1873p.). The exchange rate was determined by the relation of gold content of currencies. In our case - 1: 20,3.

A gold-coin standard was based on direct connection with gold. According to this system:

- currencies were freely converted in gold;
- the bars of gold had the opportunity to interchange on coins freely;
- gold was freely exported, imported and was sold on international markets, the markets of gold and foreign exchange markets were interdependent;
- all countries supported strict correlation between their gold stocks and the amount of money in turnover.

The exchange rate fluctuated in a relatively narrow range (within the limits of gold points, which were equivalent to the parity of national currency with addition or deduction of transport and insurance charges, caused by the material transfer of gold). Therefore, the system of gold standard is acknowledged as a currency system with the fixed courses. Authorities of currency control pursued the policy of regulation that allowed providing currency stability and the equilibrium of balance of payments.

The international payments of gold-coin standard were carried out by the use of the bills of exchange that were discharged into local currency, mainly in English. Gold was used only for payment of deficit of balance of payments. The part of gold reduced in money supply and fractional credit money forced out gold from turnover gradually in the end of XIX century. Gold-coin standard disintegrated at the beginning of the First World War because it ceased to meet the scales of economic connections, that grew, and the terms of adjusting of market economy.

The second world currency system was legally formalized by the intergovernmental agreement of the Genoese international economic conference in 1922. A **gold exchange standard** was the basic of the system. It was based on gold and leading currencies convertible into gold. Characteristic features of the Genoese currency system are:

- gold and foreign currencies were the basis of the system. The currencies that were suitable to exchange for gold at any time were called as reserve. The pound sterling and the dollar were responsible to such criterion (in 1922).The money systems of 30 countries were based on **gold exchange standard;**
- gold parities were saved. The conversion of currencies into gold was carried out directly and indirectly (through foreign currencies) Great Britain, the USA, France, Belgium, Netherlands, Germany and other. However, unlike the gold standard, currency of these countries changed not on any amount of gold, but on bullions no less as 12,4 kg per each;
- the exchange rates fluctuated freely;
- the currency regulation was carried out in the form of international conferences, meetings, active currency policies.

The relative exchange rate stability in the world was observed from 1922 to 1928, but it was undermined by a world economic crisis 1929 – 1933. As a result of crisis, a **gold exchange standard** collapsed. The course of many currencies decreased on a 50 – 84%, an accumulation of gold by the private persons increased, external payments were stopped, the mass of "hot" money were created, money moved from one country to other spontaneously to find speculative super profit.

It was the reason of the currency war. Currency intervention, currency dumping, currency limitations, currency bans were used in the war.

The world currency system was shocked by a new economic crisis in 1937. It was the mass devaluation of currencies. There was no stable currency before the Second World War.

3.8.2. What is the essence of Bretton Woods monetary system?

Development of new, more efficient international currency system began in April in 1943. The leading countries of the West coordinated basic principles of the Bretton Woods currency system at the international conference in Bretton Wood in 1944p. International organization - International monetary fund (IMF) was founded, - the "obligation" of which is providing of the normal functioning of the system and observance of the principles, envisaged by a general agreement.

The basic principles of organization of currency relations according to Bretton Woods system are:

1) the Bretton Woods system was based on Gold exchange standard. The role of gold as a general equivalent, as a mean of payment and settlement unit in international turnover was maintained. “Parities of currencies of all participating countries must be expressed in gold, that is a general equivalent, and also in the dollars of the USA according their gold content on July, 1st 1944"- was wrote in Bretton Woods agreement. However, this position was not executed in practice; the connection of all currencies with gold was indirect (through foreign currencies). Only the dollar kept an external convertibility and acted as a kind of world money

2) establishment of the fixed parities, agreed within the framework of IMF. Currencies were compared and interchanged on the basis of the parities.

To provide accordance of the real currency exchange rate to the declared parity, every country could:

- guarantee convertibility of the currency in gold according to official parity (this variant was chosen by the USA, such parity: 35 dollars for a 1 ounce of gold, was set in 1945);

- to support the currency exchange rate on markets in relation to other currencies within the limits of vibrations “+”, “-“ of 1% of its parity (other countries chosen).

The exchange rates deviated from the parities unimportantly, as they were under the state and intergovernmental influence. The IMF controlled the mechanism of the international payments, succeeding to currency interventions, mainly in the dollars of the USA. At fundamental unbalances, by approbation with IMF, devaluations and revaluations of currencies of the developed countries were conducted;

3) convertibility of currencies, freedom and variety of payments by current operations;

4) prohibition of free (private) purchase-sale of gold.

Bretton Woods system functioned almost 30 years. These were the years of proceeding in the economy of Western Europe countries and Japan, "the economic miracle", in relation to moderate inflation rates in the industrially developed countries.

However the Bretton Woods system satisfied the needs of international trade and capital flows less and less due to the extent of increase of world economy, strengthening of competitive activity, growth of inflation, sharp increase of volume of financial operations, unconnected with concrete foreign trade agreements, and also in connection with the crisis of key currency of the system – the dollar of the USA.

Inequality of currencies was folded within the framework of the Bretton Woods system. The dollar of the USA occupied the privileged position. It allowed the USA to cover the deficit of balance of payments in a considerable measure due to the short-term obligations of the American banks to foreign state organizations and private persons. The USA became debtors. Investment balance (capital balance sheet) was also folded not in behalf on the USA. There was an outflow of capital, and, as a result, negative balance of balance of payments.

The chronic deficit of balance of payments resulted in fact that the amount of dollars abroad considerably exceeded gold reserve of the USA. There was an distrust to the dollar and aspiration to exchange dollars for gold. The USA began to lose the dominating position in a world production and international trade. The role of the countries with positive balances of payments grew (EEC, Japan and other countries) The overcoming of deficit of balance of payments of the USA in this situation would mean the reduction of international liquidity, that would bother the international settling. The USA had a choice: to bear large charges or change all currency rules. The USA made a choice in behalf on the change of rules, tearing connection of dollar with gold in 1968, and then entering the floating course of dollar in 1971. Except that, principles of the Bretton Woods system undermined the development of euro market and market of eurodollars, where the enormous amount of dollars, that practically fell out of the mode of the limitations, which were set by national currency departments and IMF, circulated freely. All of it created a favorable situation for currency speculations. At these terms the system of the fixed exchange rates could not effectively function.

Transition to a new currency system had begun, that had got the name "Jamaican" in honor of the name of country, where basic principles of this system were established.

3.8.3. What is the specificity of Jamaica monetary system?

A transition from a **gold exchange standard** to the new system of currency relations took several years. After the first substantial step - stopping of exchange of dollars on gold - such events happened. The floating exchange rates were introduced in March 1973. All major currencies (dollar, pound sterling, German mark, yen, and French franc) freely floated in relation to each other from 1974. In the same year "Special Drawing Rights" - "SDR basket" became the new standard of value exchange. The IMF made a decision to give up fixing of official cost of gold, stopping the operations with him within the framework of IMF, giving a right to the national currency organs to dispose of their own gold at own discretion in 1976. And finally, there was the envisaged abandonment from the fixed parities in the charter of IMF in 1978. The Jamaica monetary system was officially enacted.

Basic differences of the Jamaican currency system from Bretton Woods monetary system are:

1. The carrier of world money changed. If the Bretton Woods system used gold and reserve currencies as eventual means of payment, then the new currency system bases on SDR (collective currency of IMF). This currency became an element in the structure of international liquidity.

2. The new currency system allows both fixed and floating exchange rates and their mixed version.

3. The presence of closed currency blocks that, from the one side, are the participants of the world currency system, and from the other - there are the special relations between participating countries inside them. The most typical example is the European currency system (ECS) - origination of EEC.

4. The rights of IMF on a supervision of the exchange rates are extended in the Jamaican monetary system. IMF produced basic principles, which are required to perform by countries-members of IMF, during realization of course politics, for the effectively functioning of international currency system on the whole. Essence of these principles is as follows:

- the rate of exchange should be economically justified. Countries must avoid manipulation by the exchange rate with the aim of non-admission of the necessary adjusting of balance of payments or receipt of unfair competitive edges.

- to carry out intervention with the aim of smoothing of considerable chaotic short-term course fluctuations;

- to take into account the interests of other countries during realization of intervention.

Basic criteria were developed for determination, whether the country fulfills these principles.

The obligations were laid on the countries-members of IMF: at the choice of the new currency mode to inform the IMF; collaboration of countries-members from IMF in the decision of currency problems; national economic politics of countries-members must assist stabilizing of exchange rates.

The abolishment of gold, as an official international means of payment and the measure of value, was the condition of Jamaican system. The official price of gold was canceled, and its demonetarization (the deprivation of gold from functioning like money) started. Gold could be the national reserve instrument, but all payments between IMF and national currency institutions were implemented only in SDR.

The principle of regulation of exchange rates by market forces (demand and supply) was proclaimed as the theory basis of the Jamaican system. However, the exchange rates could not function in the regime of the pure floating (so under the act of only market forces). Integration processes resulted: in the close interlacing of the national recreated processes, in the greater submission of national economies to conformities of world economy, in dependence on processes that take place in the world economy, including in the field of currency. It was unreal to create optimal background for the development of international trade without the currency policy coordination.

By means of the "pure" floating it was not succeeded to attain the equilibrium of balances of payments. The floating exchange rates did not result in the autonomy of domestic economic policy. In contrast, the freely floating exchange rates strengthened intercommunication between the exchange rates and internal economic processes. Consequently in the real practice the Jamaican currency system functions as the system of the managed floating exchange rates (with a tendency of strengthening of "custom controls" elements in currency policy of individual countries). The central emission banks do interventions for providing to exchange rates a favorable level for national interest by:

1) purchase or sale of both foreign and own currency on the foreign markets;

2) limitations or prohibitions of purchase or sale of certain currencies, direct control above private external translations, introduction of negative interest rates in relation to the foreign holding etc.

Despite the fact, that the Jamaican currency system has a row of negative moments, its functioning renders substantial influence on the acceleration of rates of development of the industrially developed countries and many countries of the "third world" in direction of further social-economic integration.

There are the characteristics of the modern world currency system: substantial fluctuation of exchange rates, in particular, in relation to the American dollar (the periods of underestimation of dollar change by the periods of rise of his cost); considerable flexibility of exchange rates, that, as a rule, are regardless despite the existence of free-floating, world economy cannot be free from international interdependence, which imposes certain restrictions on national economic policy; the instability of the world currency system to the currency crises and sensitiveness to the external shocks.

Chapter 4. Features of modern world monetary and financial crises

4.1. What are the essence and types of financial crises?

New quality of interdependence of participants of the world financial system is clearly manifested in the modern terms of global integration and internationalization. Their interests require maintenance of economic and political stability in the world, as a financial sphere has decisive impact on the real economy, on a level and quality of life. However, the world often facing financial crises, which are the shocks to the financial system, causing great damage to the national economy.

A financial crisis is a process of disorder of financial market when the problems of adverse selection and psychological risk result in that financial markets cease to function as a channel of financial resources transmission by the parties with the best investment possibilities.

The financial crisis is accompanied by disorder of financial market functioning that shows up in depreciation of national currency, exhausted foreign exchange reserves, mass bankruptcy of credit-financial institutions, insolvency of non-financial sector and sovereign debt default [10, p.179].

During the financial crisis there are quality changes in the economic system, that cause proportions violation in the development, its halt, modification or destruction of the financial system of some countries or world markets in general.

The characteristics of modern financial crises are as follows:

- spreading of crises by waves, touching the new spheres of financial relations. They systematically embrace financial markets and institutions of financial sector;
- negative influence in medium- and long-term on economic activity within a country and on the dynamics of welfare of the population;
- in the financial sector and on the financial markets the crisis shows up as a sharp increase of interest rate, share of insolvent banks and non-bank financial institutions, debts; reduction of loans; transformation to the unprofitable model of banking and other financial activity; predominance of speculative financial activity above investment; substantial falling of stock prices; destruction of the payment system; mass losses at the market of derivatives; illiquid financial markets;
- in the field of international finance there is an out-of-control drop in the national exchange rate; mass capital outflow from a country; out of control increase of external debt and overdue payments of the state and commercial organizations;
- in the field of monetary turnover there is out of control price increase with passing to a chronic inflation; escape from national currency, prompt emergence of hard foreign currency in internal turnover;
- in the field of public finances there is a sharp falling of foreign exchange reserves and state stabilizing funds; the emergence of budget deficit; reduction of

tax revenues and budgetary financing of the government spending; increase of internal national debt;

• realization of system risk (risk related to the change of investment climate in a country and changes in the conditions of investment market) that is accompanied by the effect of "domino", if: 1) crisis of financial institutions and companies of the real sector, segment of market or system of payments is passed in an growing extent through cross obligations on other groups of financial institutions and companies of the real sector, market segments and payment system, gradually embracing greater part of market; 2) crises of financial market of one or a few countries is passed to other country, as a "financial contagion", crisis of trust of investors, that causes market illiquidity;

• crises begin not in the real sector of economy, but on stock exchanges, in the banking sector through unbalanced amount of money in an economy.

There are different types of financial crises: currency, bank, debt and stock market.

Currency crisis takes place in cases when a speculative attack on currency results in sharp devaluation of national currency or when public authorities try to prevent devaluations, selling gold and foreign exchange reserves or considerably increasing interest rates.

Bank crises are connected with inability of banks to fulfill their obligations or with active state interference, aimed at preventing arising problems.

There is a sudden and massive affluence of clients wishing to withdraw their deposits and in this situation the bank can not pay with the depositors.

During the *debt crisis* there is bankruptcy of the state (default) i.e. the state can not fulfill its obligations. Government obligations sharply lose their value and capital outflow begins.

During the *stock market* crisis an increase of price variability of financial assets is observed or their falling is observed, which is connected with the change of expectations of investors. As a rule, the stock market crisis precedes to the first three crises.

In the conditions of financial globalization it is important to determine the reasons of origin and development of financial crises, their analysis, forecast with the aim of prevention, neutralization or minimization of negative consequences.

There are many scientific works, where the mechanisms of spreading of financial crises are investigated, and their influence on international and national development. These problems are examined, first of all, in the theoretical models of P.R. Krugman.

A financial crisis, according to the models of Krugman, arises inside the country as a result of inefficient economic policy and begins after awareness of this ineffectiveness by external economic agents (Table.4.1).

Table 4.1.

Models of a financial crisis by P.R. Krugman

Terms of the emergence of crisis	Characteristics of consequences of model application
1.Fixation of exchange rate by a central bank or its support within the limits of currency corridor by interventions at the foreign exchange market	The amount of money grows quicker than in other countries at these model, hereupon internal prices grow in relation to world that abbreviates an export and stimulates an import. Reduction of flow of currency into the country and increase of its outflow reduces foreign exchange reserves and leads to forced devaluations. Speculators of international foreign exchange market, knowing about reduction of official reserves begin to lend money in national currency and to convert them in foreign, hoping that at the moment of loan repayment national currency will become cheaper. It accelerates devaluation and, as a rule, is its reason.
2.Excessive inflow of foreign investments	Appreciation of the national currency is stimulated according to this model. Central Bank buys on the market excess foreign currency to save the previous level of the exchange rate. This process causes the increase of the gross international reserves and of the money supply, leading to higher prices. Central Bank may issue government bonds at the same time in order to absorb excessive money supply. The threat arises in this case, that this process will become cyclical because sale of bonds stimulates the growth of interest rates, the new inflow of foreign capital. This policy causes an increase in national debt and expenditure on its maintenance, and then policy causes debt crisis, accompanied by devaluation.
3.The accumulation of national debt	This model is based on the comparing of advantages and disadvantages of refusal of FER treatment. In case, when the investors understand that the benefit from the devaluation of the national currency and the devaluation of national debt exceeds the negative effects of FER (increase of prices and the cost of servicing of the national debt) for the government of a country, they convert their assets into foreign currency, causing a crisis. Excessive accumulation of national debt, expectation of default, devaluation of national currency results in the early withdrawal of investment from domestic stock market that puts pressure on the currency.
4.Excessive increase of assets prices	In case of huge capital inflows and hasty economic growth there overvalued assets and increase of private sector debt emerge. In case of emergence of tendencies of reduction of rates of growth, expectation of investors and creditors change. They will quit market, quickly will realize their liquid assets, the supply of which at the market grows considerably. It results in asset price decline, as a result of which the value of bank collateral deteriorates. There is transformation of investments from highly profitable to unprofitable. There is a currency, debt and bank crisis.

World experience testifies, that the political events of 70-80th – the cyclic deceleration of rates of the economy growing in the industrially developed countries - were the basic terms of occurrence of financial crises at 50-60th of XX century. The motion of "hot money", that are characterized by considerable volumes and supermobility on the world financial markets, and also appearance of new innovative products, technologies, sharp increasing of the demand for real estate – are the basic terms of occurrence of the modern financial crises.

The first world financial crisis of XXI century (sometimes it is called "Great recession") started in September-October 2008 as a considerable worsening of economic indicators in the most developed countries, and the recession became global at the end of this year. There were the main circumstances for its appearance:

- imbalances of international trade and capital flow;
- an inadequate estimation of risks of the speculative investing in financial resources and the absence of the appropriate regulatory system;
- overproducing of the basic world currency – U.S. dollar;
- depreciation of the U.S. dollar during 2002-2008, as a result using of this currency, as a reserve, was diminished by countries;
- the general cycle of economic development;
- overheating of credit market, mortgage crisis as a result
- the high prices on raw goods, particularly on oil;
- the overheating of stock exchange market.

There were the consequences of this financial crisis in the countries of the world: the decline in a production and volumes of crediting, increase of interest rates, strict requirements to the borrowers, reduction of scales of the mortgage lending, price decline on energy commodities, crash of stock exchange markets, crisis of mistrust, recession in trade, bankruptcy of enterprises and banks, reduction of workplaces and salary.

Financial crises are considered as the phenomenon of globalization in the financial sphere. Financial globalization creates the pre-conditions of outgrowing of crises in separate countries in the crises of global character, so there is the contagion of countries by crisis (transfer of crisis).

There are some ways to the crisis contagion. 1) By realization of conscious actions of one country in relation to other that threaten last heavy crises, decline of competitiveness of national economy and narrowing of its presence on markets, worsening of enterprise and investment climate; 2) consistent transference of crises from more developed to less developed countries.

The outflow of capital to abroad grows in the infected countries (not less than 30 %), the capitalization of market of shares and reserves (not less than 20%), the levels of interest rate and inflation in the annual measuring present not less than a 20%, exchange rate of national currency (not less than 15%).

The transfer of crisis situations is realized through: the pressure of international financial organizations, discrimination in foreign trade, artificial lengthening of life cycle of products on the markets of other countries, export of out-of-date technologies and canning of backwardness of other countries of moving ecologically dangerous productions etc.

First of all, macroeconomic shocks, that are divided into shocks of the real sector and monetary shocks, influence on spreading of financial crises. The most typical shocks, that take place in the real sector, are changes of world prices of the main exported or imported commodities of certain country. Monetary shocks are related to the increasing of world or national interest rate.

Sudden price decline on export products and the jump of interest rate on the international credit market could significantly reduce the competitiveness of national commodity producers and their external debts servicing.

Trade relations and devaluation of currencies assist to the spreading of crises. Crisis in large country market-partner is accompanied by the decline of volumes of export of internal firms, by the declining of prices on assets at internal market, by the outflow of capital and speculative operations at the foreign exchange market. In general, the worsening of the condition of current account of the balance of payments occurs. Devaluation of currency reduces the export competitiveness of counties-market partners in the country, infected by a crisis, because there is a pressure on currency of these countries.

In addition, the financial relations and informative channels have an influence on infecting of countries by crisis. The investors look over the international securities portfolio in the conditions of crisis in one or a few countries. They begin to sell not financial assets with low rates, but the assets with high rates. As a result, there is destabilization, volatility of financial markets, especially in segments with speculative operations that keep unjustified high prices on the certain categories of financial assets. Due to the informative channel, large international investors (TNB, the specialized financial institutes) could know, that there is the currency crisis in some country, that the regime of the fixed exchange rates in countries with analogical macroeconomic politics is shaky. Hereupon investors begin to pay high attention on the macroeconomic indexes of other countries. Countries with weak macroeconomic fundamentals could be the object of infecting by crisis.

The most informed investors begin to withdraw the investments from the country; following their example, other investors do the same that causes the mass outflow of capital. International investors begin to search new fields of application for capital, after the leading out of the capitals from the infected country and from other countries with a similar situation. There is the considerable entering of capitals in a certain sphere. However investors can lose a trust even to this sphere.

Then the capital inflow could be stopped or it could be withdrawn by the sale of securities and converting of profit yields in foreign currency that results in speculative pressure on national currency, as a result of what a crisis begins in a country.

There is the system of indicators that signal about the risk of financial crisis.

There are the indicators of currency crisis: the dynamics of the real effective exchange rate, official gold and foreign exchange reserves, ratio of short-term foreign investments to GDP and ratio of FDI to GDP; state of the balance of payments; rates of increase of money supply; a comparative analysis of the real interest rate in relation to the rates of other countries with similar economic conditions.

Such indicators dynamics of warn about a bank crisis: the real interest rate of deposits, ratio of deposits in foreign currency to the money supply, prices on the real estate and export prices.

The following relative indicators are used for the diagnostics of debt crises: ratio of external debt to the export, ratio of external debt to GDP, ratio of debt service payments to the volumes of export of commodities and services, ratio of sum of international reserves of country to the external debt, in particular short-term.

4.2. What anti-crisis measures exist at the national and international levels?

With the aim of overcoming of negative consequences of financial crises on national and international levels, anti-crisis measures are developed. So the governments of the world countries defined such key elements of the anti-crisis programs to minimize harm from a world financial crisis in 2008-2009:

1) the application of traditional monetary methods – declining of interest rate and norm of reserves by central banks for commercial banks. The USA, EU and Japan have chosen this way. The USA had reduced an interest rate from 4,5% to 0,25% , the bank of Japan - from 0,5% to 0,1%, the bank of England - from 5,25 %–to 0, 5 %, the rate of ECB was diminished from 4% to 1,25% from the beginning of 2008.

2) state helps to the systemic banks and financial institutes: their refinancing from budget (money of taxpayers), increase of control from the side of the state (including through acquisition of part in a own capital), granting of guarantees (for a certain commission) on the cost of past investments of banks, placing of state facilities on the savings accounts of commercial banks. The key principles of state help to the financial sector are protecting of taxpayers and giving of it on some term. Thus most states - world leaders declared that the plans of state help would operate during 2009-2012, and tax deductions are temporal. For example, legislation requires from companies that will sell the "bad assets" to the state within the framework of participating in Program of privatization of problem assets, to give the guarantees of that these assets will bring a benefit in the future. Another ways of defense of taxpayers are the permanent monitoring of efficiency and directions of the using of state facilities and timely stopping of help in case of abuses or absence of positive effects. There are the conditions, which are connected with the state aid: lending to small businesses and homeowners, support the efforts of people who are experiencing difficulties with mortgage payments, to prevent their eviction, limiting of compensation of top management.

3) improvements of the regulator system by the input of harder control. Germany suggested the creating of Economic Council under the auspices of the United Nations that would operate like Security Council and would mortgage

bases of new social economy in a global scale. Also countries require revising the role and functions of IMF and The Forum of financial stability. Great Britain suggests entering the so-called cyclic measures that would allow creating reserves in economically successful years for the softening of slumps. Great Britain, France, Germany support the liquidation of offshore zones, which allow tax evasion.

4) the redemption of problem assets by the state;

5) the strengthening of control of financial flows at the national level;

6) the reduction of tax pressure on households;

7) the exemption of enterprises from taxes or their decline with the aim of increasing of competitiveness and business activity. For example, tax cut on the income of enterprises, favorable tax treatment of investments of enterprises in studies and scientific developments, arranging on the installment system of tax debt, decline of payments on social security of workers, the exemption of import of technical equipment from VAT.

8) the increase of investments in new technologies, developments and researches, especially in those, that are related to power efficiency;

9) the support of small and midsize businesses that must provide proceeding in economic activity and soften the problem of unemployment. The USA extends possibilities of participation of small enterprises in the public purchasing, introduce tax incentives to increase their investment volumes. The program of sponsorship of small business, which is realized by “Vnesheconombank”, was increased (to 30 billion of rub.). There was the proposition to expand the access to public procurement at the regional level, provides a mechanism for refinancing of loan portfolio of small and medium-sized businesses.

The central role in coordination of international efforts in relation to overcoming of crisis in global level is played by such multilateral forums as Group of "seven" and Group of "twenty". In reply to distribution of world financial crisis from the end of 2008 the "Group of twenty" conducts 5 anti-crisis summits : on November, 14-15th in 2008 in Washington, on April, 2nd in 2009 in London, on September, 24-25th in 2009 in Pittsburg, on June, 26-27th in 2010 in Toronto and on November, 11-12th in 2010 in Seoul. The anti-crisis program that included new standards became the result of realization of these summits.

1. A new structure with widespread plenary powers was created - it was the Financial Stability Board that was the successor of Financial Stability Forum. All the members of "Group of twenty", the members of Financial Stability Forum, and also Spain and European Commission are the members of Financial Stability Board. The main task of new structure is collaboration with IMF to do the early warning of risks of macroeconomic and financial instability and development of the actions sent to their minimization (it is planned to create the effective system of prognostication of financial crises).

2. The feasibility of restructuring of the regulatory systems, in the way to give to the public organs the opportunity to identify and take into account macro financial risks, was recognized.

3. The decision to distribute the systems of regulation and supervision under all important institutes, instruments and markets, was accepted. Important

hedge funds were included in this list for the first time (funds of risks management that are private investment funds, unreserved by the normative adjusting, inaccessible to the wide circle of persons and that are followed by professional investment leaders). The hedge funds have the special structure of fee for guidance by assets, and, as a rule, serve professional investors only). A failure in activity of hedge funds, as specialists determine, is one of the reasons of world financial crisis.

4. New hard principles of Financial Stability Forum are installed (taking into account the features of national jurisdiction). The principles are connected with the practice of payment of compensation award in the most of system arising financial institutes for managers and other employees that are responsible for high-risk financial transactions. Initiatives are also supported in relation to the input of rational charts of payments of indemnifications and social corporate responsibility of all companies of financial sector. It is about the regulation of bonus payments to the management of the company and to the banks (the using of the state aid), the control of the payments.

5. Another agreement of the Basel committee is focusing on a bank supervision (Basel of III), in relation to introduction of new bank standards of international adequacy of capital and liquidity, that must increase the rigidity of the world banking system, decrease the incentives of banks to assume excessive risks, to bring down probability and sharpness of future crises and allow to the banks to maintain (without a considerable state help) financial shocks of the same scale as during the recent world financial crisis. The system of new standards includes the leverage coefficient harmonized at the international level that must complement the indexes of capital taking into account risks. The coefficient envisages the decision of problem of divergence in the terms of financial requirements and obligations, and also sets buffer reserves of capital over the level of minimum requirements, that can be used in unfavorable periods. The leaders of "Group of twenty" are determined to fully implement the new standards during the period of 01.01.2013- 01.01.2019.

6. It is decided to implement the measures against countries, that renounce the collaboration by the above-mentioned questions, thus it applies even to "tax havens". A fight against offshore centers increases. It is declared about application of approvals in relation to defense of public finances and financial systems, about completion of era of bank secrecy. Thus, expounded readiness in relation to the improvement of mechanisms of exchange by information, that applies to tax payment.

7. The necessity of creation of only complex of the high-quality global standards of accounting is underline. It is suggested to spread informative work with developing countries, and their participating in creation of these standards.

8. The decision about distribution of supervision on credit rating agencies was accepted, with the aim of inhibition of international conscientious practice code by them.

9. It is suggested to prepare the national packages of conjuncture measures in relation to prevention of financial crises; to set stricter control over financial markets.

The package of measures at 1,1trln USD was accepted to promote the economic growth and jobs, and also trust to the financial system. The mentioned package included the following measures:

- the additional 500 billion USD for the sake of grant of support from the side of IMF to the developing economies;
- the additional 250 billion of USD as SDRs of the IMF for all countries-members of the Fund (new financial mechanism of "overdraft facility");
- the trade-financial package at 250 billion USD for the sake of support of international trade flows during two years;
- at least 100 billion USD of additional loans from the multilateral banks of development to the poorest countries.

Concerning the activity of regional organizations, particularly of EU, European Commission developed the Plan of European economic renewal in the end of 2008. The plan contains two key elements. These are:

- the scale and urgent budgetary stimulation of purchasing power at the level of 200 billion euro (1,5% of GDP) for the support of consumer demand, and also to assume the exit of some countries-members outside the threshold of deficit of budget set by the plan at 3%, which is necessary for overcoming the crisis;
- strengthening the competitiveness of the EU by investing in perspective innovative technologies - energy-savings, development of alternative resources, transport infrastructure etc.

The council of EU of economic and financial questions granted permission to the countries-members of EU to apply the brief rate of VAT in some industries, and also confirmed the new rules of activity of credit-rating agencies that set more hard standards of quality and transparency and envisage the realization of permanent control over their functioning from the side of public organs.

International organizations develop anti-crisis measures also. IMF negotiates with countries concerning granting them the loans on the simplified scheme within the framework of instrument of *standby* that envisages the brief terms of payments and more simple terms. Within the framework of efforts on a fight against the global economic crisis, IMF entered the row of new credit instruments, in particular, flexible loans (*Flexible credit line*).

The Executive Board of the IMF confirmed the introduction of new instrument of the operative grant of short-term loans *(Short - Term Liquidity Facility)*, intended for the countries with a market economy in the process of becoming (emerging markets). In the conditions of international economic crisis the World Bank also declares about possibility of increasing of the sponsorship to the developing countries. A world bank expounded a willingness to increase the volume of loans to 100 billion dollars.

Modern financial crises (in particular world) put under a doubt not only the idea of globalization, but also strategy of open market in general (now many countries declare about possibility of closing of the markets). It should be noted that Africa, China, Brazil are least affected by the crisis in 2008. The degree of globalization is not too high in mentioned countries. The corresponding measures are accepted for prevention of world financial crises at the level of the separate state and at the international level. The main attention during the development of these measures is spared to the limitation of out-of-control inflow of speculative capital, limiting of risks, that undertake banks, and to the macroeconomic stabilizing on the whole – at the state level. At the international level, the IBM system of measures must reflect the interests of world economy, to assist prevention of crises and serve to the effective functioning of markets.

PART 2. INTERNATIONAL SETTLEMENTS AS THE FORM OF MONETARY AND FINANCIAL RELATIONS

Chapter 5. International settlements: essence and forms

5.1. What is the essence of international settlements?

The realization of international economic operations envisages the exchange for money of one country on money of other country. C*urrency relations appear* on this basis. *Currency relations* are the set of money relations that mediate payment and settlement operations between the participants of the global economy. The participants of these relations are banks, financial institutions, subsidiaries of large enterprises, brokers.

The location of currency relations in the system of world economic connections is determined by their role in the relations of world trade and international credit, international movement of capitals, influencing, from one side, on these relations, and from other, - being under their influence.

Talking about eventual reasons of processes that take place in the currency sphere (first of all, movement of exchange rates), they are determined by processes, that take place in the sphere of production, and are influenced by changes of correlation of economic forces between some countries or groups of countries.

The international settlements, as a form of currency relations, assist the deepening and strengthening of connections between national economies. They are conducted by international economic operations and generally represented in the balances of payments of all countries of the world. The **international settlements** is the system of regulation of payments on money claims and obligations that arise between the subjects of international economic activity, based on political, economic, scientific and technical, and other relations. Thus, **international settlements** are**:**

a) commercial payments on money claims and obligations, that arise between enterprises, banks, organizations and individuals of different countries, related to international trade, international credit, foreign direct investments etc.

b) the noncommercial payments, related to the transport of passengers, insurance, tourism, the transfer of funds abroad etc.

Different factors that influence the state of international payments:

- economic and political relations between countries;
- position of country on the commodity and money markets;
- the degree of using and effectiveness of government measures to regulate foreign trade;
- international trade rules and customs;
- the regulation of intergovernmental commodity flows, services and capitals;
- the differences between inflation rates in different countries;
- the state of balance of payments;

- the banking practice;
- the terms of foreign trade contracts and credit agreements;
- the convertibility of currencies etc.

The features of the international settlements:

1. Importers and exporters, their banks, enter into the certain separate from the foreign economic contract relations that are related to shipment, processing of payment documents, to payment implementation. The volume of obligations and distribution of responsibility between them depend on the concrete form of settlements.

2. The international settlements are regulated by national normative and legislative acts, international bank rules and customs.

3. The international settlements are the objects of unification. It is predefined by the process of internationalization of economic connections, universalization of bank transactions. For example, the unification of bill legislation, Uniform Rules for Collections, The Uniform Customs and Practice for Documentary Credits, Uniform Rules for Contract Guarantees etc.

4. The international settlements have, as a rule, documentary form, so they are carried out against the financial and commercial documents.

5. The international settlements are carried out in different currencies, and therefore, firstly, the dynamics of exchange rates influences on their efficiency. Secondly, the normal functioning of international commodity-money relations is possible only with free exchange of national currency for the currency of other countries. In other words, the most effective participating of that or other country in the international trade settlements is possible only on the basis of convertible currency. In modern practice, settlements of promissory requirements and obligations between the banks of different countries come true mainly in FCC (freely convertible currency). The state uses currency limitations that directly influence on the foreign trade settlements in countries with convertible currency.

The international settlements may be bilateral, when they are carried out between two countries, or multilateral, when the sum of money received from the sale of goods in one country are used for payments to the third countries.

The majorities of international payments are carried out as cashless payments, through the banks of different countries that have mutual correspondent accounts, they keep the funds in relevant currency and execute payments and other commissions on principles of reciprocity. The procedure is provided by such way: a bank in the country of importer writes off the sum of payment from the account of the client and enrolls it (or equivalent in foreign currency) on the account of foreign bank - the correspondent. The bank in the country of exporter writes off this sum from the account of correspondent and enrolls it on the account of the client that exported the commodity.

Cash payments on international settlements are made mostly in case of traveling of delegations abroad, traveling of tourists or individuals who change their currency for foreign currency in the banks.

International payments are connected with the functioning of financial markets, with the movement of securities in the form of direct and portfolio investments.

Large banks play a leading role in the international settlements. The degree of their influence on the international settlements depends on:

- the scales of foreign economic relations of home country;
- the use of national currency of home country;
- the specialization, financial state, business reputation;
- the networks of banks-correspondents.

The banks use their foreign branches and correspondent relations with foreign banks for realization of settlements. Correspondent relations with foreign banks are accompanied by opening of accounts of "loro" (accounts of foreign banks in this bank) and "nostro" (accounts of this bank in foreign banks). Correspondent relations determine the procedure of payments, size of commission, methods of replenishment of spent funds.

With the aim to receipt the higher income, banks try to keep minimum balance on the accounts of "nostro". They give the advantage to allocation of currency assets in the world financial market, including the European market.

Banks usually support necessary currency positions in different currencies in accordance with the structure and the terms of next payments for timely and rational realization of the international settlements. At the end of every working day they try to balance assets and liabilities of every currency. *Currency position of bank* is a ratio (difference) between the sum of assets and off-balance obligations in certain foreign currency and sum of balance and off-balance obligations in the same currency. Assets and off-balance obligations are the assets of bank for some period of time and assets that will be received by a bank in the future. The balance and off-balance obligations are the obligations of bank to clients and contractors on a certain day, and obligation of bank in the future.

Currency position could be different. *Currency position is closed* when the sum of requirements equals to the sum of obligations in every foreign currency. *Currency position is open* when the sum of requirements in certain foreign currency does not equal to the sum of obligations in this currency. There is a possibility of the risk of losing or getting a profit in bank from the change in exchange rates. *Opened long currency position* is the sum of requirements exceeds the sum of obligations in every foreign currency, as a result of this fact the bank can sustain losses in case of increase of national currency exchange rate in relation to foreign. *Opened short currency position* is the sum of obligations exceeds the sum of requirements in every foreign currency. In this case, a bank can sustain losses at the increase of foreign exchange in relation to the national.

5.2. What are the main forms of the international payments?

The main forms of the international payments in international trade are a commercial letter of credit and acceptance of the documents submitted to the bank for the collection.

A letter of credit is a document issued by a financial institution, or a similar party, assuring payment to a seller of goods or services provided certain documents have been presented to the bank. The letter of credit assures an exporter, that the bank will pay the transported products. It also assures an importer, that the payment to the exporter will not be executed without verification of the accordance of documentation with the terms and conditions of the letter of credit.

Procedure of realization of letter of credit operation is divided into three phases.

The 1 phase. Letter of credit opening agreement. The suggestion concerning the terms of delivery of commodity is examined. An exporter gives to the potential customer his suggestion and discusses the terms of letter of credit with a customer during negotiations.

The 2 phase. The commission for opening the letter of credit. This phase is related to signing of delivery terms of commodity and its payment. An importer gives to the exporter an order to supply the goods in accordance with the signed agreement of sale. At the same time he gives to the bank the commission to open the letter of credit.

The 3 phase. Using of letter of credit. An exporter supplies the ordered commodity and gives to the bank documents for payment.

Commercial banks get a certain commission from issue and payment of letter of credit.

Collection of payments is a bank transaction, by means of that a bank gets monetary resources from a payer (importer). The resources belong to the client. Bank does it on the instructions of the client (exporter) and on the basis of settling documents for the commodity and material values or rendered services shipped to importer and sets off this money on the bank account of client-exporter. This form of payment is considerably widespread, as it is cheaper, comparatively with the letter of credit.

The realization of collection is conditionally divided into three phases.

The 1 phase. The agreement on the terms and conditions of collection. An exporter determines the conditions of payment in his offer or co-ordinates them with a customer in a contract of a purchase-sale.

The 2 phase. Issue of collection order and the delivery of documents. The seller ships the ordered goods or directly to the buyer or to the agent upon receipt of the order or after conclusion of the contract for purchase and sale. At the same time he folds all necessary documents (invoice, bill of lading, insurance certificate, testifying to the origin of commodity and other) and sends them to the bank (remitting bank) together with an encashment commission. Remitting bank passes the documents with necessary instructions to the collecting bank.

The 3 phase. Submission of the documents to the payer. A collecting bank informs the customer about the receipting of documents, and also about the terms of their receipting. He takes over a custom payment or accepting bill of exchange and passes documents to the customer. The paid sum on collection is transferred to remitting bank that then enters this amount to the account of exporter.

The state can interfere in the sphere of the international payments by the using of ***currency clearings***. The currency clearing is an intergovernmental agreement about the mutual enrollment of counterclaims and obligations that come from the cost equality of commodity deliveries and rendered services. The aim of the currency clearing can be:

- equilibration of balance of payments without expenditure of gold-value reserves;
- obtaining of soft credit from trade partners that have active balances of payments;
- irrevocable financing of the country with negative balance of payments by a country with an active balance of payments.

The currency turnover abroad is replaced by the settlements in local currency through the clearing banks in case of the currency clearing. The clearing banks carry out the final enrollment of counterclaims and obligations, so the operations are carried out without cash payments or the transfer of funds, but by allocation of appropriate sums on transactions on debit or credit of demand deposits.

Depending on the number of participating countries there are bilateral and multilateral clearings. There are two types of clearing according to the volume of operations: the complete clearing (covers up to 95% of payments) and partial (spreads to the certain operations).There are three types according to the method of adjusting of clearing account balance: with freely convertible balance, with conditional conversion (for example, after a certain period after the establishment of balance) and non-converted (balance of them cannot be exchanged for foreign currency).

Currency of clearing can be of any country. A currency risk can arise at the clearing settlements. This risk is related to the freezing of currency profit in case of the not converted clearing and to the losses from the change of exchange rate.

Currency clearings have a notably influence on foreign trade. The negative consequences of currency limitations are softly because of currency clearings, because the clearings give the opportunity to exporters to use the currency profit. It is the necessity, during the using of currency clearings, to regulate foreign trade turnover with every country separately, and a currency profit can be used only in the country – clearing partner. Thus, the currency clearing is unprofitable for exporters. Instead of the profit in convertible currency they get national currency.

The clearing agreements between the industrially developed countries disappeared gradually because of the development of international economic relations. But clearings are used by developing countries.

Chapter 6. International payment systems

6.1. What is the essence of international payment systems and its risks?

The growth of payment transactions between banks of different countries caused the necessity of creation of standardized communication systems that would work with unified data. Such systems by which payments for goods and services are moving between banks have become international payment systems, which are essential for the efficient functioning of global financial environment.

In general, the payment system is the payment organization, the members of payment system and the set of relations that arise between them during the transfer of money. Carrying out money transfer is mandatory function that payment system must perform. This is done via telegraph, telegraph and computer networks, and electronic communications.

International payment system is a payment system, in which payment organization can be resident and non-resident, and which operates on the territory of two or more countries and provides the transfer of money from one country to another.

At functioning payment systems may face the following risks:

- credit risk – risk that a participant of the payment system will not be able to fully perform his financial obligations currently or in the future;
- liquidity risk – risk that a participant of the payment system will not have enough money to perform his financial obligations as it is expected, although he can perform them at a certain moment in the future;
- legal risk – risk that insufficient or changeable legal basis can cause or exacerbate credit risk and liquidity risk;
- operational risk is connected with operational factors: technical failures and operating errors can cause or exacerbate credit risk and liquidity risk;
- system risk – it arises from the inability of one of the participants of the payment system to perform his obligations or due to the destruction in the system its remaining participants or credit institutions in other segments of financial system will also be unable to perform their obligations.

Therefore, spread of problems with liquidity and threat to the stability of the system or financial markets are possible.

6.2. What are basic principles of effective functioning of payment systems?

The key to financial stability is reliable payment systems. Committee on payment and settlement systems (CPSS) of central banks of the countries “Group of Ten” made an important contribution to this cause. In December 1999, it published "Basic principles for systemically important payment systems" that defined conditions for efficient functioning of payment systems [19, p.625]. These principles include the following.

1. The system should be based on well-founded legal basis in all relevant jurisdictions (the laws on banking, contracts, payments, securities, debtor – creditor relations, bankruptcy, etc.).

2. System rules and procedures should provide a clear view of the impact of the system on each financial risk to the participants. They should clearly specify the rights and obligations of all parties involved, which must be provided with relevant materials in time.

3. The system should have clear management procedures of credit risk and liquidity risk, which would establish respective responsibilities of system operator and participants and provide appropriate incentives to manage these risks and their limitations.

4. The system should provide final settlement on the value day, preferably - during the day or at least in the end of the day.

5. System, with multicurrency mutual offset should at least ensure timely completion of daily settlements in case when participant with the largest obligations fails to perform the settlement.

System of multicurrency mutual offset and postponed settlement is at the risk of failure of one participant to meet his settlement obligations. This increases probability that the other participants will feel suddenly the pressure of lack of liquidity. Therefore, a least, the system of mutual offset should withstand the insolvency of a member with the purest receivables position.

6. It is more comfortable, when the assets that are the claims to the central bank are used for settlements. When other assets are used, they should have negligible credit risk or none at all. If there is even a slight threat of insolvency of the issuer of assets, the system faces a crisis of trust, which in its turn creates system risk. Accounts in the central bank are usually the most suitable assets for payments due to the absence of credit risk

7. The system should ensure a high level of security and operational reliability and should have mechanisms to handle unusual situations for timely completion of daily processing of payments.

8. The system should provide suitable for users and efficient for the economy method of payment transactions. If the system has inadequate maintenance mechanism of intraday liquidity, it faces the risk of slow turnover or even stops when each member expects that the other will pay first. To be efficient, the system must encourage its members to immediate payment. The support of intraday liquidity for settlement systems in real time is especially important. Central Bank has to decide whether it should provide intraday liquidity to support continuous daily functioning of the system and how to do it. The structure of the payment system should meet the country's geography, population distribution and its infrastructure (telecommunications, transport and banking).

9. The system should have objective and public criteria of membership that ensure fair and open access.

10. The management mechanisms of system should be effective, accountable and transparent. Guidance of system has to encourage management to meet the interests of stakeholders and society in whole. It is its competence to take care of appropriate tools and opportunities to achieve system goals. Management mechanisms should ensure accountability of system to its owner and the general public finance. In addition, they should be transparent.

The participation of countries in international payment systems is characterized by the following features:

- access to advanced and flexible technologies, which allow providing customers with a variety of services;
- significant entrance fee;
- necessity to keep a large amount of insurance deposits in foreign banks;
- limited market of customers and service outlets that make such projects quite complicated, capital-intensive and those that require detailed study.

6.3. What types of international payment systems exist?

The number of international banking networks is constantly increasing. To meet growing demand for information and telecommunication servicing international networks that provide a range of services for transferring payments, information and asset management are created. The most famous international payment systems are systems SWIFT and TARGET.

World interbank SWIFT system

The system SWIFT is a worldwide interbank financial telecommunication system. It was organized in 1973 in Brussels to develop unified methods of exchange of financial information and the establishment of an international data network using standardized messages. This system is the largest and most widespread in the world network of financial messages, any bank can consider itself a full-fledged member of the world financial community after connecting to the system. The main activity of SWIFT is to provide prompt, reliable, efficient, confidential and protected from unauthorized interference access to telecommunications services for banks and for works on standardization of forms and methods of sharing financial information.

SWIFT provides the following services:

- the exchange of standardized financial messages with a fixed set of symbols;
- transfer by the network of mass payments and other files with an arbitrary set of symbols;
- the exchange of secured financial messages of own formats in real time (“Online”, i.e. the departure time in the place where the starting point of transfer is located);
- union of structural units of the financial institution and its customers into a single virtual network (creating a closed user group), led by a member of SWIFT;
- obtaining online data about the state of the correspondent account.

Network payment messages as well as messages that are relevant to the treasury, securities and trade are sent by SWIFT. Financial SWIFT messages are classified into: system messages, client transfers and checks, transfers of financial organizations, money markets - forex, derivatives and deposits, collections and cash letters, securities markets, precious metals, letters of credit and guarantees, traveler's checks, money management and the status of the client.

Transmission of a message over the SWIFT network takes from 20 seconds to 5-20 minutes, while the high degree of reliability and confidentiality is provided (about 100%).

Every day in the world over 9 million SWIFT messages are transferred, total value of which is more than 7 billion dollars. Distribution of SWIFT messages in the whole world in 2011 is presented in Table. 6.1.

Table. 6.1.

Distribution of SWIFT messages (%)

Payments	52,9
Operations with securities	39,1
Forex transaction, money markets and derivatives	6,2
Documentary operations	1,4
System messages	0,4

Source: [2, p.129]

The main advantages of SWIFT are as follows:

- reliability. SWIFT takes on financial responsibility for the accurate and timely delivery of messages;
- speed. Message delivery is done within a few seconds, is completely automatic with verification and authentication;
- safety. SWIFT network ensures complete security by multilevel combination of physical, technical and organizational security methods, provides complete autonomy and privacy of transmitted messages;
- efficiency. All payment documents are received by the system in a standardized form that allows the automate processing, eliminate the possibility of different understanding of the meaning of messages by sender and recipient, and ultimately increase the efficiency of the bank. Fixation of transaction execution enables full control (audit) of all orders and daily automated report about them, besides, language barriers are being overcome and the difference in the practice of banking operations is reduced;
- profitability. SWIFT network allows significantly reduce settlement and financial risk, reduce the cost of communications and broaden the range of services for its clients, which in its turn increases the competitiveness of member banks.

From the perspective of users the main drawback of SWIFT is a high entry fee, which creates some problems for small and medium-sized banks. Generally, in practice, the cost of banks to participate in the SWIFT system is usually recovered within 5 years.

There are more than 50 national payment systems built, based on SWIFT.

Trans-European interbank system TARGET

The Trans-European Automated Real-Time Gross Settlement Express Transfer System – TARGET was created in the EU for servicing transactions between the ECB and national central banks. It began to function on January 4, 1999. It was organized in order to facilitate implementation of the single monetary policy, reducing transit time of cross-border payments, creating a safe and secure mechanism for cross-border payments, increasing the efficiency of payments between EU countries. Its basis is the system SWIFT. TARGET system is the decentralized system, i.e. cross-border payments go through national central banks, by passing the European Central Bank (ECB). It consists of the national Real-time gross settlement systems (RTGS) and system of interconnection between them and the European Central Bank (ECB). TARGET system performs such three main tasks:

- serves the needs of the monetary policy of the Eurosystem;
- increases the effectiveness of cross-border internal European payments;
- provides reliable and secure mechanism for the settlement of cross-border payments.

In TARGET the following types of payment transactions are processed:

- payments that are directly related to the operations of central bank, where at least one party (sender or recipient) is Eurosystem;
- payment transactions of netting systems of large transfers which are in euro;
- payments in euro between clearing banks;
- interbank and client payments in euro.

TARGET system operates with about 70% of the total gross European settlements. Over 200 thousand payments in the amount of approximately 1,500 million euro are made through it daily. The average size of one cross-border customer payment is 1 million euro, and of interbank – about 18 million euro [19, p.632].

Since January 2007 the implementation of the system TARGET 2 was started. Basis of TARGET 2 is defined by task of creating a single European payment area, which involves the harmonization of infrastructure, interfaces and functionality, consistency management system, the overall liquidity management system and uniform prices. In addition, the development of the system is influenced by EU enlargement, which involves the use of common platform for payment transactions for countries – new EU members instead of decentralized structures, including the national payment systems.

The principles of TARGET 2 formation are as follows:

- contacts with customers are decentralized (between the credit institution and its native central bank);
- accounting, management reserves and transactions are related to monetary policy and are implemented on the level of the national central bank.

Modular TARGET 2 implies the existence of compulsory and additional modules (systems). The compulsory modules provide a full range of services for conducting settlements and providing information about payment transactions. Additional modules allow making transactions with payment in a national central bank, managing customer database, using a data warehouse and providing the ability to control the minimum reserves.

PART 3. THE BALANCE OF PAYMENTS: THEORY AND STATE REGULATION

Chapter 7. The theory of the balance of payments

7.1. What is the essence of the balance of payments?

Balance of payments is one of the most important concepts of international economics. Its study provides a generalized assessment of the economic situation of the country, the effectiveness of its economic relations. Functionally the balance of payments acts as a macroeconomic model that systematically reflects economic transactions that are carried out between the national economy and economies of other countries. This model is made for the purpose of developing and implementing a reasonable exchange rate and foreign trade policy, analysis and forecast of commodity and financial markets, bilateral and multilateral comparisons, scientific researches, etc. On the basis of actual data of the balance of payments, the international financial institutions, particularly the IMF, make the decisions on the providing the particular countries with financial assistance for the stabilization of the balance of payments and to deal with its deficit.

The balance of payments is a statistical report in which in a systematic form the data on international transactions of residents of the country with residents of other countries (non-residents) for a certain period of time are summarized.

The balance of payments fulfills the following functions:

- gives an idea of the level of international interconnections of the country, structural changes in international transactions as it is a source of information;
- allows simulating the processes of macroeconomic development of an open economy, i.e. characteristic of the balance of payments in addition to practical, has scientific value;
- serves as a guide for government, who are responsible for economic policy, because monetary and fiscal measures as well as measures to stimulate competition, often are the result of the condition of balance of payments or international influence, which is fixed by balance of payments.

7.2. What are the formation principles of the balance of payments?

Balance of payments is based on certain principles arising from its purpose – to account the foreign economic operations. Economic operation is considered foreign economic if it occurs between the economy of one country and economies of other countries. Economic transactions that occur between residents and non-residents include agreements which subject is goods, services, income, external financial assets and liabilities. *The economic agreements,* by the definition of IMF, are the economic flow that reflects the transfer of real resources (transactions in goods, services and income) as well as the creation, the elimination of external financial assets and liabilities and/or the transition of ownership of the existing external financial assets and liabilities (transactions in external financial assets and liabilities).

Foreign economic transactions can be exchange and one-sided.

Most economic transactions that are recorded in the balance of payments, are exchange and presuppose that one participant of agreement transfers an economic value to another participant and receives its equivalent value in return. There are three types of international exchange transactions: 1) the exchange of goods and services for other goods and services (barter operations as both sides of these transactions are real); 2) the exchange of goods and services for cash or other financial requirements, i.e. one party of transaction is real, the other is financial; 3) exchange of financial instruments for other financial instruments, i.e. both parties of transaction are financial.

Transactions where one participant of agreement provides economic value to another participant without the return of value equivalent are called one-sided. If one of the parties has no economic value, then a special record called “transfer” is made in the balance of payments. Usually transfers have form of money or goods. Transfers appear, usually in the form of funds or goods. Depending on to which of these types belongs a particular foreign operation, its account in the balance of payments of the country is carried out.

The definition of the subject of foreign economic transaction is based on such a concept as **“economic territory of the country”**, which is identical to the concept of “economics”. Economic territory, by the definition of IMF, is a territory which is under the jurisdiction of the government of certain country, within which labor, goods and capital can freely circulate. However, this territory does not always coincide with the geographical boundaries of the state, because in its boundaries territorial enclaves outside the main state border are included: embassies, consulates, military bases, scientific stations, information and immigration or aid agencies that are located in other states and belong to the Government, which owns or rents them.

The term “economic territory” plays a significant role in determining the first principle of the balance of payments, i.e. **the principle of residency**. The concept of residency in the system of balance of payments is not based on the criteria of nationality or economic subject or on legal criteria for determining the residents of a particular state. Economic subject (economic unit), the center of economic interest of which is in the economic territory of a certain country is the resident of that country. The economic entity has the center of economic interest in the territory of particular country, if it has business and economic transactions within the country, and intends to continue this activity for a long time. Setting of resident units is important for the registration and classification of transactions within a particular economy. Position of worker as a resident and non-resident defines the various entries in the balance of payments.

According to the IMF classification, the residents of the economy include the following business units:

- households and individuals who are the members of the household;
- legal persons, i.e. companies of different legal forms;

- non-profit organizations;
- state administration bodies of the country.

The second principle of the balance of payments is **the principle of double entry**. Since the balance of payments is based on the principles of accounting, each foreign operation that is registered should be represented by two entries that have equal cost value: the item of credit and the item of debit. The items of Credit – Plus Items (+) – include operations of "Export type" due to which country receives, "earns" foreign currency. The items of debit – Minus Items (-) – include the operations of "import type" due to which foreign currency is spent. Credit shows the inflow of foreign currency, i.e. its proposal, while debit – spending of foreign currency, i.e. its demand.

Thus, according to the principle of double entry on credit, registers a decrease of international assets of the country or increase of its foreign liabilities (international liabilities), and debit registers increase of international country's assets or reduction of its external obligations. Each change in the debit must be accompanied by a corresponding change in the loan, and vice versa, that transaction is recorded twice: one transfer – both debit and the second – as a loan. Thus, total debit and total credit are always equal in the balance of payments. In a systematic view rules for recording the transactions in the balance of payments by debit and credit are given in Table. 7.1.

Table. 7.1.

Rules of recording transactions in the balance of payments

Operations	**Credit (+)**	**Debit (-)**
A. Goods & Services	Export of goods and services	Import of goods and services
B. Incomes (wages and investment income)	Revenues from non-residents	Payments to non-residents
C. Transfers (current and capital)	Receiving the funds	Transfer of funds
D. Purchase / sale of non-productive non-financial assets	Sale of assets	Purchase of assets
E. Operations with financial assets or liabilities	The increase in liabilities of non-residents or decrease in requirements for non-residents	The increase in requirements for non-residents or decrease in liabilities of non-residents

The third principle of the balance of payments is the **principle of a unified evaluatio**n of all transactions that are recorded in the balance of payments. Its essence is that for evaluation of transactions with real and financial assets and liabilities the market prices are used that are consistent with the participants of economic transactions. Market price, as defined by IMF – is the amount of money the buyer is ready to pay for goods, services, etc., that are purchased from a seller, who is ready to sell him the product, service, financial assets. Both parties of this agreement are independent, and the exchange between them is carried out on a commercial basis. The market price is established for each operation. The market price is different from stock quotes, world market prices, current prices, i.e. prices are not the prices actually paid for the goods. There are times, when the market price cannot be set in accordance with the above criteria. This occurs during barter exchange of commodities, agreements between departments of the same multinational corporation, at international leasing operations, etc. In these cases, the evaluation of transactions is carried out at prices of similar agreements. Following this principle ensures the comparability of the balance of payments in different countries and items of balance of payments of each country.

The fourth principle of the balance of payments is **the principle of simultaneous registration** of foreign economic operation. Each operation must be reflected in the balance of payments on credit and on its corresponding debit simultaneously. Both parties of the agreement must record this transaction on the same date that corresponds to the date of its execution. To implement this approach, it is necessary to determine the time of registration by the balance of payments. This moment can be the time of conclusion of the contract or time of transition of legal ownership on assets that are transferred. If the time of transfer of ownership is difficult to determine, it is considered the moment of appropriate accounting entry into account of contractors.

During the compilation of the balance of payments it is important to establish the monetary unit in which the records should be keeps, i.e. to determine the unit of account (estimated exchange rate). The unit of account should be quite stable, so that changes in its course during the accounting period were not reflected in the totals; in addition, it must be stable for the largest possible number of accounting periods to ensure comparability and analysis of their dynamics. During preparing the balance of payments we should use the unit of account, which is used by them in internal calculations and accounting. According to the IMF, it is necessary to make the balance of payments in national currency, and then recalculate the indicators in the unit of account (USD) for the free-market exchange rate. However, it is necessary to note that the compilation and publication of the balance of payments in most countries is carried out in U.S. dollars.

Information sources of the balance of payments are:

- the data of the State Statistics: Data of national accounts, generalized statistics on foreign trade in goods and services, statistical reporting accounts of direct and portfolio investment, quarterly reports on foreign trade in goods at prices FOB and SIF in geographical terms, indices of consumer and wholesale prices, the cost structure of export industries, data on informal trade;

- the information of the state bodies on economic policy: forecast calculations of the dynamics of key macroeconomic indicators, information on the economy as a whole and for individual sectors, reference prices of basic goods and services exported and imported, data on terms of trade, data on trade regime;

- the information of the State Customs Service: the data on exports and imports of goods and humanitarian aid assessment, the data on non-formal (or spontaneous) trade.

7.3. What are the standard components of the balance of payments?

Development of the balance of payments is based on a methodology that is regulated by international standards “Balance of Payments and International Investment Position Manual”, prepared by the IMF [25]. It is updated periodically, is reviewed and published. Last, the sixth edition of the Recommendations was published in 2007.

The basic standard components of BoP are listed in the Table. 7.2.

Table 7.2

The standard components of BoP (according to IMF)

Items	**Credit**	**Debit**
Current Account		
A. Goods and services		
1. Goods		
2. Services		
Б. Incomes		
1. Wages		
2. Investment income		
B. Current transfers		
1. Public administration sector		
2. Other sectors		
Capital account and financial account		
A. Capital account		
1. Capital transfers		
2. Acquisition/disposal of non-produced non-financial assets		
Б. Financial account		
1. Direct investment		
1.1. Outward		
1.2. Inward		
2. Portfolio investment		
2.1. Assets		
2.2. Liabilities		
3. Other investment		
3.1. Assets		
3.2. Liabilities		
4. Reserve assets		

The distribution of BoP on standard components (sections) is based on such approaches:

- each item should have characteristics, i.e. factor or the set of factors that affect the amount of one item should be different from the factors that affect the other items;

- the presence of a particular item in BoP should be set for a group of countries, which is reflected as changes in the dynamics of this item and in its absolute value. In other words, if any balance of payments varies significantly over time in either group of countries it is a significant percentage of the balance of payments of the group; it must be isolated in a separate item;

- gathering the information for the account by the items should not have particular difficulties for preparers of balance of payments;

- the structure of the balance of payments must be such that its values were connected with other statistical systems, such as the system of national accounts;

- the number of items should not be too numerous, and the item should be subject to consolidation into the components of a higher level.

The standard components of BoP are divided into two groups of accounts: the current account, which accounts the economic transactions on the international movement of real material assets, and the capital account and the financial account that accounts the international transactions related to the changes of ownership on foreign financial assets or liabilities of the country (especially these are the operations, which essence lies in the presentation and settlement of financial claims of one country to other countries and vice versa).

7.3.1. What is the essence of items of current account?

The current account includes all operations with real values that occur between residents and non-residents, and operations related to the free provision or receiving of values that are designed for current use. There are four main components in the structure of the current account: goods, services, and income and current transfers. Export transactions are recorded on credit side, import – on debit side. Current account includes transactions that are completed during the period. If they are reflected in BoP in future periods they do not have any effect on it.

Let's consider the main types of current operations in more details.

1. **Under the goods** the group of items of BoP is meant, which summarizes market prices on exports and imports of ordinary goods and goods for further processing (goods that cross the border for further processing, after which they return to the country - owner of the goods), repair of goods (the cost of repairing mobile equipment), the purchase of goods in ports by transport organizations (fuel, food, inventory and auxiliary materials).
2. **The services** provided by residents to non-residents and vice versa include:

▪ Transportation (freight and passenger transportation by all types of transport, related services, support services, which include rental of vehicles with a crew, storage, loading, unloading, vehicle maintenance, pilot services, commission payments, agency services, associated with passenger and freight transportation);

- travels (the value of all types of goods and services purchased by visitors: payments for tours, for accommodation, purchase of goods for personal use, private transfers from abroad to non-residents, cash exchange sold for travel, etc.)
- communications services (telecommunications, telephone, radio, email, satellite, telex, TV communications, postal services);
- construction services (construction objects equipment installation and repair of buildings and facilities);
- insurance and pension services (insurance, which are made by residents to non-residents);
- financial services (financial intermediaries, receipt or payment of fees for operations of letters of credit, bankers' acceptances, securities, asset management, financial leasing and maintenance of correspondent accounts, etc.);
- other services (computer, informative, royalties and license fees, services to individuals, services in the field of culture and recreation, government services, i.e. foreign trade embassies, consulates, military missions, as well as various types of business, professional, technical linked to the research activities and services).

3. Income. This is a group of items, which includes payments between residents and non-residents related to the wages of non-residents, and operations, related to investment income.

Wages include salaries and other benefits, received by workers and employees outside the country where they are resident, for work, performed by them for residents of other countries.

Income from investments is divided into:

- income from direct investment: from share participation in the capital of the company (dividends, distributed and undistributed profits of foreign branches, reinvested earnings) interest on debt liabilities (interest paid to direct investor by enterprise of direct investment and vice versa);
- income from portfolio investment: cash flows between residents and non-residents as a result of buying and selling stocks, bonds, long-term securities, government bills and other instruments of the financial market;
- income from other investments: interest (receipts and payments) in other financial requirements and obligations (interest on deposits, loans from the IMF).

4. Current transfers. This item reflects the operations of interstate transfer of material resources, when in return the country does not receive any cost substitution. Depending on the direction transfers appear only on credit or debit.

Current transfers include: cash transfers to governments to finance expenditures, humanitarian aid, and regular contributions to international organizations, government fees or costs for international organizations to provide technical assistance.

7.3.2. What is the essence of items of capital and financial account?

Capital and financial account fixes the movement of capital, export and import of goods and services are financed with the help of which. It is divided into the capital account and the financial account.

The capital account includes capital transfers and acquisition/disposal of non-produced non-financial assets.

Capital transfers are the transfers that involve the transfer of ownership to the fixed capital or debt relief by creditor. These include investment transfers (funds transferred by one country to another with the purpose of payment of fixed capital purchase: buildings, structures, airfields, airports, communication networks, hospitals, etc.), transfers related to migration (migrant remittances, cost valuation of migrants' property that moved from country to country), debt cancellation by creditor (written off all or part of the debt by the bank and other state or private entity), private donations for investment purposes (for example, transfer of inheritance bequeathed to finance the construction of hospitals).

The item "Acquisition/disposal of non-produced non-financial assets" includes operations with assets, which are not the result of production (land, its subsoil) and intangible assets (acquisition of patents, trademarks, copyrights).

The amount of transactions that reflected on this account is usually insignificant.

The ***financial account*** shows all transactions in the result of which there is a transition of ownership to external financial assets and requirements of the country in which, that is the emergence and repayment of financial liabilities between residents and non-residents.

The financial account is divided into two classification groups, including transactions with financial assets and transactions of financial commitments (liabilities). Both groups are divided into three functional categories: direct, portfolio and other investments. The composition of assets also includes such category as reserve assets.

Accounting of direct investments is carried out depending on their orientation: investments of residents abroad showed separately (capital outflow) and investments of non-residents in the domestic economy (capital inflow).

Direct investment is divided into share capital (the purchase of shares of branch and associated establishments), reinvested earnings (inverse investments of part of undistributed in the form of dividend income) and other investments (typically intra-firm crediting by company of its subsidiary and associated companies).

Thus, capital in the form of direct investment is: 1) the capital invested by direct investor in foreign enterprise of direct investment and 2) capital obtained by direct investor to participate in this enterprise.

Portfolio investments are divided into two groups: operations with foreign securities (operations with financial assets) and domestic securities transactions (transactions with financial liabilities).

Depending on the type of financial instrument, transactions with portfolio investments are divided into:

1) securities transactions, confirming participation in capital (transactions with shares, certificates of participation, ADR);

2) transactions with debt securities, confirming the right of the creditor to collect the debt from the creditor: a) bonds and other long-term or perpetual debt,

b) in foreign exchange market instruments, i.e. treasury bills, promissory notes, banker's acceptances, short-term certificates of deposit, and c) financial derivatives (options, futures, swaps).

The category of "Other investments" includes trade and bank credits and loans, including credits and loans from the IMF and the international financial institutions, financial leasing agreements, cash currency and deposits and other short-term assets/liabilities.

During the considering the capital account it is necessary to pay attention to the fact that usually crediting abroad is called "the export of capital" and foreign loans – "the import of capital". However, crediting of foreigners is import, as investments in other countries (capital outflows) mean expenditure of foreign currency reserves decrease, and thus reflects on the debit side. Getting credit (capital inflow) is an export operation, as foreign investment increased reserves of foreign currency, and therefore reflects on the credit side. So, if export of goods increased and import reduces reserves of foreign currency, the outflow (removal) of capital, i.e. investment in other countries, means spending, reducing foreign currency reserves and inflow (import) of capital, i.e. investment from other countries increases the reserves of foreign currency.

7.3.3. What are the reserve assets?

The most important part of the financial account is ***reserve assets***, which include external assets of the country under the control of monetary authorities and that can be used for direct financing o0f the balance of payments deficit or for the interventions on the foreign exchange market to support the national currency rate at any time.

Reserve assets include:

- monetary gold, which is at the disposal of the central bank or the government of the country and can be implemented on the global gold markets or international organizations in foreign currency;
- Special Drawing Rights (SDRs) – the reserve asset issued by the IMF, which is shared between the member states in accordance with their quotas. It is used to purchase foreign currency, allocation of credits and carrying out of payments;
- reserve position in the IMF, that is the amount of the country's reserve share in the capital of the IMF (25% quota of the country in the capital of the Fund);
- currency assets, which consist of foreign currency, bank deposits, government securities, shares in companies, financial derivatives. Currency assets have the largest share in the structure of reserve assets;
- the other claims that include the remainder of claims in the foreign currency.

Foreign currency reserves determine the extent of the solvency of the country.

As the balance of payments is a financial report of double entry, the debit balance of all structural parts must exactly correspond to the credit. However, such compliance is rare in practice due to incorrect entry or lack of records of certain transactions. The item *"errors and omissions"* is used to achieve balance and maintain the double entry system. This item is the balancing item and represents the difference between the amount on all credit entries and the sum over all debit entries that reflect the temporary and cost differences.

7.4. How are the items of balance of payments balanced?

The principle of the balance of payments (BoP), when debits equal the loan, often does not satisfy economists and it is required the balance of aggregated groups of operations within the overall balance to develop specific measures. Therefore, the balance of payments consists not only in the neutral form (in accordance with standard components), but also in analytical form. The main parameter that is used to analyze the balance of payments is the balance of BoP.

Due to the definition, the BoP is always in balance. However, the analysis of the balance of payments uses notions such as "active (surplus)" or "passive (deficit)" balance of payments. International Monetary Fund proposed the method for determining the deficit or surplus on the basis of the distribution of its items on independent (main or "articles over line") and balancing (compensation or "articles below line"). Thus, the balance of payments is divided into autonomous balance (basic) transactions and balance of balancing transactions. Autonomous transactions include all private and public transactions that are undertaken without regard to the balance of payments, the implementation of which is not intended to influence it. The actions of state bodies, especially of the central bank, are understood under balancing transactions that are caused by the state of balance of payments, i.e. that are used to finance the pre-autonomous transactions. Thus, the basis of the distribution of transactions is the criterion of their motivation. Balance of autonomous items is called "balance of BoP", and depending on the positive or negative this value, the balance of payments is defined as active or passive. The balancing items are used to cover the balance of BoP. Thus, the concept of balance of BoP does not apply to the entire balance of payments, and to its constituents is to balance up a particular set of transactions.

There are analytical groups of items of balance of payments, an appropriate balance is the result of which:

- the trade balance;
- the balance of services trade;
- current account balance;
- base balance;
- total balance or the balance of official settlements.

The *trade balance* is the difference between the payments of exports and imports of goods. If exports exceed imports, it creates a "positive balance" of trade balance. If import exceeds export, there is a trade deficit or "negative balance" of trade balance. In the most general terms, the assets and liabilities of the trade balance are associated with an increase or decrease in demand for products of the country on the world market that is the economic conjuncture of the world market. The excess of exports over imports shows increasing global demand for the country, and domestic buyers prefer domestic products, which indicate the good state of the economy. In contrast, the deficit (negative balance) indicates the lack of competitiveness of the products of the country on the world market and excellence in the country of import.

However, the trade balance may be affected by other factors such as a favorable investment climate, which can cause the inflow of investments into the country, and the increase in purchases of equipment abroad, which could lead to trade deficit. In this case, the trade deficit is accompanied by economic growth. Trade deficit may be covered, for example, by earnings from sale of licenses, from tourism, remittances of foreign workers.

The *balance of services trade* is the movement of services and non-commercial payments, classified as “invisible” exports and imports, comparing of which forms the balance of “invisible” transactions.

Balance on current account is the most informative. It displays all transfers of assets that are associated with the movement of goods, services, investment earnings, transfers, and provides a link between the international treaties of the country and its national income. The positive balance on current transactions means that the country is a net investor in relation to other countries, and the negative balance indicates that the country is a net debtor, i.e. it should pay for the net imports of goods.

The balance of current account and balance of operations with capital and financial instruments represents *base balance*, excluding short-term capital and the reserve assets. The balance of the basic balance is defined as the sum of operations of these two balances. The balance can be both negative and positive. The negative balance often leads to the depreciation of the currency and reduction of reserve assets. All agreements of current account balance and balance operations of long-term capital are autonomous (basic) and are displayed in the main articles. Base balance shows the most important characteristics of the economic area: the level of international competitiveness, investment climate, consumer preferences, labor productivity, level of its pay, etc.

Operations with reserve assets are balancing and create *the balance of official settlements*.

The balance on current account and flow of capital (total balance) is balanced by the aggregate amount of official reserves, i.e. it is balanced by reserve assets (compensatory articles). So, if the payments of the country (debit transactions) are not covered by foreign currency inflows (credit transactions), than the negative balance shows a deficit of balance of payments. An equal credit balance in the balance of official reserves must offset this deficit. The amount of covering of the deficit by reserves shows a reduction of currency reserves of the country. The positive balance of BoP (total credit exceeds the total debit) must be compensated by an equal debit balance of official reserves.

Chapter 8. State regulation of the balance of payments

8.1. What is the essence of the concept of economic equilibrium of balance of payments?

The balance of payments is in equilibrium state when the national economy is well adapted to the global economy. Under the equilibrium we can understand the stable relationship between the economic indicators such as demand, supply, and prices of certain goods. Although the balance of payments is the balance sheet but it is not always in a state of equilibrium. Prices, income, exchange rates and other macroeconomic indicators of country vary to restore a stable relationship with another world in case of disequilibrium of the balance of payments. Thus, the concept of the balance of payments equilibrium is the concept of market alignment.

The balance of payments is influenced by various internal and external factors, the effect of which is not the same length of time. There is long-, medium- and short-term balance of payments equilibrium [2, p.57].

Long-term equilibrium provided with the lack of balance of trade in goods and services for a long period of time. Active balance of current account indicates that the country earns on external markets more than it spends. A negative balance indicates that this country spends more than it earns on external markets. The result for the current transactions has to be financed in certain way of capital movement to achieve balance: net credits from non-residents used to finance the deficit, and the surplus goes to residents crediting. Current account balance indicates the international financial position of the debtor country or creditor. Country of prolonged current account deficit is a net debtor, the country that has for a long time active current balance is net creditor. Thus, the presence of balance is a measure of disequilibrium of balance of current transactions.

Medium-term equilibrium of balance of payments equilibrium is provided by the absence of total balance of the current account and the balance of long-term capital, i.e. the lack of balance in base balance from three to five years. This balance is maintained by the mechanism of long-term crediting. Breaking medium-term equilibrium is defined by the base balance state, the balance of which indicates the degree to which it is financed by long-term capital. It is believed that the basic balance is unreceptive to factors of the short-term actions, such as, for example, fluctuations of exchange rates and interest rates, and more exposed to non-monetary economic factors (long-term changes in the distribution of resources in the branches of production and their prices, labor productivity, tastes and consumer preferences, etc.). Credit or debit balance is the evidence of medium-term equilibrium breach, which necessitates an appropriate adjustment of the country's economic ties with the world economy.

Short-term equilibrium of balance of payments is observed in the absence of balance of official settlements balance. This occurs in the case when the state monetary institutions do not use official reserve assets.

Balance of payments equilibrium can be broken because of the imbalance of international payments for the following reasons:

- seasonal or random imbalance. Seasonal imbalance appears as a result of seasonal fluctuations of production and consumption that do not coincide in time. Seasonal variations are not long-lasting, and the deficit in one period is compensated by an excess in another one. Random imbalance is caused by unforeseen non-economic reasons. For example, flood or earthquake can cause an increase in imports, and adverse weather conditions – reducing agricultural exports;
- cyclical imbalance, which is based on the cyclical nature of economic conjuncture. As a result, there are periodic changes in supply and demand on world markets;
- structural imbalances, based on a gap between changes in the demand for exported and imported goods, and not a quick adaptation of the national economy to new conditions;
- imbalance, as a result of destabilizing currency speculation and capital outflow. These are different phenomena by their nature, but usually take place at the same time;
- imbalance of other reasons. For example, an imbalance may occur due to an unrealistic exchange rate or technological and other changes in the economy transition from one stage of development to another.

8.2. What are the main economic factors that influence the balance of payments?

The main economic factors affecting the balance of payments are: inflation, the real rate of GDP growth, interest rates, exchange rates of "spot" [30, p. 71].

Comparative increase in the price level in the country affects the competitiveness of its products and services. Goods and services that are produced domestically are expensive to foreign buyers. As a result, there is a reduction of export. However, there is increased import due to increased prices for domestic goods. This means the reduction of the inflow and the increase of outflow of currency.

High rates of GDP also lead to an increase in imports of goods and services. The high growth rates of GDP mean increase of the level of incomes in the country, some of which will be spent on imports.

Interest rates affect the movement of capital. Increasing interest rates may lead to capital inflows, decline – to capital outflows.

High current spot rate of foreign currency prevents the import operations and facilitates export operations in terms of floating exchange rates. The low exchange rate favors import and hinders export.

The effects of BoP disproportion can be both negative and positive.

Negative consequences include: total debt, lack of necessary reserve stock of foreign currency, reducing overall welfare in the passive balance of payments. The positive effects are: the ability to develop rapidly by attracting foreign investment, the compensation of trade deficit by attracting long-term capital. Alternative solved problem: economic growth, an increasing employment, the fight against inflation.

The negative consequence of the active BoP is the depreciation of financial assets that are accumulated, giving rise to the need to develop a program of spending of excess funds. This program may include the stimulating of the acquisition of foreign ownership, the development of foreign tourism, the revaluation of the national currency and so on. The positive result is the accumulation of currency liabilities in foreign currency, which allows the extra stabilization of the state of the country in case of natural disasters, temporary crop failures, declining in production.

8.3. What are the measures of the government regulation of the balance of payments?

The balance of payments cannot always be in a state of disequilibrium and therefore it is the subject to state regulation. The material basis for this regulation is considered official gold currency reserves, the state budget, the country's participation in global economic activity as an exporter of capital, the creditor, borrower, guarantor, and the regulation of foreign economic activity by means of laws and regulations.

The state regulation of the balance of payments involves a set of currency, financial, monetary measures, aimed to the creating of major items of balance of payments and to cover its balance.

These measures are intended to stimulate exports, reduce imports, attraction of capital in the country and limitation the outflow of capital [2, p. 60]. They include:

- deflationary policies, which aim to reduce domestic demand by limiting budget expenditure, mainly for civilian, needs, freeze prices and wages. Important instruments of this policy are considered to reduce the budget deficit, the change rate of the central bank, credit limits, setting limits to the growth of the money supply;

- the devaluation of national currency depends on the specific conditions of its implementation and financing and general economic policy. The role of this process is the regulation of the balance of payments;

- the introduction of currency control and of the restrictions on currency transactions. The blocking of currency earnings, the licensing of sales of foreign currency to importers, the concentration of currency transactions at authorized banks are aimed at eliminating of deficits of BoP by the limiting of the export of capital and stimulating its inflow, and restricting the imports of goods;

- the financial and monetary policies. Using of a budget export subsidies to exporters, increasing of import duties, the abolition of tax on interest, paid to foreign owners of securities for capital inflows into the country, etc. helps to reduce deficits of BoP.

The government uses a variety of financial, credit, currency, including the revaluation of currencies, measures to promote the growth of imports and reduction of exports of goods and services, to increase exports and limit imports of capital for the eliminating of excessive active balance of BoP.

The exchange rate regime impacts to achieve the equilibrium of BoP. If fixed exchange rate is implemented, the rebalancing occurs directly under the articles of BoP. According to a floating exchange rate, equilibrium is restored on foreign exchange market and exchange rate changes until it is aligned to demand and supply of foreign currency within the current and long-term capital transfers.

There may be a situation in the country, when the government is unable to settle the balance of payments. It results in delay of payments, interruption of financing. There is a so-called balance of payments crisis. In this case, a country may resort to ***exceptional financing***, i.e. the transactions, which are conducted by the country that has some difficulties in the financing of the BoP deficits, and are provided with the agreement and support of its international partners in order to reduce the negative balance to a level that can be financed by traditional methods (use of reserve funds, etc.). In other words, exclusive financing includes financial agreements concluded by the authorities of the country to resolve balance of payments problems. The basic operations of exclusive financing are:

- the transfers. For example, partial or total cancellation of debt obligations in accordance with an agreement, concluded between the creditor and the borrower; other intergovernmental transfers, including transfers from international organizations (grants in cash);
- exchange of debt on participation instruments in capital, such as shares of companies of the country-debtor;
- the loans for balance of payments adjustment (including by using issue bonds), which are carried out by state management or the central bank;
- the restructuring of debt that involves changing the terms of existing debt contract or the conclusion of a new agreement with the continuation of debt service payments;
- late payments on debt: countries do not pay the proper amount on external liabilities with the consent of the creditor or without it.

8.4. What is meant by the international investment position of the country?

The balance of payments shows only flows of real and financial resources between residents and non-residents during specified period (quarter, year), reflects the changes occurring only as a result of economic transactions. These flows accumulate and form deposits that are recorded in the so-called balance of international debts. The balance of international debts is a ***country's international investment position***, which characterizes the overall cost and structure of external financial assets and liabilities of the country by the accrual sum at the end of the year. Thus, by definition of the IMF, international investment position is a statistical statement that shows the value and composition of financial assets of residents of a country, that are the claims on non-residents and liabilities of residents of the country to non-residents at a certain time [3].

The structure of the international investment position indicators corresponds to the structure of the financial account of BoP. For the classification of the items of the international investment position can be used:

• functionality or type of investment: direct investment, portfolio investment, financial derivatives and other investment, reserve assets;

•the type of financial instrument: different classes of equities, debt instruments and other financial assets and liabilities;

•the institutional sector of the domestic economy;

• the maturity of the debt liabilities: short-term or long-term, with an original or other maturity;

• currency: national, foreign, SDR;

• the structure of interest rate of debt instruments: fixed or floating.

It should be meant that the institutional sector, maturity and currency are used for the analysis of financial stability and vulnerability.

Changes in the investment position compared to the previous period can be caused by the economic transactions with the assets and liabilities, with revaluation of assets and liabilities as a result of changes in exchange rates, prices, etc., and as a result of other actions (such as the donation of financial resources transfer). The calculations of the international investment position are used to predict the future stream of payments of foreign investment.

The relation between international financial resources, which country has and the countries' debt to other countries (i.e. matching of assets and liabilities of the country), forms a ***net international investment position***. Net investment position is the equivalent to the share of national wealth, which was given or taken into credit from the outside world (non-residents). It defines the country's economic dependence on the outside world and shows the relationship between foreign assets that the country has, and the debt to other countries. The excess of liabilities over assets indicates that a country that is international investment position is the "net debtor" to the outside world. The excess of foreign assets over liabilities to the outside world points to the "net creditor". The level of net investment income of country for its foreign assets and liabilities is determined on the basis of the net investment position.

The international investment position is calculated in U.S. dollars for the international comparability.

PART 4. INTERNATIONAL FINANCIAL MARKETS

Chapter 9. International foreign exchange market

9.1. What is the essence of the international foreign exchange market?

International foreign exchange market is the largest financial market in the world and takes an important place in the ensuring of correlation between the components of the global financial market.

Foreign exchange market is the system of currency and organizational relationships, related with switching currency operations, international payments, and provision of loan in foreign currency under certain conditions.

There are the following peculiarities of this market:

- it is non-material;
- it does not have a concrete location and single center;
- mechanism of its functioning is an exchange of the currency of one country for the currency of another country;
- there is complete freedom of immediate opening or closing of any position, the opportunity to trade 24 hours online;
- it is the interbank market;
- it has a flexible system of trade organization and flexible strategy of payment for conclusion of agreement;
- it is one of the most liquid markets due to the possibility of work on it with different currencies;
- it is global due to the process of telecommunications and informatics.

There are the following functions of foreign exchange market: the implementation of international settlements; the insurance of currency risks; the providing of crediting in foreign currency; the diversification of currency reserves of banks and states; the obtaining of speculative profit by market participants; the impact on government regulation of the national economy and monetary policy coordination at the level of the world economy [9, p.110].

The participants of the international foreign exchange market are commercial banks, corporations that are engaged in international trade, non-bank financial institutions (asset management firms, insurance companies), and the central banks. However, the main participants of the international foreign exchange market are commercial banks, because the most transactions with currencies involve exchange of bank deposits, denominated in different currencies.

The main product of this market is a foreign currency in different forms: currency deposits, any financial requirements, identified in the foreign currency. The operations with currency demand deposits prevail on the foreign exchange market.

Demand deposits are the money, used in currency trading among banks operating on the foreign exchange market. Banking dealers hold foreign perpetual deposits in foreign currency in correspondent banks, located in countries where this foreign currency is national.

Bank in any country may sell foreign currency, giving the orders to foreign employees to transfer deposits to the buyer. The purchase of currency is carried out similarly. In this case, the seller puts it on the buyer account in a bank, located abroad. Currency transaction acts in some way. For example, an American firm has to pay 200 thousand euro for delivery of the goods to the German firm. The company instructs its bank to debit a dollar bill and pay that sum, transferring it to the supplier to the German bank. American Bank transfers dollars at the exchange rate from the account of U.S. firms on the German bank debit in exchange for deposits in euro, which will be used to pay for the German supplier.

International foreign exchange market consists of a number of national markets. There are three levels of the foreign exchange market operations:

1st: Retail trading. These are the operations in one national market, when the bank-dealer directly interacts with customers.

2nd: Wholesale interbank trading. These are the operations in one national market when two banks-dealers interact through currency broker.

3rd: International trade. These are the operations among two or more national markets where banks-dealers from different countries interact with each other. Such operations often involve arbitrage operations on two or three markets.

Depending on the level of organization of foreign exchange market, there are exchanging (organized) and off-exchange (non-organized) foreign exchange markets. *Exchanging market* is represented by the exchange market (currency exchange), and *off-exchange* (interbank) is represented by banks, financial institutions, enterprises and organizations.

Functions of exchange market consist in determination of the demand and supply of currency, establishment of exchange rates, forecasting of their dynamics, determination of the reference exchange rates, as well as in formation of the strategy and tactics of the country's central bank concerning the financial and monetary policy and currency regulation system. Agreements of the current nature as well as durable ones are concluded on the foreign exchange markets. Exchange market is small due to its volume, as it functions primarily as a national foreign exchange market (approximately 10% of all currency transactions are concluded on it).

The activity of interbank market is directly related to the implementation of currency transactions. Interbank exchange rates, i.e. rates that banks ask from each other, are established on this market. Interbank “wholesale” rates are lower than “retail” rates for customers. The difference is the income of the bank for the service. The interbank market takes about 90% of the turnover of foreign currency.

Any two currencies can participate in the operations with foreign currencies, but most interbank operations are the operations with exchange currency for the U.S. dollar, which is considered as a key currency. Euro, Japanese yen, Swiss franc, British pound sterling also play an important role on the foreign exchange market. The demand for these currencies is occurring every second, as opposed to other currencies.

International foreign exchange market operates with significant amount of money. Its volume exceeds 700 trillion dollars per year, the daily turnover amounted approximately 4 trillion dollars in 2010, 5 trillion dollars in 2011, in 2020 it is predicted an increase in the daily operations till 10 trillion dollars, while the Asian market is about 20% of all transactions, 40% – on European, and 40% – on the U.S. [14, P.246].

According to the nature of operations, foreign exchange market is divided into the markets: spot, forward, swap, futures and options.

9.2. What transactions exist on the international foreign exchange market?

The different types of agreements on switching currency operations are concluded on the international foreign exchange market.

Switching currency operations are the agreements, concluded on the foreign exchange market for buying and selling a certain amount of currency of one country for the currency of another country at an agreed exchange rate on a certain date. The purposes of switching currency operations are:

- currencies exchange in international trade, in the implementation of tourism, migration of capital and labor;
- the speculations (to get profit from changes in exchange rates);
- the hedging (protection from currency risks and from the potential losses from changes in exchange rates), which improves conditions of concluding of international trade and investment agreements. In this way hedging is the stimulation of international flows of goods and capital.

Switching currency operations include:

- operations with immediate delivery of currency (current switching currency operations), which are divided into operations “tod” with today value date, “tom” with tomorrow value date, “spot” with value date in two working bank days;
- terminable switching currency operations, which are divided into forwards, swaps, futures, options.

9.2.1. What are spot transactions?

Spot market is the market, where the transactions of current and immediate (or cash) currency exchange between two countries are carried out. The two parties agree to exchange the bank deposits and carry out an agreement on the second working day from the date of conclusion of the exchange rate, fixed at the time of the conclusion of agreement. Now, by the request of customer, the currency converting is carried out on the date of the conclusion of agreement by electronic means.

The exchange rates of immediate exchange of currencies are called current (spot) rates. These operations create cash foreign exchange market.

The spot agreements are the basic currency operations, the spot rates– are the basic rates. The other agreement rates on the foreign exchange market are calculated on the basis of spot rates – cross-rates, forward and futures contracts rates.

Two prices (rates) of currencies are used during the exchange of foreign currency: the rate of the buyer and of the seller. When you buy the currency at a bank or the dealer to pay for the currency higher price than the one for which you can sell the same amount of currency the same bank or dealer.

Banking and dealer *rates of buyer* are those prices, which the bank and dealer are ready to pay for foreign currency. *Rates of seller* are the prices by which bank and dealer are ready to sell foreign currency. These two rates are quoted in pairs. For example, if a bank quotes dollar as 5.437 – 5.598, it means that it is ready to buy dollars at 5.437 UAH for 1 dollar and sell them at 5.598 UAH for 1 dollar. Higher price always refers to the seller price, and lower –to the buyer price. The difference between these rates is called the *absolute spread*. It is used to cover the cost of bank and for the insurance from currency risks. Under the condition of instability of foreign exchange market or during the currency crisis, spread may increase from 2 to 10 times, compared to “normal” spread – 0.05-0.09% of quoted rate.

The relative spread can be calculated as the difference between the seller and buyer quotations, calculated in relation to the seller price, i.e. in percentages:

$$\frac{Seller\ price - Buyer\ price}{seller\ price} \times 100\%$$

The size of spread is influenced by such factors: the status of the contractor and the nature of the relationship between contractors (the size of spread is more narrow for constant and reliable bank-contractors); market conjuncture (the size of spread is usually higher during rapid changes in exchange rates); quoted currency and market liquidity (the size of spread is higher during the quotation of rare currency or by agreements on less liquid market); the amount of the agreement (a smaller spread is used under agreements for large sums).

Currency operations of immediate delivery are the most common and accounts for approximately 60% of the currency agreements on the interbank market. These operations must be fulfilled by subjects. They are used primarily for the immediate receipt of currency for foreign trade payments.

Banks give necessary foreign currencies to their customers; provide the flow of capital and the implementation of arbitrage and speculation operations with the help of spot operations.

9.2.2. What are forward contracts?

Forward market is the market, where the terminable currency transactions with foreign currency are carried out. Terminable (forward) transactions are the contracts, which are the agreements of two parties about the delivery of agreed amount of currency over a certain term after conclusion of the agreement at the exchange rate, fixed at the moment of its conclusion. Forward agreements are concluded out of exchange and are obligatory for execution unlike the futures and options.

The interval in time between the moment of conclusion and the execution of agreement can be from 1-2 weeks, from 1 to 12 months, to 5-7 years. Exchange rate of the forward agreement is called the forward exchange rate. It is fixed in the moment of conclusion of the agreement.

Exchange rate on the terminable transactions differs from the spot rate. The difference between the spot and forward rates is defined as the discount from the spot rate, if the rate of forward agreement is lower, or premium, if it is higher than the spot rate. The premium means that the currency is quoted more expensively on the terminable transaction than on the cash transaction. The discount means that the exchange rate on forward agreement is lower than on the spot agreement.

The size of forward premium/discount is calculated by formula:

$$FD = \frac{(FR-SR)}{SR} \times \frac{360}{t} \times 100, \quad (9.1)$$

where FR and SR –forward and spot rates;

t – validity (in days) of forward contract.

Forward agreements are carried out for the following purposes:

- the real sale or purchase of currency;
- currency exchange for commercial purposes, advance sale or purchase of foreign currency to insure currency risk;
- insurance of portfolio or direct investment from risk, which is related with a decrease of the exchange rate;
- getting of speculative profit due to differences in the exchange rate.

Speculative operations can be performed without a currency.

Forward market is narrower than the market of cash transactions (it makes 10% of trade in currency values). Mostly, forward agreements are carried out with major currencies, by large corporations or banks with a stable credit rating.

The rate expectations (increasing or decreasing rate) are not always justified, in case of conclusion of forward agreements. Thus, forward contracts are not always appropriate or not available in all types of businesses. Many businesses and most individuals are looking for alternatives to forward contracts. One of these alternatives is the swap agreement.

9.2.3. What are currency swaps?

Currency swap is a combination of the current (cash) and terminable transactions, i.e. the combination of spot contract of selling the currency (immediate supply of currency) and simultaneous forward contract of purchasing of the same currency for a certain period of time. Cash agreement is carried out on the spot exchange rate in swap transactions. The spot exchange rate in the forward contract is adjusted for premium or discount, depending on the movement in exchange rates. So the swap rate is created on the market of currency swaps. It is the difference between the spot rate and the forward rate. Swap transaction may be signed with one contractor, when both conversion transactions are carried out with the same bank, or with different contractors. Two opposing agreements must be signed by two contractors with different dates for the same amount of value in case of agreement with different contractors.

Let’s consider the example of currency swap. Bank A received a payment in the amount of 10 million dollars on March 1st. This amount will be needed in 6 months, and so during this period it is beneficial to invest this amount in euro. Bank A decided to implement currency swap: to sell 10 million dollars for euro to the foreign Bank B on the condition to redeem it as part of the deal in future. It is more profitable than to implement on the foreign exchange market two separate agreements on March 1st: sell hryvnia per euro on the spot market and buy hryvnia per euro on the forward market to get them in 6 months.

Swap transactions are convenient for banks, because they do not create an open position (purchase is covered by selling); reduce currency risks, implement hedging of forward operations; can be used for extension (prolongation) of open currency positions in the future, that is to save the state position for a specified period in the future; the using of them is more cheap for marker-takers (banks that provide spot contracts) than the conclusion of forward contracts in the case of prolongation of currency position.

“Swap” operation is used for:

• the implementation of commercial agreements: the bank sells foreign currency on “spot” terms and buys it on a period;

• the purchase of necessary foreign currency by bank without currency risk;

• the mutual crediting in two currencies by bank.

“Swap” operation is hedging, i.e. the insurance of the foreign exchange risk by creating of counterclaims and liabilities in foreign currencies. The market of currency swaps is about 20% of the total currency trading.

9.2.4. What are currency futures?

Currency futures are the contracts that certify the obligation to buy or sell currency at standardized requirements in the future at a predetermined rate. A certain amount of foreign currency must be supplied on the day of the contract implementation. Currency futures market is a market of foreign exchange derivatives because not the currency is being traded, but monetary instruments (liabilities). The signing of the futures contracts is carried out on the stock market. Party, which is obliged to fulfill the supply of currency, is called the seller of futures contract and a party, which is obliged to transfer the funds against the supply of currency, is called the buyer. Futures contracts are obligatory for execution.

Futures currency transactions create a special form of speculative agreements and hedging of currency risks by large banks. Currency futures account about 15% of currency trading.

Currency futures are in fact the forward contracts that foresee the future exchange of currencies. However, terms of execution and, above all, the exchange terms differ from the terms of forward contracts, allowing avoiding currency risk more flexibility.

The difference is:

• the agreements are concluded only for certain currencies;

• the currency futures are liquid, they can be bought and sold by most of the business entities on the exchanging market;

•the futures contracts can be re-sold on the futures market at any time before the deadline for their implementation;

• buyer of currency futures undertakes to buy and the seller – to sell the currency for a specified period at a rate, agreed at the conclusion of the contract;

•the futures contracts are standardized (e.g., futures contract of the British pound is concluded on the amount of 62.5 thousand pounds, Canadian dollar – 100 thousand dollars, Japanese yen – 712,500,000 yen) and their implementation is guaranteed by guarantee payment in settlement and clearing house (clearing and settlement fee). This is a deposit, which is paid in cash by clients;

• the supply of currency can be occurred only in specific days;

• the standard amount of futures contract is less than the sum of the forward contract. In case of exceeding of the standard sum of the contract the buyer conclude the agreement for the purchase of several contracts.

Futures price is determined by their supply and demand and the currency, the subject of the contract.

The effectiveness of futures is determined by spread after each working session on the stock exchange. If the seller sells currency more expensive at the time of the contract than the quotation rate at the time of the execution of this contract – the seller will win and vice versa.

$$M = pQ(C - C_c)$$

where M- spread (positive or negative);

p=1 in case of selling; p= –1 in case of buying of the currency;

Q – the quantity of contracts;

C –the exchange rate on the day of agreement conclusion;

Cc – the rate of quotation of current working session (on the day of agreement conclusion).

Spread is added on each open operation, even if the participant did not make the operation on the current working session.

$$M = p(C_p - C_c)$$

where Cp – the rate of quotation of the previous working session.

9.2.5. What are currency options?

Currency option is a contract that certifies the right of its buyer, but not committing to buy or sell a standard amount of foreign currency on certain conditions in the future at fixing prices at the moment of conclusion of the contract or at the moment of the purchase by the decision of the contractors. The seller of the option undertakes for a cash prize to ensure the realization of this right if it will be needed by being prepared to buy or sell foreign currency at the respective agreed price. Thus, if the foreign currency exchange by futures contract is compulsory even in the case, when the transaction is unprofitable for the buyer, the option provides a choice: if the transaction is profitable – to make an exchange, if the transaction is not profitable - give it up. The buyer of the option has more rights and fewer responsibilities, and seller – more responsibilities and fewer rights.

Currency option contracts are similar to futures. The amount of currency, maturity and execution price are determined in them. Options, which are traded on stock exchange, require standardized forms of contracts and guarantees of their implementation, like futures. The amount of currency, which operates in each option, is equal to half of that, which is set for futures contracts.

There are two basic types of options: call option (options to purchase) and put option (option to sell). Call options give the right to their owners, but not the obligation to buy the standard amount of currency at a price, specified in the contract. Put options give their owners the right, but not the obligation to sell a specified amount of currency at the price, specified in the contract.

There are options that can be executed at any moment before the termination (American options) and options that can be executed only on the termination (European options).

Options as a type of hedging are more alluring than forwards and futures contracts, but they have high price of execution, i.e. the price by which the supply of the standard amount of currency is carried out. The buyer of the option has to pay a high premium (bonus) for them, which is fixed in the option contract.

An option will bring a profit to its owner in the following cases:

• for a call option, if the exercise price is lower than the price of a standard amount of currency by option on the market;

• for a put option, if the exercise price is higher than the price of a standard amount of currency by option on the market.

Options are used to hedge currency risk and to carry out speculative operations.

9.2.6. What is the essence of speculative currency operations?

Currency speculators intentionally affect the state of the foreign exchange market, by buying or selling the currency in order to achieve a depreciation of the exchange rate, or its appreciation. Playing on the increase or decrease of the exchange rate, they can get a profit or bear the losses. Speculative transactions are carried out on the spot market and on the terminable market.

On the *spot market*, if the speculator plays on the increase of the exchange rate, he buys the currency and keeps it on a deposit in the bank, in order to sell it in case of higher exchange rates. Speculators' profit will be equal to the difference between the original low spot rate, at which he bought the currency, and the higher current rate at which he sold this currency.

If the speculator plays on the decrease of exchange rate, he takes a loan in foreign currency on a certain term, then sells it at a high exchange rate (changes it for the national currency), and he puts the received money on deposit in the bank in order to get interests. At the end of the term of the loan, if the spot rate of foreign currency fell down, the speculator buys foreign currency at a lower rate for returning the loan. In this case, speculators' profit is equal to the difference between the spot rate at the sale and purchase of foreign currency.

Speculation in the forward foreign exchange market is more widespread and is based on the assumption about increase or decrease of spot exchange rates, compared to the forward rate in the future. If speculator believes that the currency spot rate will be higher in 3 months, than in comparison with the present-day forward rate, he conducts such operations: he buys foreign currency in the forward market for delivering in 3 months, in case of his prediction coming true, after 3 month he receives foreign currency at a low price of forward market and then he resells it at a high rate of the spot market. Speculators' profit is the difference between the forward rate and the spot rate, if his expectations were not met, then it makes losses. If the speculator expects that the future spot rate of foreign currency will decrease relatively to the present-day forward rate, he performs such operations: he sells foreign currency on the forward market, buys foreign currency on the spot market for the low spot rate and then he resells it at a higher rate on the forward market. Speculators' profit is also determined by the difference between the spot rate and the forward rate. Professional speculator makes thousands of currency forward exchange contracts, to avoid the risk of mistakes on the future spot rate, and, if the assumptions about the general nature of the changes in exchange rates will be valid, his operations will be profitable.

Currency options are also used for speculation. Speculator is the buyer, as we have noted above, he can use the option, or let it expire its date. He uses the option, when it is profitable for him; it means that the exercise price will be higher than the market price.

Banks, firms and TNC are involved in the speculative operations. The speculative operations that are aimed at decrease or increase of the exchange rate often attain tens of billions of dollars in a few days. Currency speculation has substantially increased in a floating exchange rate conditions, as their wavering has increased.

Speculation on the exchange rates is one of the legal forms of currency business, but it often negatively affects the monetary sector and the whole economy. Speculation destabilizes the economy, when speculators sell the currency at exchange rate depreciation or at a low exchange rate, hoping that it will have the further fall, or when speculators buy foreign currency at the growth of the exchange rate or at its high level in anticipation of its future growth. As a result of carrying out of destabilizing speculative transactions, exchange rate fluctuations are intensified.

At the same time, speculative operations can be stabilizing, it means that they weaken the currency fluctuations in time and also contribute the stabilization of the foreign exchange market. This occurs when speculators will: a) buy foreign currency at decreasing of its domestic price, or at its lowest level in anticipation of growth, and b) sell the currency, when the exchange rate is increasing, or is at a high level and it is expected to decrease soon.

9.2.7. What do arbitrage operations mean?

Arbitrage operations are carried out also with the speculative goal on the foreign exchange market. Arbitrage - is the process of purchasing and selling of foreign currency for profit. The difference between arbitrage operations and speculative operations is that arbitrage operations are always stabilizing, as they contribute to the short-term exchange rate adjustment on different foreign exchange markets, and speculative operations are carried out to maximize profit through the difference between the exchange rates of foreign and national currency.

The main types of arbitrage on the foreign exchange market are the arbitration of exchange and interest arbitrage.

Arbitrage of exchange (simple) is the purchasing of currency on the one market at a low price, with its simultaneous sale on another market at a higher price, and getting profit from the difference in exchange rates. Arbitrage of exchange can be complicated, in case of multiple different currencies on different foreign exchange markets.

On the foreign exchange market, where the currency has a relatively low rate, arbitrage operations increase demand on it, and the exchange rate begins to rise, but on the market where the currency has a high rate, such operations increase its supply and the rate decreases.

Arbitrage operation, which is conducted by arbitrageur, gives the opportunity to make profit practically without any risk and there is no need of investments. For example, Bank A (arbitrageur) provides customer with service of buying and selling of currency. The client believes that the price of the British pound will rise against the U.S. dollar. This client applies to the Bank A for the purchasing of pounds and specifying the amount. Dealer of the bank communicates with the banks-partner B and receives two-way quote 1.4250 / 1.4255. Before giving this quote to the client, bank includes the commission in it, and after that it gives the new quote to the client: 1.4248 / 1.4257. Then the bank A buys pounds in the bank B at the rate of 1.4255 in, after this it sells them to the customer at the rate of 1.4257 and gets the profit on the difference in this course (1,4257-1,4255) without any risk. Such operations are done by the expenses of the client of the bank A, which doesn't invest any money for this operation [15, p. 139]. Arbitrage of exchange can be temporal and spatial. In case of *spatial* arbitrage, arbitrageur gets profits due to the difference in "spot" prices on the markets, which are situated in a "different spaces", it means on the two different geographically distant markets. Profits are derived from the difference in exchange rates in time (for example, the currency is bought on the spot rate, then placed on a fixed term deposit and at the end of this period, it is sold on the same market but for another spot rate) in case of *temporal* currency arbitrage.

The interest arbitrage is connected with the operations on the capital market, i.e. with the movement of resources from one currency to another to improve the conditions of the loan or terms of lending and is based on the use by banks of the difference between interest rates in various markets.

The base of interest arbitrage is the striving of economic subjects (investors) to invest available amount of money in the currency, which makes the greatest profit. Interest rates in different countries rarely coincide by sizes. They have quite wide diapason on different world markets. Investors seek to move funds from the market with low interest rate to the market with a higher one. To do this, they carry out a transaction of interest arbitrage. If investors want to preserve capital and make profit, they will produce *covered (secured) arbitrage*, providing for the exchange of one currency for another. There is a process of borrowing money in one country and converting it into the currency of another country, where funds are given on credit.

Providing means that the risk of reverse conversion of the currency, where the loan was made, for payment of the loan in date, is eliminated by the purchase of that currency in the forward market. The simultaneous purchase of currency on the spot conditions and its forward sale, i.e. the swap operation, reduces or eliminates the operational risk. Swap has a price, so this price (costs) has to be deducted from the difference of interest rates of currency, with which arbitration is carried out to get net profit.

The interest arbitrage operation consists in obtaining of credit in one currency and crediting in another one. Risks from changes in exchange rates can be reduced by conclusion of forward contracts on currency exchange for the term of loan or deposit.

Since the operation of interest arbitrage associated with the supply and demand of spot and forward transactions , this operation affects the spot and forward exchange rates [27, p. 84-86].

Interest arbitrage (e.g., transfer of the U.S. dollar to country B) consists of three operations:

1) the loan in dollars and convert of them into the currency of the country B;
2) the allocation of credit in the country B;
3) the drawing up the forward contract to the moment of completion of the credit for the reverse exchange of the currency of country B to dollars.

At the end of the credit (t + 1) the arbitrageur will owe (in dollars):
$\$(1 + r_{us})$, where r_{us} – the interest rate in the United States.

The bank will receive in country B:
$B(1 + r_B)$ units of currency B. This currency must be converted at the forward rate $(\$/B)_{t+1}$ to dollars in the amount of $B(1 + r_B) \times (\$/B)_{t+1}$.

As the amount of foreign currency (B) equals the amount of borrowed dollars ($), divided by the spot rate $(\$ / B)_t$, i.e. $B = \$/(\$/B)_t$, the amount of earned money is: $(\$/(\$/B)_t \times (1 + r_B) \times (\$/B)_{t+1}$

Arbitration profit of bank equals to the amount of earned dollars minus the amount of dollars that it owes to its creditor:

$Profit = \{[\$/(\$/B)_t] \times (1 + r_B) \times (\$/B)_{t+1}\} - \$(1 + r_{us})$ (9.4)

The exchange of one currency for another affects on the supply and demand on the spot and forward markets. At the process of exchanging dollars for currency B, it is created additional demand on the spot market for currency B, which leads to the increase of value of that currency in dollars $(\$ / B)_t$. At the forward market, the currency B is exchanged for the dollar, leading to a further supply of this currency and reducing its value in currency terms $(\$/B)_{t+1}$.The increase in the exchange rate of "spot" $(\$/B)_t$ and decrease of forward rate $(\$/B)_{t+1}$ reduce the profits of the arbitrageurs to a value at which the potential profit will be zero.

$[\$/(\$/B)_t](1 + r_B)(\$/B)_{t+1} = \$(1 + r_{us})$ (9.5)

Equation (9.5) describes the balance, which is caused by the arbitration actions.

If we divide both sides of the equation (16.5) to $\$(1 + r_{us})$, we will get:

$(\$/B)_{t+1}/(\$/B)_t = (1 + r_{us})/(1 + r_B)$ (9.6)

This equation shows that the ratio of the forward rate to the spot exchange rate of the currency B is equal to the ratio of profitability of the United States to the profitability in country B.

The ratio between the spot rates, forward rates and interest rates, expressed by equation (9.6) is called the interest rate parity.

Interest rate parity is expressed by formula:

$(1 + f) = (1 + r_{us})/(1 + r_B)$, (9.7)

where f – forward raise to the currency of the country B or a discount with it.

$f = \{(\$/B)_{t+1} - (\$/B)_t\}/(\$/B)_t$ (9.8)

For example, if the interest rate of the USA is 8%, and the interest rate in Germany – 6%, the interest rate parity leads to the fact that the forward rate of the euro will be with 1,89% raise, i.e.:

$(1 + r_{us})/(1 + r_g) - 1 = f$, or

$(1 + 0.08)/(1 + 0.06) - 1 = 0.0189$.

The ratio of the forward rate to the spot one for the euro will be

$(1 + 0.08)/(1 + 0.06) = 1.0189$

The banks lean on interest rates parity in establishing of forward rates for their customers. Putting obstacles in arbitrage's way can cause deviations from interest rate parity.

9.3. How does the government interfere in the activity of foreign exchange market?

Governments can influence on the exchange rate of their currencies: a) by buying and selling of large amount of foreign currency on the foreign exchange market, b) by carrying out economic policies that affect changes in demand and supply of the national currency, c) by concluding of international agreements, related to the exchange rate.

The central bank can support the exchange rate at a certain level through the currency intervention. For this, the central bank has to trade currency at a fixed rate to private agents of the international foreign exchange market. For example, to keep dollar exchange rates at the level of 9.00 hryvnia to the dollar, the National Bank of Ukraine should be able to buy hryvnia for this rate to their dollar reserves in any amount dictated by the market. If it is needed to prevent the growth of the national currency, the central bank must sell sufficient quantity to meet the excess demand.

In order to carry out currency interventions, the country must have sufficient foreign exchange reserves, gold reserves, international money (special drawing rights, euro). Central banks, conducting currency interventions, want to slow down changes in the exchange rate to prevent abrupt changes in the competitiveness of export sectors, to prevent fluctuations in the level of employment and inflation trends.

To influence the exchange rate, governments use two types of state macroeconomic policy:

• monetary, which affects the exchange rate through the mechanism of change in the money supply;

• fiscal, which affects the exchange rate through changes in government spending and taxes.

The temporary increase in the money supply is currency depreciation and rising output. The rapid depreciation of currency leads to reduction of prices of the domestic product compared to the imported one. So there is the increase in aggregate demand for it, which should be covered by the increment of output. The continuous growth of the money supply influences on the exchange rate and on the output greater impact.

The disadvantage of the use of monetary policy for influence on exchange rate is that great fluctuations of money supply in the country can lead to inflation or deflation. This limits the ability to use monetary policy to regulate foreign exchange rates.

Fiscal policy is the policy of changing of the level of taxation and of government spending. The policy, which causes the budget deficit or excess.

Fiscal policy can be expansionary and restrictive.

Restrictive fiscal policy is carried out by the reducing of governmental spending or by rising of taxes, or by using of these two methods. The realization of restrictive fiscal policy leads to an increase in the value of the currency. Reducing of the governmental spending and tax increases cut the budget deficit. There is also a decrease in demand for goods and services, which is reflected in decrease of imports, which, consequently, causes a decrease in supply of foreign currency and increase of its value.

Expansionary fiscal policy in the form of increase of governmental spending or saving taxes, or some combination of these two directions leads to an increase in aggregate demand. This leads to an increase in imports and, consequently, to greater supply of currency, which causes a decrease in the exchange rate.

In order to achieve macroeconomic stability, the central bank, under fixed exchange rates, cannot use monetary policy. However, fiscal policy, under fixed exchange rate, is more efficient than floating.

The government can also influence on the value of the exchange rate by official statements of their intention to carry out a strategy for the exchange rate. The purpose of these statements is to influence the expectations and behavior of the participants of foreign exchange market. The effectiveness of these statements depends on the degree of confidence in the foreign exchange market to government statements.

The government occasionally makes decisions about immediate change in price of the national currency, expressed in units of foreign currency, in countries, where the exchange rate is fixed.

If the central bank increases the price of a unit of foreign currency into national currency, there is devaluation, when the central bank reduces the exchange rate – revaluation. Devaluation or revaluation means the willingness of the central bank to sell unlimited amount of national currency in exchange for foreign currency at the new rate.

Change of the value of the exchange rate under a floating exchange rate, as a result of the joint impact of market forces and government, is defined by the terms "depreciation" and "appreciation" of currency.

9.4. What is the Eurocurrency market?

Eurocurrency market (Euromarket) is a specific sector of the foreign exchange market. If the foreign exchange market is the market, where the sale and the purchase of foreign currency take place in the country of its origin, eurocurrency market is the market of deposit and crediting transactions in foreign currency outside the country of its origin.

Eurocurrency market (in the broad sense) includes markets of eurodeposits, eurocredits, eurobonds, euroequities, eurobill, etc. It is a universal international market that combines elements of currency, credit transactions and securities transactions.

Deposit and crediting operations are carried out in euro on the European market. Currencies are transferred into foreign bank accounts and banks use them for operations in all countries, including the emission of this currency by country. For example, if the Bank of France takes credit in U.S. dollars, it is the operation on international foreign exchange market, and if they get a credit from a bank in the United Kingdom or Japan, the agreement is concluded on the eurocurrency market. Eurodollar or euroyen are the currencies of the same name in bank accounts that are not in the U.S. and Japan, i.e. not in the "homeland" of these currencies and in other countries. So, the dollar in liabilities of the Bank of France is the eurodollar, yen in liabilities of Bank of UK – is euroyen.

Eurocurrency, functioning in the global financial market, retains the form of the local currency and the prefix "euro" only indicates that the currency is not under the control of national monetary authorities.

Eurocurrency market emerged due to company needs of investors, in some countries and not the government's decision. He started to operate since the mid of 50s, when Western Europe appeared the market of Eurodollar. There are the following prerequisites for the development of this market:

• firstly, the ability of branches of U.S. banks in Europe and European banks to pay for deposits in dollars higher interest than in the U.S. In addition, dollar loans that were given in Europe cost less;

• secondly, the surplus dollars in oil-exporting countries of the Middle East and countries that preferred placement in European banks;

• thirdly, the demand for dollar loans from the side of developing countries;

• fourthly, the removal of exchange restrictions in the promotion of capital by Western countries.

This led to the establishment of favorable conditions for transactions with non-residents' deposits on the national European currency markets. Western European countries experienced an acute dollar deficit and encouraged the inflow of funds to the residents in their banks, as these deposits serve as currency credit for the countries receiving these deposits. Therefore accounts of aliens exempt from taxation and compulsory reservation of funds in the local central bank. To distinguish flowing to the accounts of non-residents in European banks “ownerless” currency from the monetary units controlled by emitting their central banks, they have the prefix “euro”, which became added to U.S. dollars, and then, as their development of the Euromarket, to other freely usable currencies.

The elimination of the currency regulation and tax laws of the country encouraged international banks to facilitate the full development of the Eurocurrency market.

Eurocurrency market participants are central banks and governments that operate primarily on the Eurobond market, commercial banks that are major participants in this market and are active on the market of short-term and as well as long-term operations, private institutions and investors (mostly TNCs) that have a significant amount of money and play a significant role in the global financial market.

There are the following special features of the European market:

1. Supranational nature of functioning. Euromarket is not the subject of local laws, outside the scope of national and international control. This contributes to uncontrolled movement of huge masses of debt capital, by passing national borders and regulation (invasion of “hot money”, “outflow” of capital), increasing speculative operations. Attempts to control the Euromarket had no success. On the one hand, the Euromarket stimulates the development of world economic ties, the internationalization of foreign economic activity, contributing to the growth of the productive forces, and on the other hand, it is the factor of instability in the world economy as a whole, and of national economies.

2. Institutional feature – the selection of category of Eurobanks and international banking consortiums, where transnational banks (TNBs) form the base of them, which carry out operations in many countries in different areas and in different currencies. Banks are Eurobanks in that part of their activities in

foreign currencies, which are carried out on their territory. The rapid movement of money from one country to another is depending on the interest rate and the ratio of exchange rates on the Euromarket.

Eurobank activity is attractive for two reasons: the relative lack of regulation and the huge size of the Eurocurrency market. Eurobanks are usually not covered by requirements of the regarding of availability of the necessary reserves and requirements to the capital structure and payments of premiums for deposit insurance.

The largest banks on the Eurocurrency market are represented in Table. 9.1.

Table 9.1

The largest Eurobanks in the world

Country	**Name of the bank**	**Asset size, trillion dollars in 2012**
France	BNP Paribas	2,84
Germany	Deutsche Bank	2,62
Great Britain	HSBC	2,6
USA	Bank of America	2,27
China	ICBC	2,2
USA	Citigroup	1,95
Japan	The Bank of Tokyo-Mitsubishi UFJ	1,53

Source: [25]

Temporarily organized consortia (syndicates) of banks to finance and credit large-scale projects are specialized by regional or sector basis.

TNBs continuously increase their number of institutions in foreign countries, where they compete with national banking systems. The international activity of TNBs is diverse. It depends on the bank's strategy and on the rules, operating in each country, which can restrict banking activities.

3. Access restrictions of borrowers. The main borrowers are TNCs, governments, international monetary and financial institutions.

4. The use of leading convertible currencies: eurodollar (60%), euroyen (6%), euro (3%) and others.

5. Using the latest computer technology. Transactions are carried out by telephone, fax with exchange on the same day of telegraphic confirmation, which serves as a single document.

6. Specificity of interest rates:

• relative autonomy in relation to national rates;

• the opportunity to bid higher rates on eurodeposits and lower rates on euroloans than the national rates because the system of required reserves is not covering eurodeposits that commercial banks are obliged to hold on interest-free deposit at the central bank and the payment of income tax on interest. Because transactions in eurocurrency are more profitable than national currencies.

7. The emission and operations with:

• Eurobonds (from the 70s) that are placed simultaneously on the markets of different countries and are used by TNCs to finance investment and by the government – to cover the budget deficit and refinancing of "old" loans;

• eurobills (since 1981);

• euroequities (1983), which are not traded at all national capital markets, but only there, where it is permitted by law, as the share is not only a form of credit, but also the right to a share of ownership.

The main Eurocurrency market attractiveness is the lack of government regulation that allows Eurobank to offer higher interest rates on eurocurrency deposits than on the deposits made in the national currency, and allows banks to take from borrower's higher interest for the use of Eurocurrency, than loans in national currency. In addition, in transactions with foreign currency the banks have greater freedom of action.

At the same time, Eurocurrency market has drawbacks. Thus, when there is the regulated banking system, the probability of loss of deposits in bank bankruptcy is negligible, while non-regulated system such as the Euromarket, the probability increases. Borrowing of company funds on the currency exchange market in the eurocurrency can be risky. Signing a forward contract can insure risk, but there is no absolute guarantee.

Nowadays Eurocurrency market acquired enormous sizes (its volume is about 700 trillion dollars annually). Due to the large scale of operations the considerable mobility of funds on this market significantly affects the currency of the financial state of the world environment. The market covers all major international banks and world financial centers, and all convertible currencies.

Europe accounts for about 50% of Eurocurrency market transactions. The main financial center is London (over 20% of the global volume of transactions in eurocurrency). Now there are more than 35 centers of Eurocurrency market. Among the largest, apart from London, there are Tokyo (about 20% of market transactions), New York, Frankfurt am Main (10%), Paris (7%), Zurich – Geneva (6%), Luxembourg (4%), Amsterdam, Brussels (3%) [16, p.264].

Chapter 10. The international credit market

10.1. The essence of the international credit market

10.1.1. What is the place of the international credit market on international debt market?

One of the components of the global financial market is an international debt market (loan market). It is a specific sphere of market relations concerning the circulation of debt liabilities, guaranteeing to the creditor the right to collect the debt from the debtor.

Debt liabilities take various forms by methodology of the World Bank (Fig. 10.1).

International debt market conventionally is divided into the international credit market (the market of bank credit liabilities) and the international debt securities market, where financial instruments are turned over, that evidences the debt relationship between creditors and borrowers (bonds, notes, commercial paper, etc.). The main feature of this division is the possibility or impossibility of freely purchase and sale of financial liabilities or financial instruments (agreements to exchange the current value for the future value may be concluded in the form of securities that may be the subject of free purchase and sale and credit agreements, i.e. liabilities of the borrower to the creditor are not the subject of free purchase and sale). Each market includes Euromarket, as a part of the international credit capital market [16, p.265]. In chapter 11 it will be disclosed the main features of the international credit market, and issues, relating to the debt securities.

International credit is defined as the movement of debt flows in the form of financial requirements between creditors and borrowers in different countries, associated with the provision of currency and commodity resources (assets) on the terms of repayment, urgency and interest payments. Taking part in the circulation of capital at all its stages, the international credit mediates its transition from one form to another: from money to the production, then to the commodity and to money again. Consequently, there is the movement of money capital, formed by supply and demand on the international credit market.

International credit is considered as a special kind of international trade. This trade is not the exchange of commodity to another one, but the exchange of current goods for future goods. This exchange is called inter-temporal trade.

There is always the problem of choosing between current and future consumption in economics. Usually produced products are not consumed immediately; part of it is used as an industrial capital to expand production in order to increase consumption in the future. In other words, it is a choice between consumer products now and in the future.

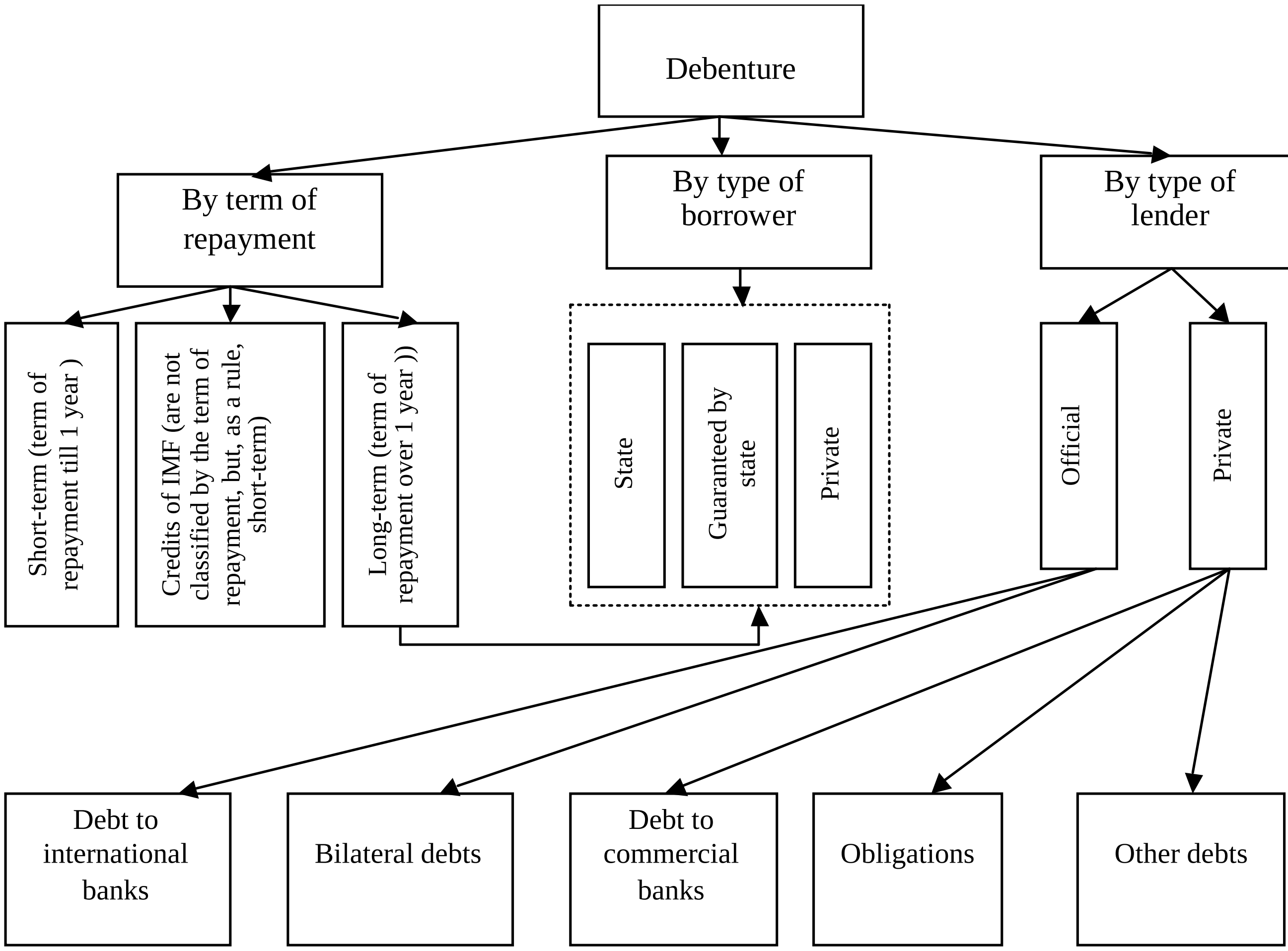

Fig. 10.1. Forms of debanture on the international loan capital market

International credit makes it possible to trade in time. If a country-creditor provides a loan, it sells current consumption for future consumption. Country-borrower, taking a loan, has an opportunity to spend more funds today, than it was earned, for exchange for the obligation to pay compensation in the future for today's consumption. It is determined by production capacities, which countries borrow and which provide. Countries that have good current investment opportunities, take loans from other countries that do not have the relative investment opportunities, but get large current income.

Countries that have relatively large financial resources, compared with the possibility of profitable use inside the country, can increase its national income by allocation of credits to countries that have a higher rate of return on capital (interest, dividends). Country-importer of capital has an opportunity to increase its national income due to foreign investment obtained on more favorable, compared with domestic, lending conditions. In general, using international credit there is the maximization of global product due to the general increase in world production.

The essence of international credit is that due to the credit there is a redistribution of capital among countries according to the needs and abilities of its more profitable use, provided the growth of international trade, supported by foreign direct investment, and governments of different countries receive foreign currency to stabilize the economy, covering external debt.

The effectiveness of the credit is achieved by:

- free movement of capital;

- the stability and predictability of the global economy development;
- the fulfillment by borrowers of their obligations, the full payment of their debts.

Each country is an importer and exporter of capital. As creditors and borrowers, i.e. the subjects of international credit markets, there are commercial banks, corporations, financial intermediaries, non-bank financial institutions (insurance companies and pension funds), central banks and other public bodies, governments, regional international development banks, international financial institutions. However, crediting is usually carried out by the international banks, thanks to the broad sphere of their financial activities.

International banks are classified according to the share of international transactions and incomes in the general volume of transactions and incomes on the followings groups:

- national banks, having a small foreign branch, which provided an insignificant share of assets and incomes;
- banks, the international transactions of which are accounted from 5 to 10 percents of their incomes;
- transnational banks, wherein the level of international concentration and centralization of capital allows them to take part in the economic distribution of world market of debt obligations;
- offshore banks, registered in offshore zones and that use the special tax and other privileges in the carrying out of financial and credit transactions. None of transactions of TNBs are carried out without them.

The Bank for International Settlements includes such specific types of activities of banks in the sphere of international credit transactions, as [1, p. 152]:

• loans and loans that banks offer to each other, both domestically and abroad;

• loans and loans, granted by non-bank institutions, both domestically and abroad;

• interbank deposit (euro operations, operations on offshore banking markets).

The international transactions of banks are characterized by following basic features:

- transactions on crediting take into account currency, credit and regional risks, which can be avoided by implementing of different protective measures;
- the greater part of credit operations of international banks is made by credits to the foreign banks, which are not their branches;
- the international crediting is mainly oriented to the grant of short-term credits to foreign banks, which are not the branches of this bank;
- the districts of the short-term crediting are more various geographically, than areas of the long-term crediting.

10.1.2. What are the forms of international crediting?

International crediting is carried out in various ways. They can be classified according to several features that characterize certain aspects of credit relations [1, p. 153].

According *to the sources*, there is domestic and foreign crediting in foreign trade.

According to *the object of foreign trade agreement*, there are distinguished:

• the commercial (commodity) credit, which is directly related to foreign trade. It is provided for the purchase of certain goods or payment for services and usually has "connected" character, i.e. strictly special purpose, fixed in the loan agreement;

• financial credit. It provides the carrying out of trade on any market that gives opportunities to choose trading partners. But often this type of credit is used not for the trade supply, but to the direct investments, construction investment objects, refill of the accounts in foreign currency, external debt retirement, maintaining exchange rate etc.

According to the type of provision, credits are subdivided into a commodity credits, which are provided to the importers by exporters, and currency credits, provided by banks in a money form.

According to the terms, international credits are divided into short-term – up to 1 year (as a rule, used in foreign trade for the noncommercial, insurance, speculative transactions), medium-term – from 1 to 5 years (sometimes up to 7-8 years) and long-term – more than 5 years (used for investments in main instruments of production, financing major projects, scientific research, new technologies implementation, as well as allocation of loans by international financial institutions, governments).

According to the currency of loan, credits can be provided in currency of the country- borrower, country-creditor and the third country or in international payment units (SDR, euro).

According *to security for credit*, there are secured and blank credits. Commodities, documents of title to the goods and commercial documents, securities, bills of exchange, immovable property etc. serve as the security for credit. A blank credit is provided to a debtor under his obligation to pay off his debt in a certain term, and a document on this credit is a promissory note, signed only by the debtor.

According to the technique of credit extension, the credits are classified on cash credit, which are transferred to the account of the debtor and are received at his disposal; acceptance credit, used in the form of acceptance of draft by importer or by bank; deposit certificates and other.

According to the type of creditor, credits are divided into private, provided by firms, banks, brokers; governmental; mixed, in which private firms and the state take part; intergovernmental credits of international and regional currency-credit and financial organizations.

An important variety of international commercial credit is a *corporate credit*. It occurs when a firm-exporter of one country gives to the importer of another country deferred payment when selling goods and services. Under present conditions, terms of corporate credits have become quite long (usually from two to seven years) and are determined by conjuncture of world markets, commodities and services, interest supplier in maintaining foreign economic relations and the expansion of exports, etc. Corporate credit is usually registered by a promissory note or given by an open account.

Corporate credit, that expresses the relationship between the firm-exporter and firm-importer, is usually combined with a *bank credit*. As the long-term corporate credit distracts significant funds of exporter, who uses the bank credit or refinance his credit in the bank. Bank crediting of the exporter and importer takes the form of loans on the security of goods, shipping documents, promissory notes and bills of exchange account. Sometimes banks give bank credits to a large exporting firm, i.e. without formal provision.

Bank credits have some advantages over corporate credits: they give the opportunity freely use the funds for the purchase of goods to the borrower, provide extended credit terms, larger volumes of supplies due to the credit, and characterized by relatively lower cost.

Banks give also export credits besides the financial credits that allow under the most favorable conditions to purchase goods on any market. Export credit is the credit that is issued by the bank of the country-exporter to the bank of the country-importer for crediting supply machinery, equipment and so on. It is issued in cash and has “associated” character: the borrower is obliged to use the credit solely to purchase goods in the country-creditor.

The broker loan is the intermediate form between corporate and bank credit in some countries. As well as commercial credit, it has to deal with commodity operations and simultaneously with bank credit because brokers usually take credit from banks.

In foreign trade the following alternative forms such international factoring, forfeiting and leasing are used in the practice of international bank crediting.

Factoring is an operation to sell foreign accounts before getting export products to commercial banks or specialized companies by suppliers. Factoring can be carried out with the right of regress and without it. Factoring with the right of regress means that non-compliance of terms of the agreement financial institution, which bought accounts, may indemnify company’s losses from the company that sold them. However, as a rule factoring of international accounts before receiving is carried out without the right of regress.

The distinctive features of factoring: requirements of agreements accepted till 1 year; no restrictions considering the amount; it is mainly used on the domestic market; potential right of regress of requirements for the buyer; using a wide range of currencies; additional guarantees are not always needed.

Factoring services usually provided by factoring companies, many of which are owned by banks. They buy the accounts from exporters at a discount. They can pay immediately in cash till 85% of the nominal value of the accounts of exporters. The rest is paid after the payment of bills to importers. The benefit to the importer is that he cannot deal with letter of credit. Exporter avoids the threat of credit and currency risks. He should not expect the moment, when the importer will pay for the goods.

Forfeiting is the purchase operation of bank-forfeiter for full terms and beforehand established conditions of bills and other debt and payment documents.

According to the agreement of forfeiting importer, of course, provides a simple bill, which guarantees the bank on behalf of the importer. Exporter sells this promissory note to the bank-forfeiter at a discount. Bank-forfeiter assumes the risk of non-payment of debt without right of regress (turnover) of these documents to the former owner. Forfeiters may resell the purchased from exporting bills on the secondary market, which is called “a forfeit” (which means to yield the right).

Distinctive features of forfeiting are as follows:

• long-term promissory notes are taken under the term over 1 year;
• the minimum amount, which is used, is not less than 500 thousand dollars;
• the average amount of contract - 1.2 million dollars;
• it is used primarily in international operations;
• the absence of requirements’ regress for exporter;
• the purchase of requirements only by FCC (freely convertible currency);
• obligatory bank guarantee.

For the exporter, forfeiting agreement is beneficial because it turns loan agreement into cash; it is not necessary to worry about the creditworthiness of the importer. Forfeiting frees the exporter from liability on the bill after the sale. Importer gets the goods on credit, without succumbing, as an exporter, to exchange rate risk.

Forfeiting is often used in the implementation of medium-term lending of foreign trade by means of production, especially in Eastern Europe and the countries of Asia and Latin America, which are developing.

Leasing is the operation of lending in the form of rental equipment, ships, cars, planes, etc., for a period of 3 to 15 years. Rental serves as a form of loan and at the same time as a form of international trade, which creates conditions for the rapid development of new technologies. The leasing company (lessor) purchases equipment etc. at its own expense and transfer under the contract of lease to the firm (lessee) for a certain period. At the end of the lease term firm-client may continue it or to buy the leased property by the residual value. The rent is set at a level that exceeds the price of the lease object at which you can buy it at normal commercial terms.

There is operational and financial leasing depending on presence or absence of the transfer fact of ownership of the leased asset.

Operational lease provides the temporary use of property without following its acquisition. Financial leasing combines lease with subsequent purchase of the object by the residual value.

According to the method of lending, there are fixed-term and renewable lease. Fixed-term lease is a one-time rental. Renewable lease is a lease agreement, which is restored at the end of its first term.

According to the organizational characteristics, there are direct lease when the lessor is the owner of the property, and indirect lease when renting is carried out through a third party.

Level of leasing relations’ development is an indicator of the dynamic state economy. In developing countries, it is less than 1.5%, while in developed countries this figure reaches 25 - 30% or more. For example, leasing in the United

States is the primary investment instrument, it accounts for over 30% of investment in equipment. The share of U.S. leasing market is about 39.5% of total world asset [1, p. 160].

International leasing is especially important for developing countries because it allows reducing the outflow of funds, which are spent on importing expensive means of production, reduces balance of payments deficit, and contributes to the introduction of new technologies into the national economy.

10.2. What are the monetary and financial terms of the international credit?

There are following terms of obtaining of international credit: the cost and credit period, the credit currency and the payment currency, the type of providing and methods of insurance. The row of factors influences these terms: direction of the use of credit resources, the character of subjects of credit relations, the level of internationalization of credit markets and their subordination to the national credit control.

The cost of the loan, i.e. borrower's expenses on the loan, consists of amount of loan, interest rate, commissions and other commissions. It is given by:

$$S = \frac{Lim \times R \times T_{cp}}{100}, \qquad (10.1)$$

where S – the total cost of credit;

Lim – the amount of credit;

R – total interest rate (basic rate on credit, commissions, insurance premiums, legal fees and any other services);

Tcp – medium term of credit.

The main element of the cost of credit is the interest rate. Interest rates in the world market are formed on the basis of interest rates of leading creditor countries (USA, Japan, Germany, and others).

The range of interest rates is quite wide (average 7-18%). The difference in interest rates is determined by:

• the risk on the loan;

• the term for which the loan is issued;

• the size of the loan (the higher – the lower of the two, other equal conditions);

• the size of the taxation (for example, 7% lending interest rate on an untaxed bond is preferably than the 9% rate on a taxable bond);

• the terms of competition in the loan capitals markets.

An important indicator of allocation of credit is the amount (limit) of credit. It is part of loan capital that is provided to the borrower. In firm lending the amount of credit is specified in the credit agreement. Credit may be given in the form of shares that differ in their conditions.

The term of international credit is affected by the purpose of the credit; supply and demand of similar credit; the size of the contract; the national legal framework; intergovernmental agreements.

There are full and medium terms of credits. Full term includes: the period of using of the given loan, preferred period (deferment of repayment of used loan), the repayment period (when it is done the payment of main debt and interest). It is calculated from the beginning of the credit to its final redemption.

The average credit term includes full preferred period and half of the term of using, and redemption of the credit. It is used to compare the effectiveness of different credit terms, because it shows the average full amount of the credit per period.

There are different types of loan, according to the terms of redemption:

• with uniform redemption in equal installments over an agreed period of time;

• with unequal redemption;

• on-time redemption of the full amount;

• with equal annual installments of the principal amount of credit and interests.

The type of provision is discussed at the allocation of credit. This can be the opening of savings accounts, mortgage assets, assignment of rights under the contract.

It is important for international credit in what currency it is provided and in what currency indebtedness will be repaid. The correct choice of credit currency depends on whether the lender will suffer losses or not. The choice of credit currency is affected by the degree of interest rates, the practice of international payments, inflation, and exchange rate dynamics. The payment currency may be the same credit currency, or may not coincide.

There are contractual and hidden elements of the credit cost.

Contractual elements are the credit costs due to the agreement. They are divided into basic and advanced. The main elements are: the amount paid directly by the borrower to the lender; interest; costs of collateral commission. Additional elements of the cost of the credit include amounts, paid by the borrower to third parties (under warranty). In addition to the basic rate, there is bank commission: the negotiations, participation, management, the obligation to provide the borrower the necessary funds, agency commission.

The hidden elements of the credit cost include: costs associated with the allocation of credit, but which are not fixed in the agreement (high prices of goods under corporate credits, compulsory deposits in certain amounts in relation to the loan, the bank overstating fees for collection of documents, etc.).

10.3. What is the nature of the Eurocredit market?

Eurocredit market is an important source of borrowed funds. Banks provide short-, medium-and long-term credits in Eurocurrency. Using of eurocurrencies, as currencies of credits, is due to such advantages as large size, easy access, short mobilization, lower cost, because there is no national loan limit. The functioning of eurocurrencies promotes the formation of credits mechanism of greater efficiency and capacity on the international credit market.

International interest rates are applied for eurocredit, which are relatively independent, compared with national rates. Eurocurrency interest rate, as a variable includes LIBOR – the London interbank offered rate on short-term inter-bank transactions in euro – and an increase to the basic rate that is the premium for banking services. Interbank interest rate of demand for short-term operations on the European market in London is called LIBID. As Eurobanks are not the subject of the local law and are not the subjects of income taxing, they can reduce the interest of their credits while the maintaining of high profits.

Short-term eurocredits are usually given at a fixed rate for the whole term in the full amount. This is the simplest form of the loan agreement.

Medium- and long-term eurocredits that provide reproduction of the fixed capital, exports of machinery and equipment, implementation of industrial projects, take the form of rollover and syndicated loans.

A characteristic feature of rollover eurocredits is that the interest rate is not fixed for the whole term of the credit, and reviewed regularly (every 3 or 6 months) in accordance with a change in the base rate (LIBOR rate). The main forms of rollover eurocredits include renewable rollover loans and rollover loan support (under the conditions of “stand-by”).

Rollover loan under conditions of “stand-by” is secured credit, i.e. at the conclusion of the credit agreement, credit is not actually available. The bank takes commitments to provide eurocredit on the first demand of the borrower during the time of the agreement.

Renewable rollover credits have no fixed size of the sum of credit. It allows only a maximum limit within which the borrower is entitled to get loan in the required amounts at the beginning of each interim period of using it. There is fixed date of change of interest rate and loan amount in the credit agreement that is carried out every 3 or 6 months within a period of implementation.

Compulsory conditions of rollover credit agreements include: characteristics of partners; the amount and purpose and the currency of the credit, the procedure and the term of repayment; the cost of credit and guarantees of it.

Today, the most common type of international credit is syndicated eurocredits. The resources of Eurocurrency market are the sources of syndicated eurocredits. Typically, such credits are organized by large commercial banks, which are the head of consortiums (syndicates) and come to an agreement with the borrower about loan conditions.

There is the procedure of allocation of syndicated eurocredits:

1. The borrower finds a bank, which will lead allocation of syndicated eurocredit (bank manager) and submit major loan conditions (term, amount and currency of the loan) to its approval.

2. Bank manager forms the syndicate: inquire a certain number of banks to participate in the loan.

3. Reference banks are appointed that establish the LIBOR rate (interest rate-orientation).

4. Bank manager chooses bank agent that acts as a control on the loan. He receives the credit interest paid in accordance with the repayment schedule of the loan.

The total cost of syndicated eurocredit includes:

• interest payments (the interest rate is adjusted every 3 or 6 months based on changes in the interest rate-orientation);

• tax payments to banks that are members of the syndicate;

• commission to banks that are members of the syndicate;

Commissions are paid at the beginning of the credit, making the credit package more alluring to creditors.

Commission fees are divided into:

a) commission for obligations, when the borrower can determine the sequence of repayment the loan and can use cash after the conclusion of the agreement. These commissions are appointed on the part of the loan that has not yet returned;

b) commission for management, which is paid to bank manager as payment for arranging the loan;

c) commission for participation, which is paid on determined day or at the moment of full repayment of the debt. With the increasing number of members of the syndicate, the commission increases;

d) commission to bank agent as payment for services.

The total amount of commission varies from 0.50 to 1.25% of the nominal amount of the loan.

The main features of eurocredit are:

• sum of credits– from 20-30 million to 1-2 billion of US dollars;

• terms – from 10 months to 12 years;

• interest rates – are reviewed regularly and calculated on the basis of the discount rate (LIBOR, SIBOR – Singapore bid proposals, the U.S. “prime rate”) plus the difference (spread), that uses floating interest rates as a result of the introduction of which the risk of changes in interest rates is transferred to the borrower;

•the commission for management, participation, loan servicing;

• usable currency – the U.S. dollar, British pound, Japanese yen, euro, Swiss franc, and others;

• the access to funds is fast;

•the right to early repayment – under condition of payment of compensation;

• guarantees and insurance – governments, companies, central and commercial banks provide guarantees for loans; various governmental and private agencies engaged in insurance of foreign loans and investments.

Advantages of syndicated eurocredits consist in that they make it possible to distribute credit risk among the members of the syndicate; banks can participate in lending, regardless of their size; the borrower gets a great credit due to the unification of resources of certain number of banks; the difference between interest rates on loans is much lower than on national markets; allocation of credits is carried out in any freely convertible currency, and it gives the borrower the ability to use these tools on his own, without limiting his economic decisions.

Disadvantages of syndicated eurocredits are related primarily to the fact that they are provided for a shorter period, compared to the national bank crediting.

10.4. What is the essence of the international official assistance to developing countries?

One of the channels of global financial flows movement is the redistribution of national income through the budget in the form of assistance to developing countries. The aim of the assistance is the elimination of underdevelopment. This redistribution of financial resources related to international non-market mechanism that contributes to macroeconomic stabilization of the economy and sustainable production growth in countries that are directed to a market economy.

The International Official Development Assistance (IODA) to developing countries is mainly achieved in the form of preferred loans and irrevocable subsidies, as well as in the form of commodities.

There are the subjects of international assistance in the recipient country:

• governments;

• executive authorities, authorized by government;

• central and export-import banks;

• legal entities.

Recipient country receives the bulk of credits and subsidies irrevocably from industrialized countries, international financial institutions, multilateral funds, integration associations that act as foreign donors.

International official assistance to countries is classified in project and non-project.

Project assistance in development of country includes:

- *system projects* (macroeconomic stabilization of the economy): the financial stabilization of the economy; the structural changes in the economy; the reforming of economic relations; the implementation of administrative reforms;

- *structural projects* (structural changes in separate sectors of economy): loan rehabilitation; institutional development, state administration reforming; the reforming of legal system;

- *investment projects:* the development of production, industries and sectors of economy;

- *technical assistance projects*. Forms of assistance: additional qualified staff; job training; specialized courses in the recipient country; documentation, equipment and technology to provide technical assistance.

The projects have the following components: mutual obligations between the government of the recipient country and donor; the development program of certain sectors of the economy, the mechanism for its implementation and monitoring; grants to improve effectiveness of the process of design preparation and implementation.

Non-projected assistance in development of country includes:

- *commodity assistance*: long-term preferential export credits for the purchase of imported goods; food aid as a gift for resale in the local currency; creation of special funds to support agriculture at the expense of profits derived from the use of export loans;
- *grants* to support the reformative actions of government: cover deficits of balance of payment; financing certain parts of some projects;
- *non-credit tools* of the IODA: discussion of strategy development of country in the short and medium term perspectives; general economic and branch of industry research work; the mobilization and co-ordination of official resources through the conducting sessions of donor countries and the participation in joint financing.

The international official development assistance is carried out on a bilateral (international) and multilateral basis, bilateral flows twice exceeds the multilateral ones.

The donor countries give credits and irrevocable subsidies from the budget and strictly control their spending in case of the implementation of the IODA on the bilateral basis. Donors should commit funds in the amount of 0.7 % of GNP to the IODA, which are fixed in a range of international documents. However, the major donor countries (the USA, Japan, Germany, Great Britain) provide funds in fewer amounts – 0.25 % - 0.35% (Table 10.1). So, the total amount of assistance in 2011 decreased compared to 2010 by 2.7 %.

Table 10.1

The international official development assistance in 2011

		% from GNP	**Billion dollars**
Total volume of the IODA	Purpose indicator UNO	0,7	300,3
	Fulfillment in 2011	0,31	133,5
	Lag in 2011	0,39	166,8
The IODA for the least developed countries	Purpose indicator UNO	0,15–0,20	63,7–84,9
	Fulfillment in 2010	0,11	46,5
	Lag in 2010	0,04–0,09	17,2–38,4

Source: [29]

The main criteria for the distribution of the IODA are: the level of economic development of the recipient country; military-strategic, political, social and economic considerations.

Most of the resources, which are given, are connected with financing of specific objects. Lending of construction of infrastructure is carried out under preferential conditions (transport, communications and energy), social programs (education, health) and agriculture. An important role also belongs to food assistance.

During the implementation of the IODA on the multilateral basis, funds come from international financial institutions: IBRD, regional banks of development, the IMF, the various funds under the UN and the EU.

The international official development assistance, provided to countries that are the members of the Development Assistance Committee (DAC), is more than 133 billion dollars that is the equivalent to 0.31 % of the GNP of these countries (Table 10.2).

Table 10.2

Volumes of the IODA in leading donor countries

Countries	2010		2011	
	mln.dollars	**in % to GNP**	**mln. dollars**	**in % to GNP**
Australia	3 826	0.32	4 799	0.35
Austria	1 208	0.32	1 1070	0.27
Belgium	3 004	0.64	2 800	0.53
Canada	5 209	0.34	5 291	0.31
Denmark	2 871	0.91	2 981	0.86
Finland	1 333	0.55	1 409	0.52
France	12 915	0.46	1 2994	0.46
Germany	12 985	0.39	14 533	0.40
Greece	508	0.17	331	0.11
Ireland	895	0.52	904	0.52
Italy	2 996	0.15	4 241	0.19
Japan	11 021	0.20	10 604	0.18
Korea	1 174	0.12	1 321	0.12
Luxembourg	403	1.05	413	0.99
Netherlands	6 357	0.81	6 324	0.75
New Zealand	342	0.26	429	0.28
Norway	4 580	1.10	4 936	1.00
Portugal	649	0.29	669	0.29
Spain	5 949	0.43	4 264	0.29
Sweden	4 533	0.97	5 606	1.02
Switzerland	2 300	0.40	3 086	0.46
Great Britain	13 053	0.57	13 739	0.56
USA	30 353	0.21	30 745	0.20
Total	128 465	0.32	133 526	0.31

Source: [29]

According to the basic programs of development, assistance increased by 9% over the past year. The overwhelming share of growth of the IODA fell to reduce debt to foreign creditors. For this component, the support from abroad increased by 3 times. Another component – humanitarian assistance – increased by 15.8% and reached 8.7 billion dollars.

The IODA, which is provided by the EU as part of DAC, was increased by 28.5% (to 55.7 billion dollars). Most of it was aimed at reducing the debenture of the recipient countries.

It was concluded a range of international agreements aimed at improving the efficiency of assistance over the last decade, with the active participation of the OECD.

Two momentous agreements – the Paris Declaration on Aid Effectiveness (2005) and the Accra Agenda for Action (2008) – were signed by more than 100 donors and recipients of the IODA. Five basic principles of international official development assistance are attached in these documents:

- recipients must develop their own national development strategies;
- donors should support national strategies, developed by the recipients of assistance;
- donors should achieve the harmonization and co-ordination of their actions;
- national development strategy should include clear objectives, and achievement of these objectives shall be monitored;
- donors and recipients of assistance are jointly responsible for achieving of development goals.

In order to make the IODA to stimulate economic growth (not dependence on assistance), the recipient countries should act more actively by themselves – to engage in the mobilization of domestic resources, attract foreign investment and develop small and medium businesses. It is needed to continue the reforming of the system of international trade and finance, to seek new forms and instruments of financing international development. Private foundations and non-profit organizations as new members of the IODA make significant contributions to the development. According to the OECD, in 2010, these organizations have spent for development 31 billion dollars [25].

10.5. International indebtedness

10.5.1. What kinds of causes of international debts are known?

The practice of international crediting clearly shows how the actual development of international credit does not come to an agreement about the conditions of the normal work of loan system such as stability and timely payment of debts.

Weighty evidence of this fact is the global debt crisis.

The main reason for the periodic reiteration of the international debt crisis is the presence of strong motivation to abandon the payments on the debt of sovereign debtors. If the debtor-governments conclude that fulfillment of all payment obligations does not provide more net inflow of funds in the future, there is an incentive to give up from part or all payments on the debt, in order to avoid the outflow of resources. The existence of such incentive to abandon the payments on the debt helps to explain the repeated refusal of payment of Latin American countries in the early XIX century, simultaneous mass refusal to pay during the financial crisis in 1929-1932, 1975-1986, 1997-1999, 2008-2009, when the amounts of debt service has grown to the size of the new capital inflows and many debtors demanded a review of the terms of payments.

The reason for termination of payments by sovereign debtors helps to explain some features of the behavior of international creditors. One of them is the persistence in establishing higher interest rate on loans to foreign governments compared to the private and public borrowers in their own country. Requirements of higher interest rates are the way of getting in its way premium in case of refusal to pay the debts: until there is no crisis, creditors receive this premium, but in case of crisis they have big losses.

What can solve the problem of refusal of payments? We believe that this cannot be a traditional continuation, but it links receipts of new loans to the debtor with the implementation of requirement of “belt tightening” to gain the time of payments on debt. New loans must cover the amount of interest and main amount of debt at least. But even the new loans are so large, that their provision increases the total amount of debt, because the debtor may eventually refuse to pay independently of the term of new lending.

A reliable way to solve the problem of ownership on loans that are given to sovereign debtors is introduction of security or provision (any kind) that may become property of the creditor in the case of suspension of payments on the debt of the borrower. In the loan agreements within the country, legally executed security or provision play an important role in maintaining payments on the debt and at the same time to strengthen the debtor creditworthiness, allowing him to get loans at the lower interest rate and more convenient temporary scheme. In the past countries, which paid debts on time, were those whose creditors were able to seize the debtor's assets in case of non-observance of terms of repayment.

Despite the adoption of the above measures, the total world debt has increased by 2 times over the past 10 years, and in 2012 reached 69.08 trillion dollars [42]. The external debt of some countries is illustrated in the Table 10.3.

Table 10.3

The external debt of some countries, billions of dollars

Country	**The amount of external debt**		
	billion dollars	**per capita, dollars**	**in % to GDP**
EU-27	16 080,00	27,864	85
USA	16 506,20	52,17	105
France	5 633,00	74,619	182
Germany	5 624,00	57,755	142
Japan	2 719,00	19,148	45
Italy	2 684,00	36,841	108
Netherlands	2 655,40	226,503	344
Spain	2 570,00	18,26	84
Ireland	2 352,00	26,82	108,2
Luxembourg	2 146,00	3,696,467	3,443

Belgium	1 399,00	113,603	266
Australia	1 376,00	52,596	95
Switzerland	1 346,00	154,063	229
Canada	1 181,00	29,625	64
Sweden	1 016,00	91,487	187
Great Britain	983,6	156,126	390
Hong-Kong	903,2	105,42	334
Austria	883,5	90,128	200
China	697,2	396	8, 7
Norway	644,5	131,22	141
Denmark	626,9	101,084	180
Greece	583,3	47,636	174
Portugal	548,8	47,835	223
Russia	501,3	3,634	23
Finland	370,8	68,96	155
South Korea	370,1	7,567	37
Brazil	310,8	1,608	15

Source: [15, p.150]

The main part of the debt falls on developing countries. The problem of international debts of these countries is one of the central ones as in theory as well as in practice of international monetary and financial policies.

A significant increase of debts of developing countries began in the middle of 70s of XX century. Let us consider its causes.

On the one hand – the growth of loan capital, which seeks for profitable use, began in connection with oil crisis in the late 1973. Developing countries have been involved in intensive process of international capital movement.

Necessity of implementation of the industrialization program, interest payments by previous loans, the use of new loans not for purposes of development, but to cover the current deficit of balances of payments due to rising fuel prices, imposing them on different sides of the policy of militarization, activities of TNCs, urged developing countries to take loans and loans in growing amounts. The negative role was played by massive corruption of the officials, who made a profit out of agreements for getting loan.

On the other hand – in the same period, there have been some interrelated events that negatively affected on the economic and financial situation of developing countries, and led to the debt crisis; in 1982-1983 many economically backward countries appeared unable to make payments on their foreign debts.

The most important of these events is the jump in prices for imported oil, reduction of demand for raw materials and agricultural products from the side of developed countries and, consequently, reduction in export revenues of developing countries, raising interest rates in the developed countries, the growth of the dollar rate and reduction of private loans.

Defaults of governments of developing countries were common in the 80-90's years (default – refusal of the debtor to fulfill his commitments on debt securities, unsecured[2] loans and loans). However, since 2000 the situation has changed. Considered fiscal policy, the rapid growth of the economy and currency reserves, high prices of raw materials have allowed developing countries to reduce the amount of borrowing.

As the World Bank notes, there is a tendency of reduction the external debt of developing countries. For instance, Thailand has reduced by half the indicator of foreign debts, which in swing of the Asian crisis was 75% of GDP. In 2006, Brazil, Mexico, Venezuela announced the redemption of bonds in sum 15.5 billion dollars, because of it there was saved enormous amount on interest payments. According to the Emerging Markets Trade Association (EMTA), the volume of debenture of developing countries was 5,485 trillion dollars in 2005 (18% more than in 2004) [15, p.152].

A new global financial crisis that started in 2008 immediately adversely affected the level of international debts. The losses of financial institutions in different countries were 4 trillion dollars. Some countries were on the verge of default. The main causes of the crisis were: the collapse of the real estate market, the rapid growth of nor returned loans, bankruptcy of loan funds, written off by world banks hundreds of billions dollars losses, stock market collapse, rising energy prices, accelerated growth of world inflation and slowing the growth of world economy.

Thus, the international indebtedness problem is an acute problem of world economy. The economic situation of the country as a result of the globalization of financial markets is increasingly depend on external sources, needed to cover the budget deficit, domestic investment, socio-economic reforms in the use of debenture. Mobility and magnitude of capital flows depend on the level of development of countries. Financial resources, received by country under commercial conditions in the form of loans, lead to emergence of external debt, because they require appropriate payment.

10.5.2. What is the concept of external debt?

External debt is the amount of financial obligations of a country, owed to foreign creditors for unpaid external loans and interests.

Long-term debt obligations of a country consist of:

- the external public (official) debt, which is the amount of obligations of central and local state bodies to external creditors for unpaid loans and interest. External creditors can be foreign governments, central banks, governmental bodies, international and regional monetary' and financial organizations;
- the public-guaranteed debt, i.e. the debt of private firms, banks, companies, where the guarantor of payment is the country;
- private non-guaranteed debt, i.e. the debt of private borrowers that is not

[2] Unsecured loans and borrowings are form of external government borrowings without bonds.

guaranteed by a country'. It occurs when a borrower receives bank and other loans by means of purchasing debt securities in the international stock market.

External debt service payments are usually made in a foreign currency.

The World Bank uses a number of relative indicators for the analysis of external debt and country's ability to serve external debt:

- the ratio of the total amount of external debt to exports of goods and services;
- the ratio of the total amount of external debt to GDP;
- the ratio of debt service payments to exports of goods and services;
- the ratio of interest payments to GDP;
- the ratio of international (official) reserves to the total amount of external debt;
- the ratio of international (official) reserves to imports of goods and services;
- the share of short-term debt in the total amount of external debt;
- the share of debt to international organizations in the total amount of external debt;
- the share of concessive debt in the total amount of external debt.

It is believed that the upper limit of the optimality of external debt should be:

a) the ratio of the total amount of external debt to exports of goods and services at the level of 200 - 250%;

b) the ratio of payments on debt service to exports of goods and services, that is not more than 20 - 25%. (In calculating of these indicators we only take into account public and public-guaranteed debt).

The return of loans by sovereign debtors is the most possible in terms of their capacity to pay debt. Therefore, the creditors are ready for debt restructuring.

10.5.3. What is the debt restructuring?

Debt restructuring is a rescheduling of debt obligations, which have an expired payment term. International practice accepted the concordance of this process within the Paris Club of official creditors and London Club of private creditors.

Paris Club is an informal association of governments of creditor countries, which was established in 1956. It determines the conditions of government loans and loans guaranteed by the state. The club operates in close cooperation with the IMF, World Bank, OECD, UNCTAD.

The work of the Paris Club follows three basic principles:

- the unmediated presence of the threat of non-receipt of payment;
- the conditioning of debt restructuring by obligations of the debtor to conduct certain economic policy;
- the uniform distribution of unpaid debts among creditors.

The first two principles are the terms that debtor country has to pay before the revision of the old terms of redemption will be considered by the Paris Club. The third principle is optional. It says that creditors must work together and coordinate their actions and claims to the debtor.

To create a more effective system of debt restructuring Paris Club has developed a classification of countries by the level of their incomes, according to which for each group of countries certain terms for obtaining approval of a debt restructuring are applied. Toronto, London and Naples terms are applied in relation to the poorest countries; to the poorest countries with an average income - Houston terms; rich countries with average incomes use Standard terms.

Toronto terms were adopted in 1988 and are applicable to countries, which income per capita does not exceed the specified level of the World Bank, which today is 540 dollars per year. For such countries:

- one third of debt can be written off with revision of interest rates on its servicing;
- the opportunity to pay off the debt up to 25 years can be given, and 14 years of which the interests are charged at a preferential regime. In addition,
- interest charge is carried out at twice lower rates than the market rates.

London terms mean:

- 25% cancellation of debt with further restructuring of amount remaining for 23 years of a six-year grace period;
- the restructuring of debt at market interest rates for 25 years with 16 years grace period;
- the restructuring of obligations on servicing the loan, which was given as an official promotion of the development of the country for 30 years with 20 years grace period.

According to the *Naples terms* debt restructuring is carried out within 40 years and a grace period can be up to 16 or 20 years. In this case, the interest rate will not be reviewed.

Houston terms were adapted to the poor countries in 1990, where annual income per capita exceeds the maximum level set by the World Bank, which now stands at nearly 785 dollars per year. Under these conditions:

- the maturity of commercial credits is increased to 15 years with a grace period of 8 years;
- the official aid programs of maturity and grace period is 20 and 10 years, respectively.

The poorest countries are also applied *Lyon conditions* (since 1997), in which debt can be reduced to 80%.

The *Standard conditions* are most common. They allow restructuring of debt by 10% for 10 years with 5 years of grace period.

Among the innovations of the Paris Club - "HIPC Initiative", that involves deliberate efforts to reduce debt for the poorest of the developing countries, in terms of carrying out the reforms of the financial restructuring, which should be approved by the World Bank and the IMF.

London club is the forum of revision the terms of redemption of loans granted by commercial banks without guarantees from the governments of creditor countries (since 1976). This is an informal organization comprising commercial banks, to which third world countries own debt. Usually, the London club does not review the size of the interest rates on loans. Typically, commercial banks provide debtor countries new loans as a measure to restructure.

The measures of debt restructuring include transfer payments, the reduction of the amount of debt or its full cancellation, the conversion of debt into national assets of a debtor-countries and recapitalization. The mechanism of recapitalization involves exchanging debts for obligations of debtors, or providing them with new target loans to pay off former debts. Recapitalization is the most popular measure for restructuring the debt to commercial bank creditors. This mechanism was adopted in 1989, and is called the Brady Plan. According to the plan, banks restructure some part of the debt of the developing country (usually it is a lower interest payment) only if its government implements a more radical program of macroeconomic and structural changes.

Every creditor bank has the right to choose the methods of restructuring that are foreseen in the contract. However, on the basis of existing practice, banks choose an Advisory Committee that represents the interests of all creditor banks and negotiates with the debtor government.

Analyzing the results of the multilateral programs of overcoming the international indebtedness crisis of the developing countries, the World Bank came to the following conclusions:

1. The major role in the economic development of a country is not played by external financing (loans and assistance), but by internal resources and a balanced economic policy.

2. The focus on external capital leads in the long term to a greater dependence of the socio-economic development of the country on unfavorable external events. External financing can play a positive role only when it complements and reinforces a healthy domestic economic policy.

Debt restructuring requires from the debtor-country an economic policy, endorsed by the IMF. However, the practice of implementation of the IMF recommendations, without taking into account a country specificity, in many cases leads to a deterioration of the economy, causes social conflicts, forcing to abandon some of the requirements of the IMF and thus makes the debt crisis difficult to overcome.

Chapter 11. International securities market

11.1. What is the essence of the international securities markets?

The important segment of world financial market is an international securities market (ISM). Its role in recent years has increased considerably. With the rapid economic rise of many industrialized countries, traditional sources of funding are not fully meeting the needs of large corporations in the capital. Therefore, these companies are not limited by the services of the national banking system and, relying on a high credit rating, they attract cheap financial resources by issuing securities. Growing demand from issuers, increase of supply as a result of the integration of national markets, competition as a result of openness and globalization of the economy leads to a reduction of the role of the banking sector as a mechanism for the redistribution of financial resources at the national and international levels and to simultaneous strengthening of investing and lending activities in the international securities market.

The issue of securities gives the possibility: to raise a loan for a long period (for a few decades, bonds, for example), i.e. investment in the instruments of a loan; of unlimited use of financial resources (equities), i.e. investment in the instruments of property (title of ownership); to reduce a financial risk, i.e. investment in the instruments of trade in the financial risk (financial derivates).

The market of long-term securities is called a stock market. Together with the short-term debt instruments of the money market (bills of exchange, certificates), a stock market forms the securities market.

Thus, the international securities market unites the part of the global debt market (namely: the international debt securities market, which is mainly presented by the international bonds market), the international market of titles of ownership (property rights) and the international market of financial derivatives.

There are following instruments of the loan: bonds, bills of exchange, deposit certificates. The instruments of property include all types of equities and depositary receipts. There are also so-called hybrid instruments, securities, which have features of both bonds and shares (for example, preferred shares and convertible bonds) and derivative instruments - warrants, options, futures etc.

Market of loan instruments deals with a loan capital, and market of property instruments - with parts (by shares) of property within a corporate capital.

The stock market deals with long-term borrowing instruments and instruments of property derivatives.

At the international capital markets trading in securities denominated in foreign currencies is conducted.

The Bank for International Settlements distinguishes such types of security issues in the international market:

- the security issue by nonresidents in national or foreign currency in the internal financial market of the country;
- the security issue by residents in foreign currency;

- the security issue by residents in national currency, which are intended for a sale to foreign investors [16, p.175].

The international securities market is divided into two structural segments:

- the foreign securities market. It is a financial market of the states, in which the transactions with financial assets of nonresidents (foreign securities) are conducted;
- the securities Euromarket. It is a market, in which the securities expressed in Eurocurrencies are: produced, bought and sold.

The definition of europapers is given in the Council Directive 89/298/EEC of the European Commission, according to which europapers are being in circulation securities, which:

1) pass underwriting and are placed through mediation by a syndicate, at least two participants of which are incorporated in different countries;

2) are offered in considerable volumes in one or more countries, except the country of registration of the issuer;

3) can be initially purchased (including the subscription way) only through mediation by the credit organization or other financial institution.

The functioning of ISM requires certain preconditions: demand, supply, intermediaries, regulatory and self-regulatory system. The demand for securities is determined by the welfare of the nation. The higher is standard of living, the greater are the savings of the population and the possibility of purchasing securities. The supply depends on the demand. It is higher, if market mechanism of sources delivery of long-term loans and financing are more developed. For the development of the securities market specialists of investment business and the system of training such specialists are needed. Finally, intermediary organizations are broker and investment dealer firms, stock exchanges and regulators of investment business are required.

The securities market is a major source of investment resources for governments, corporations and banks.

11.1.1. What is meant by investment capital?

The term "investment" has several meanings. The most common definition is that the investment is the use of money to generate income or to accumulate capital. All property and intellectual values that are contained in business and other activities to make a profit or achieve social impact are investments.

Even with this definition it is clear that this is not just about money, but about money, which is a monetary form of circulation of capital, i.e. investment capital. Investment capital can be personal (retained earnings, depreciation) and borrowed, the source of which is temporarily free someone else's money. But free money is not an investment. They are converted into investments in the hands of those, who spend them on purchase on elements of production that brings income, i.e. converts into real assets. Real assets are economic resources of the company: fixed and circulating capital, intangible assets (patents, licenses, know-how, trademarks, etc.) used for productive activities to generate income. Proper storage, moving into real assets is directly converted into investments. Someone else's free money (savings) is converted into investments via the capital market, especially through the stock market.

Investment objects can be real investment projects, real estate and various financial instruments. Financial instruments as investment objects - are different types of financial liabilities:

- deposits in the bank;
- securities (bonds, equities, options, etc.).

Thus, the term "investment" is used to refer to:

a) the investment of funds, intellectual property into real assets, i.e. production;

b) the investment of funds into financial instruments, i.e. the purchase of securities.

In this chapter and the next, under the investment the investments in financial assets, not in production will be understood. In other words, we examine investment like any financial tool, which can hold money, hoping to maintain or increase their value and provide a positive amount of income.

The main goals of investors are: the safety of investments; increase in current income; the accumulation of funds for large expenses; the accumulation of funds for retirement period; the growth of investments; the "concealment" of income from taxes; the liquidity of investments.

An investor thinks primarily about minimizing risk with the purchase of securities. Under the security of investments we can understand invulnerability of investment from the shock of capital investment marker, and the stability of income generation. Security is usually achieved at the expense of profitability and growth of investments. The government bond is considered to be the safest investment. The most risky are investments in equities of young high-tech company that may be most beneficial for yield and growth of investments. Maximizing income on investment is usually associated with a low level of security.

Some investors in selecting securities prefer their liquidity or market standards. Under the liquidity the ability to quickly and break-evenly converting securities into cash for investors is understood.

None of securities has qualities that would ensure the achievement of all these goals. The mechanism of the stock market works such way that when securities are really reliable, the yield will be low, as the increased demand for them will raise the price and bring down yields. The relationship between such qualities of securities as prospect of capital growth and profitability is similar.

Optimality of securities portfolio is achieved by diversification of investments when capital is distributed among a great number of different securities, and by regular review of the portfolio. It is used to limit investment in each type of securities in 5-10% of the total portfolio.

Stock market is a mechanism for conclusion of agreements between those, who offer securities and those, who offer money. In the purchase and sale on the stock market seller is the one, who sells securities and the buyer is the owner of the money. Security is opposed to money as a special product, issue of which in circulation is called emission.

Sellers of securities (they are consumers of investment capital) are called issuers and buyers of securities (they are the suppliers of investment capital and holders of securities) are investors. Issuer is only the first seller of securities, which issues them for the money required for his work. He issues securities on his own behalf and is responsible for them. However, the issuer may sell securities not to the final holder of securities but to intermediary (dealer), which initially serves as a buyer, and then - as the seller of securities. Hence the term "issuer" and "seller" are the same only on the primary securities market. In the secondary market, where they resell these concepts are not identical.

The only source of investment capital is savings. Savings arise, when income of enterprises, governments and individuals exceed their costs. The largest suppliers of investment capital are individual savers. Personal savings (in the form of bank deposits, certificates of pension funds, bonds, government loans, corporate securities, insurance policies, etc.) reach 20-30% of total savings.

Non-financial corporations are the main creators of the investment fund (about 60% in developed countries), but their savings mostly remain within the corporation, acquiring the form of retained earnings and depreciation. The financial needs of corporations tend to exceed their savings. That is why on the market of investment capital business sector acts as a net final borrower-consumer of investment capital. The public sector also generally acts as net borrower.

According to the constitution of many countries, local authorities can issue securities both for their own and for foreign investors. The cost of municipal securities is determined by the ability of local authorities to pay interest and observe the maturity of the debt.

Institutional providers of investment capital are commercial banks, trust companies, insurance and pension funds. Commercial banks conduct financial operations mostly on the money market, where they act as buyers and sellers of treasury notes and other government securities with maturities not exceeding three years. Their role is not so significant on the market of investment capital. Banks may issue their shares. Trust companies carry out agent function on management and preservation of individual portfolios, transfer of shares. Trust can be the guardian of corporate bonds etc. The investment activities of insurance companies and pension funds lie in the long-term high-yield securities. Insurance business is a huge holder of institutional savings. Pension funds are also big buyers of high-yield corporate and government securities, as income of investments of pension funds are not taxed.

The foreign sector (foreign corporations, governments and individuals) can be net borrowers and a net savers to a particular country. If foreign sector has a negative balance of capital flows with this state, it is a net creditor in relation to it, if the balance is positive - net debtor.

The central bank obtains the special place on the market. The central bank issues government bonds, pays interest from them and repay them. To control the government deposits, the central bank has a special account for the investment of surplus of government revenue in securities (usually the very same government).

One of the tasks of the central bank is a public debt management: defining the properties of bonds, the terms of their issue, locations, changing of debt composition. Public debt is the cumulative (for all years) state budget deficit. It consists of market bonds and non-market bonds.

Market Bonds:

- treasury bills, which are sold by the Ministry of finance of central bank by its application. Their maturity is up to one year;
- treasury notes and treasury bonds that have coupons, on which the percentage and date of payment are indicated. Maturity is from 2 to 30 years.

Non-market bonds:

- savings bonds, etc., which are registered on the name of the holder and cannot be sold. Savings bonds can be sold at the nominal value at any time, which makes them highly liquid.

Periodically, the government issues bonds that are denominated in foreign currency for overseas placement. The main objective of such issues is to ensure exchange rate stability.

Managing the public debt, the central bank collects and processes the economic data, keeps track of changes in demand for the securities, the level of interest and liquidity on ISM. The central bank is concerned about the conditions of marketing and distribution bonds, coordinating their stock policy with monetary and fiscal.

11.1.2. What intermediaries exist on the securities market?

Purchases and sales of securities are carried out on ISM through the intermediaries: investment dealers and brokers, investment fund, the depositary (the institution that maintains securities and formalizes transfer of ownership rights to them), settlement and clearing institutions, registrars.

Broker carries out transactions with securities on the basis of the contract with the customer and at his expense. Broker receives a commission for the services, and therefore broker activity belongs to the category of commission activities.

Dealer carries out the transactions on his own behalf and at his own account for resale of securities to third parties or formation his own reserve of securities. Dealer activity belongs to the commercial activities.

In addition to these two types of services there is depositary activity on ISM:

1) storage and transfer of securities and the related accounting;

2) collection, collation, correction of documents and conduction of mutual settlements - clearing;

3) recorder acts - a legal entity which keeps the register of securities holders.

Intermediary operations of the issue and circulation of securities may be performed by:

- banks;
- investment companies, which combine the functions of a financial intermediary and institutional investor;
- companies that specialize in working with securities and carry out intermediary activity of the issue and circulation of securities.

Organized and permanent securities market is a stock exchange, that is a voluntary association of securities market intermediaries.

11.1.3. What is the essence of investment risk?

Securities market creates investment risk. Investment risk includes:

- the risk of losing the invested capital;
- the risk of losing possibility of obtaining of expected income.

The risk of loss of capital depends on market risk and business risk. Market risk is not directly connected with the commercial and manufacturing activities of the company. It may depend on the movement of interest rates, stock speculation, strike etc. Business risk is determined by the possibility and the ability of the company to maintain the level of income on invested capital, and for the joint stock company - on stocks. Business risk is indirectly affected by competitive situation on the international commodity, credit and foreign exchange markets.

The risk of loss of expected income depends on interest rate risk and the risk of changes in the purchasing power of money. For example, government bonds have a nominal value, expressed in money. The sudden rise in prices reduces the real value of bonds on interest value of depreciation of money. Share yield consists of dividends paid and changes in share price. Dividends and capital gains, at sufficiently long period of time, are determined by the company's revenue, which in turn depends on technological, competitive, economic, and political factors. Exchange rate fluctuations also affect the yield of securities.

The possibility that securities will be both profitable and reliable is extremely small. High income is usually accompanied by high risk. An investor, choosing an investment object, is guided by advantage, which it provides, or safety of capital, or obtaining a high return. Securities are risky, if the rate of return on invested capital strongly fluctuates. In fact any investment in securities contains an element of risk.

Ratio of risk and profit by types of securities or types of deposits in the U.S. are listed in Table. 11.1 [16, p.182].

Table 11.1

Risk characteristics of profit by types of securities or types of deposits in the U.S.

Security or type of deposit	Income on investments	Risk of loss of invested capital		Risk of loss of expected income	
		Venture risk	Business risk	Interest rate risk	Risk of changes in the purchasing power of money
Speculative ordinary shares	15-20	B	B	H	H
Shares of increase	10-12	B	B	H	H
Shares with "blue roots"	8-10	C	C	H	H
Certificates of investment funds	8-10	C	C	H	H
Profitable shares	7-8	C – H	C -H	C	C
Convertible preferred shares	6-10	B – C	B - C	H	H
Convertible bonds	5-10	B –C	B –C	H	H
Bonds of enterprises	5-8	C – H	C-H	B-C	B
Municipal Bonds	4-5	H	H	B	C
Government Bonds	4-6	H	H	B	B
Account in savings or commercial bank	4-5	H	H	H	B
Account in Swiss Bank	0	H	H	H	B
Savings in safe or "stocking"	0	H	H	H	B

11.1.4. What are the stages and development trends of world stock market?

The development of world stock market passed 5 stages.

The first stage covers the period 1860 - 1914. National stock markets were rapidly developing during this stage, international movement of capital was expanding, and global capital market began to form.

At that time the formation of world stock market was influenced by the following factors:

- changes in the structure and composition of borrowers in the capital market. On the world market 60% of foreign debt accounted for government loans in 1870, and in 1914 - less than 30%. The role of private loans increases (increases emissions corporations stocks and bonds);
- the commercial nature of the majority of borrowings;

- mostly long-term character of borrowings;
- the increase of interaction between participants of the stock market;
- the introduction of new means of communication and connection;
- the establishment of stock exchanges as a key element of the global capital markets.

The second stage covers the period 1920 - 1945. The decay of the world stock market and the disappearance of the conditions for its development in the pre-war period began during this stage.

After the First World War the balance of power in the global capital markets changed. Western European countries turned from exporters into importers of capital.

The main creditor of the global capital markets is the USA. However, in the late 20's export of capital from the United States in connection with the economic rise has slowed down. In the U.S. stock market growth of stocks quotations (Dow Jones index) was 300% in 1924-1929. U.S. banks lost interest in the Western European market. The flow of private capital was directed to the American market, which worsened the financial position (up to bankruptcy) of Western European banks involved in international transactions. As a result, U.S. banks faced serious financial difficulties because they got rid of stable sources of funds for repayment of earlier loans granted to Western European banks.

World economic crisis of 1929-1933 and the introduction of foreign exchange restrictions on current and capital operations in the beginning of the Second World War led to the disintegration of the world stock market.

The third stage covers the period 1945-1972. The development of monetary and financial relations defined Bretton Woods's agreement in 1944.

International movement of capital in the early postwar years was carried out mostly by government channels and movement of private capital was under the strict state control. Due to stringent currency restrictions international activities of national capital markets was practically absent. Formation of world capital market has gone through the development of eurocurrency market and Eurobond market.

World stock market at this stage was represented by two levels:

- at the top level bond market was functioning;
- at the lower level closed, isolated national markets operated, in which securities transactions were strictly regulated by the national authorities.

However, the degree of "transparency" of the boundaries between the world and domestic stock markets gradually increased, indicating that the expression of the globalization of capital markets.

The fourth stage covers the period 1973-2000. During this period, the radical transformations of the national stock markets of developed countries happened: market of banking services was created, public debt market, market of corporate securities. In fact it was "financial revolution", part of which are:

- the deregulation of financial transactions in the country;
- the liberalization of national regimes of long-term movement of capital;
- the formation of an active market monetary policy.

The policy of deregulation and liberalization has created conditions for the integration of national stock markets, expansion of operations on them and transfusion of private capital between countries. Strong relationship between stock markets of leading countries was created.

The model of financial transactions changed: banks lost their role as the major financial intermediaries, giving way to the stock market.

The fifth stage began in 2001, and continues today. Stock market increasingly takes shape of two-tier system: a global level, represented by securities turnover of leading TNCs whose activity is global; and national, where securities of domestic companies are circulating and their turnover is provided by the infrastructure of local financial markets.

The current condition of the world stock market is characterized by quantitative assessment of its volume, dynamics and structure of different types of securities.

Total world stock market is about 70 trillion dollars. At the same time 42% is the equity market and 58% is the debt market. Half of the total world market for the shares and bonds falls on the United States [15, p. 185]. Turnover in the stock market is 800 billion dollars a day, and in the bond market - 950 billion. The ratio between the amounts of equity and bond markets in general reflect the situation in the markets of developed countries due to their absolute dominance in the global stock market. For some states, these proportions can vary significantly. For example, in East Asia most of the market accounts for shares, and in Latin America - for debt securities.

The main trends of the modern development of world stock markets are:

- *the growth of currency factor in the operations of global stock markets*. Unstable exchange rates significantly affect the movement of financial flows between the markets of developed countries;
- *securitization of financial transactions with a focus on the development of corporate financial instruments (primarily equities and their derivatives)*[3]*;*
- *the growth in interdependence of national stock markets.* This is primarily manifested in practically simultaneous increase or drop in securities on the domestic capital markets of different countries;
- *the growth of the amplitude of fluctuations of securities rates.* Synchronized fluctuations of quotations movement of securities in the domestic market creates the conditions for an increase in scale of fluctuations and duration of cycles of movement of rates;
- *the growing influence of capital markets on the economy.* High conjuncture on the stock markets of developed countries contributes to high economic activity in Western countries, in promoting scientific and technological progress, modernization, capital concentration. For example, in the U.S. 60% of

[3]The volume of world stock market is calculated by a method which involves summing the debt on debt securities, excluding bills, and the market value of shares (in calculations involving securities that are traded on organized securities markets).

Securitization - the process of transformation of illiquid financial assets into capital market (long-term bonds, shares) that are suitable for sale.

the total annual investment in the economy accounts for companies that are connected with the latest technology;

- *change of infrastructure of stock market.* The use of computer telecommunications technologies intensifies the competition of all infrastructure elements of stock market and its participants, forcing them to be improved technically, organizationally and technologically. First of all, the organization of stock exchanges activity is changed. They are expanding the range of financial services, form stock alliances and unions. Feature of the infrastructure the world stock market is equality of volume of transactions on the exchange and OTC stock market;
- *the unification of regulatory framework governing operations at the stock market.* The legal norms of regulating transactions in the stock market that are accepted almost simultaneously in the United States, Western Europe and Japan have similar content. These requirements relate to financial reporting corporations, insider trading, business analysis and consulting services, rating agencies, etc.;
- The *infrastructure development of cross-border transactions with financial instruments.* Thus, the foreign exchange market has a system of continuous calculations. It makes it possible to reduce the time from the date of the transaction until settlement from 2-3 days to several hours. The system is also used for the calculations by securities and money market instruments. Automotization system of processing of applications for purchase and sale of financial instruments market is introduced. In Western Europe, a unified platform for the clearing and settlement of securities is created. Through all this the cost of operations can significantly reduce and risks can be minimized due to the acceleration of payments.

The level of development and the role of the stock market differ in different countries. This is because the differences in the ownership structure of the stock capital and in the control system above companies. A stock market is more developed in the countries, where the "*outsider" model of the capital supervision* is implemented (in the USA, Great Britain and in other Anglo-Saxon countries). This model is characterized by following features:

- the capital of stock companies belongs to the large group of individual and institutional interest holders;
- there are effective defense mechanisms of investors' rights and the information disclosure system. If the management of company hurts the investors' rights or works ineffectively, interest holders will realize their securities, and because of large dispersed share ownership, a company can become the object of hostile takeover;
- certain isolation of the company's management from shareholders due to that a stock ownership is distributed between plenty of interest holders, who have some difficulties with the actions' coordination.

The countries of Europe, Japan and developing countries are characterized by the *"insider" model of the capital supervision*. This model is characterized by the following features:

- the share ownership is concentrated in large blocks;
- the crossholding of papers is widespread;
- the stock market is less developed in comparison with the “outsider" model. Its volume is less due to lower capitalization of companies and less of papers, circulating in the market;
- large shareholders have the possibility to work effectively with each other for the control implementation above the company's management;
- the interests of minority shareholders are protected worse;
- it is almost impossible to carry out the hostile takeover.

The outsider model is considered to be more modern and flexible and has better reaction to the changes of the market environment.

The basic function of the stock market consists in the redistribution of money facilities. In countries with the "insider" model, the role of the stock market in the redistribution of free money facilities is relatively below than with "outsider" one, as in these countries economic entities emphasize the bank crediting.

11.2. What classification of securities exists?

A variety of securities makes it necessary to classify them according to certain criteria. The most detailed classification of securities is given by O. Mozgoviy in his book "The stock market of Ukraine" [9, p. 156]. The classification is based on such features as the economic nature of the securities, purpose, role, difference of issuers, type transfer of property rights, maturity and method payment of return, reliability and so on.

Depending on economic nature the securities are divided into equity securities, debt securities and derivatives. Equity securities fix relationship of co-ownership or equity participation in the authorized capital and the distribution of income (stocks). Debt securities mediate lending relationships (bonds, bills, savings and certificates of deposit). Derivatives certify the right to buy or sell securities (usually shares).

Depending on the purpose securities are divided into stock and commercial. Stock securities (stocks, bonds) are the tools of investment capital traded on the stock market, they usually are not limited in time or act more than one year. Commercial securities (bills, letters, etc.) are credit instruments that mediate trading operations and are circulating in the money market. These securities are mostly short-term and partially used for capital investment.

Depending on issuers securities are divided into issued by companies, public companies, government, government agencies, banks and local authorities.

Depending on the type of transfer of property rights securities are divided into registered securities, bearer and transferable. Transfer of rights by registered security requires identification (confirmation) of the owner. Transfer of rights by bearer securities does not require identification of the owner.

Transferable security (bill - draft) issued by the creditor (drawer) and is the order of the debtor (drawer) for payment at the appointed period specified amount to a third party (payee) or to bearer. When sending a bill from one owner to another on its back side transfer inscription is made, which is called endorsement. Transferable bill enables the creditor to pay for his own debts.

Depending on the role securities are divided into basic (they record the basic property right or claim) and additional, which is a confirmation of additional rights, conditions, and requirements (for example, a coupon that indicates the right of the owner to the relevant interest or dividends).

Depending on the possibility of purchase and sale securities are divided into market that can be resold, and non-market, which can only be sold once.

Depending on the type of income payment securities are divided into: securities with fixed payments (bonds and preferred shares); securities with floating rates (bonds with floating interest, which depends on the discount bank rate); securities, the income of which directly depends on the size of net profit (ordinary shares).

Depending on the territory of circulation securities are divided into: regional (local government bonds); national (domestic securities stock market); international securities, which are free to rotate in other countries.

Depending on the place of the office registration of the issuer securities are divided into foreign and domestic securities. Among foreign securities there are securities of issuers that are not residents of the country, and whose production is registered in other countries.

Depending on the degree of reliability securities are divided into high qualified (with high probability of return of capital and income) and ordinary (with lower probability).

Also there are other groupings of securities.

11.3. International market of titles of ownership

The international market of titles of ownership is divided into the equity market, which accounts for about 80% of all new international primary distribution of titles of ownership, and the market of depositary receipts, which account for about 20%.

Titles of ownership are the instruments, confirmative participating of the investor in the capital of the company

11.3.1. What are the equities?

Equity (share) is a security without set term of circulation, that indicates some equity participation in the capital of the joint-stock company, allows the holder to purchase part of the profits in the form of dividends, to participate in the distribution of property in the process of liquidation of the joint-stock company.

Shares on the basis of personalization can be registered and bearer, and depending on the rights of owners – ordinary and preferred. The nominal value of shares is determined by the formation of the joint-stock company and is fixed at its front side. Nominal value of the share is not a reflection of the real value of the assets of the corporation and usually is not indicated. Shares without nominal value are issued at a price that is attractive to investors.

Balancing value of shares is calculated as the portion of the division of net asset value of a joint stock company by the number of shares issued and distributed.

Rate (market) value of shares is determined by supply and demand correlation for them on the security market. This is the current value on the stock exchange or over the counter circulation.

Ordinary shares – shares, the income of which depends on the net income of the corporation and its dividend policy. The distribution of income between the owners of ordinary shares is made in proportion to the invested capital, depending on the number of purchased shares. However, not all net profit goes to pay dividends on ordinary shares. After paying preferred dividends, the part of net profit goes to finance future investments in most corporations. The risk of investing in ordinary equities is linked to the fact that dividends on the ordinary shares may decline and even not to be paid. Sometimes dividends are paid not in cash but in shares. If the corporation becomes bankrupt, the shareholders of ordinary shares may lose all their investment. When there is the claim on the assets and profits of the corporation, the shareholders of ordinary equity will be on the last place – after banks, bondholders and preferred shares.

The source of the risk of ordinary shares may be the stock market or the firm, or both first and second.

The attractiveness of ordinary shares that they give the right to vote, a preferential right to purchase shares of new issues, the ability to increase capital (increase in due course of share price) due to the high liquidity, i.e. rather active trading of shares in any time.

Dependences on the degree of risk and yields of shares that are traded on the securities market, divided into shares: the "blue roots"; profitable; growth shares; cyclical; speculative.

Shares of "blue chips" – shares that are issued by powerful corporations (within the U.S.: IBM, Dow Chemical, General Motors, and others.), which consistently paid dividends to their shareholders in their history. These shares are safe and profitable.

Profitable shares – shares of the telephone corporations, water, gas and electricity corporations, as well as other companies with dividends exceeding the average level. Shares of corporations tend to grow with time.

Growth shares – are shares of corporations whose income is higher than average level, but dividends are not very high, because corporations finance the expansion of production, scientific and technical researches and so on. The future value of the shares of such corporations has a great probability to grow.

Cyclical shares – are shares whose price is rising and falling in sync with the ups and downs in the economy. Mostly, these are shares of corporations of basic industries. Investors are willing to buy such shares during the upturn in the economy and to them before the recession.

Speculative shares – shares of corporation that cannot produce a course of 5-6 years. They are usually sold "off the counter" without going through the stock exchange, cost less than the shares of known corporations, but have a high degree of risk.

Along with ordinary shares, the corporations issue ***preferred shares*** in amount that does not exceed 10 percent of the authorized fund of the corporation. These shares give their owners a range of benefits (preferences), but do not give the right to vote, the right to participate in the management of the corporation (if other provisions not provided by the charter). The preferences include:

1) the right to receive a fixed income or as a percentage of the value of shares, or a sum of money paid regardless of the performance of corporations;

2) the prerogative right to: a) the priority in receiving of dividends; b) the priority participation (after satisfaction of creditors - banks of bond holders) in the distribution of assets of the corporation during liquidation; c) if the amount of the dividends paid on ordinary shares exceeds the amount of dividends on preferred shares, additional payment may be held to the holders of the latter.

There are the following types of preferred shares:

- cumulative, which have the right of accumulation of unpaid dividends, accruing and paying them by missed period in the following one;
- non-cumulative, unpaid dividends which do not join the dividends of next years;
- convertible, which are exchanged for fixed number of ordinary shares or bonds of the corporation;
- non-convertible, which cannot change their status;
- share of participation, which entitles shareholders to get additional dividends over the prescribed, if dividends on ordinary shares are higher.

A variety of benefits make preferred shares attractive to investors. The issuer is interested in their production, as the latter does not result in dilution of capital and allows keeping a control shareholding. Holders of preferred shares occupy an intermediate position between the holders of bonds, who are corporate creditors and holders of ordinary shares, who are co-owners and have right to participate in the management of the corporation. Preferred shares can be viewed as compensation for the lack of the vote.

Investment quality of preferred shares is determined by:

1) the degree of provision of payment of all preferred dividends by net income.

It is believed that the adequacy of the coverage of the annual excess of net income over preferred dividends shall be at least:

- for public companies in the utilities sector 2 times;
- for industrial companies 3 times;

2) the continuity payment of preferential dividends;

3) the adequacy of preferred shares provision by share capital of the company:

• the minimum share capital in calculation per preferred share in each of last five years should be 2 times more than the value of assets, which the shareholder will receive for each preferred share in the case of liquidation;

• the annual increase of share capital in calculation per preferred share should be relatively stable or have a tendency to increase in last five years;

4) the rating of preferred shares. It is defined by independent rating agencies of the securities in the following shades:

P_+ – "super". Preferred shares directly protected by a third party (e.g. parent company) or provided by highly liquid securities (bank acceptances).

P_1 – higher quality. Excellent protection from the side of assets and greater ability to pay dividends.

P_2 – very good quality. Reliability of assets and income.

P_3 – good quality. Preferred shares well protected, but they can be exposed to downturns in quality as in times of economic hardship.

P_4 – moderate quality. Adequate protection, but there are factors that under adverse conditions can weaken the company's ability to timely payment of dividends.

P_5 – speculative. There is no assurance that the company will be able to protect preferred shares.

During the process of rankings of preferred shares, it is analyzed the company, industry, management, financial position and other parameters of its activities.

Some TNCs issue their shares for distribution in various countries. To get to the market of any country, they need to add their shares in exchange bulletin of the country. To do this:

a) spend large sums of money by placing information in the bulletin;

b) provide sufficient amount of information that must pass an independent audit verification and certification of authenticity;

c) inform the foreign press, brokers and potential investors about the prospects of the corporation development.

11.3.2. What are the types of international equity market depending on the level of economic development of the country?

International equity market depending on the level of economic development of the country is divided into mature markets and emerging markets.

Mature markets are equity markets of developed countries, which are characterized by a high proportion of organized trade through exchanges, high level of market capitalization, developed system of organizational and legal provision of shares trading. Mature equity markets are considered markets of the U.S., Japan, the EU countries, Canada, Australia and others.

Aggregate index of capitalization of mature markets is 93% of the total international equity market.

Market capitalization is the index that reflects the market value of all companies that are involved in transactions on the stock market. The market value of a company is calculated by multiplying the market value of its shares by the number of shares in circulation.

The following key indicators are used for the analysis of stock markets:

- the ratio of stock market capitalization to GDP;
- annual turnover of stock market as a percentage of capitalization;
- listed foreign shares on the markets of particular countries.

Index of capitalization/GDP is very important because it largely reflects the level of stock market development in accordance with the classification of the International Finance Corporation and the International Monetary Fund. The world leaders by the index of capitalization/GDP in 2011 were Hong Kong (capitalization was 13 times higher than GDP), Switzerland (235%), Luxembourg (183%), Malaysia (172%), Chile (167.9%), Singapore (166.2%) [7, p.185].

Emerging markets are the equity markets in developing countries and transition countries, characterized by high growth, high-risk, low market capitalization and regulation mechanism that is being formed yet.

Among the emerging markets, there are three types of equity market:

- old markets, that was formed long ago (Greece, Spain, Argentina, Brazil, India);
- emerging markets due to special specific situations (such as Hong Kong, Singapore – due to their role as regional financial centers);
- new markets, that was emerged on the basis of rapid economic growth (South Korea, Taiwan, Philippines, Indonesia) [9, p. 123].

The highest indicators of capitalization are observed in China, Taiwan, South Korea (Table 11.2).

Table 11.2

Major emerging equity markets

Countries	The number of companies quoted	Monthly trading volume, million dollars	Market capitalization, bill. dollars
South Africa	472	6520	184,6
Brazil	399	3242	123,8
Mexico	166	1212	108,1
South Korea	1518	58721	248,5
Malaysia	865	1245	123,9
Taiwan	638	45179	251,5
China	1235	20692	463,1
Russia	196	2711	124,2

Source: [15, p. 85]

The active role on emerging markets is played by institutional investors (90% of portfolio investments on these markets). However, the share of emerging markets in these portfolios is 3-5 times lower than it needs to be according to the theory of international management portfolio of securities (in the optimal portfolio of the investor, particular countries should take a proportion occupied by the market capitalization of the country) .

In 2012 compared to 2011, emerging equity markets increased by 18%, the country with the largest global growth on the stock market was Venezuela, the main index of which increased by 342%.

An important indicator of the dynamics of emerging markets is a composite index of IFC that includes 1224 firms from 26 countries. It is used as an indicator to compare share rates of individual countries and consists of regional indexes of share rates [9, p. 131].

In recent years, in order to improve the activity of emerging equity markets, IFC applies a number of measures aimed at:

- the provision of full information on the status and tendencies of these markets development;
- the creation of investment funds that direct the foreign capital to investment of emerging equity markets. Thus, it was the fund's emerging markets, regional funds, which aim to integrate these equity markets in the international equity market.

Some countries improve their legislation for effective regulation of the equity market and trade on them; contribute to the development of pension funds, mutual funds, stocks, providing institutional framework of the market; encourage foreign portfolio investment through the establishment of foreign investment funds and more.

11.3.3. What structure segments the international equity market has?

International equity market structure has two segments: the market of foreign equities and the market of euroequities.

Foreign equities are the shares that are issued by non-resident corporation on the stock market of another country.

Such equities are traded on the market of foreign equities: equities of non-resident companies that are issued or quoted on a national stock market of a country in its own currency; equities that are issued and received stock listing only in the country of its issue, but sold on the stock markets of several countries and equities that got cross-listing[4] on stock exchange of different countries via relative price quotes and consequently traded on the stock exchange and OTC markets [15, p. 197].

The main advantages and disadvantages of foreign equities are listed in the Table. 11.3.

Euroequities are the shares that are placed simultaneously on several national stock markets by international syndicate of financial institutions that sells them for euro.

[4] Cross-listing - a quoted of shares on one or more stock exchanges, except the stock exchange of the country.

Table 11.3

Advantages and disadvantages of foreign equities issue

Advantages	Disadvantages
1. Eliminates the need to exchange currency for purchase / sale of equities and thus reduced currency risk. 2. Investors avoid certain taxes and restrictions. 3. Reduces the political, economic risk, liquidity risk.	1. The presence of a specific regulation to foreign equities in the country of issue. 2. Stringent requirements for foreign companies on the amount, frequency reflection and the quality of financial reporting.

Euroequity market appeared in 1983. Euroequities are sold on the European market, traded in world financial centers (mainly in London) and the income, derived by them, is not a subject to any national taxation.

The mobilization of financial resources through euroequities is usually carried out by TNCs of developed countries, whose share in total emissions is about 50%.

Euroequity market is characterized by increase in emissions, expansion of the composition and number of participants, but the scale is relatively small (4-7% of total emissions on the European securities market).

Issue of euroequities has positive impact on the company, which plans to export to foreign markets and the development of foreign production, as it is widely known abroad, which promotes its products on the market. Issue of euroequities often improves the credit reputation of the issuing company, making it easier for it to access other resources, and there is indirect advertising abroad.

However issue of euroequities can be risky because of the transfer possibility of a control shareholding of the company to the shareholders of another country.

International equity market takes a central place among other financial markets and its volume increases. Thus, the volume of shares trading in 2011 amounted to 8.755 billion euro (compared with 2010 increased by 32%), while the London Stock Exchange accounted for 31% of total trade, NYSE Euronext - 20%, the German Stock Exchange - 16% , the Spanish stock exchanges - 13% of the Swiss Stock Exchange - 8% [34].

The regional structure of the equity market is as follows: the U.S. accounts for 45%, Europe - 28%, Japan - 10%, China 4% - and other countries - 13% [25].

The large number of listing issuers has increased over the past 15 years from 18 to 21 thousand.

The main factors of internationalization of the equity market are as follows:

- the internationalization of corporate ownership;
- the expansion by non-resident companies their shareholding by registering their equities on foreign markets. It is connected with the fact that the registration of the equities on the foreign market is generally preceded the issue of equities on the market in order to obtain additional capital. Non-residents use the

liquidity of foreign markets and thereby increase the funds available for investment and reduce the cost of capital for the firm. Placement of equities on the foreign market facilitates the acquisition of foreign companies in the future;

- non-resident companies can use foreign equities to pay for labor of local managers, employees, possession helps to create a positive image of the company in the eyes of the consumers and suppliers of investment capital;
- reduce financial risk by diversifying their portfolio of equities in different countries.

11.3.4. What are the specifics of the international market of depositary receipts?

Depositary receipts are the derivative securities (in the form of certificate) issued by the National Bank of global significance, confirmative its right to a stockholding of foreign companies and being in its trust management.

The main purpose of issuing any securities of companies is the attraction of additional capital for development. This is not always possible to achieve with the resources of the internal market. The issue of depository receipts allows obtaining considerably greater results and has a number of advantages:

- the group expansion of the potentially informed investors due to the infrastructure development of foreign markets;
- the improvement of the image and rise of trust to the issuer, increase of the number of persons who have positive information about the issuer;
- the company's fame, its image abroad and reputation of active participant of world financial market allows to negotiate effectively with other companies on financial issues;
- in some countries issuer can avoid the active constraints on the export of securities abroad, as well as to sell securities to foreign investors when their sale is prohibited or limited or regulated superfluously hardly;
- issuer has the right not to follow the legal requirements of the country, in which the produced through depositary receipts equities are circulated;
- possibility to avoid the problem of reverse capital inflows, which appears for immediate release of foreign equities;
- it is easer for investors to diversify the portfolio of securities;
- investment in depositary receipts has low transaction costs.

Thus, according to the analysis of the experts of The Bank of New York, the spendings of investor who buys ADRs in the first year is 2 times lower than in the case of purchase of relevant shares on the foreign stock exchange. And then the level of costs connected with owning ADRs dose not change, while the costs of the shares that were purchased directly increase each year. This situation is due to the fact that in the second case, the investor pays high bank fees, besides conversion of currency influences on significant cost on the acquisition of equities;

- dividends paid by depository receipts, are more than those, which are paid by equities. So according to the calculations of Morgan Stanley, the average rate of dividend on equities of American companies is 1.7%, while in Europe - 2.9, UK - 3.3, the leading Asian countries, except Japan - 3.6% [13, p.144];

- the liquidity of depository receipts compared to equities is on the whole much higher.

The main depository receipts are American depositary receipts (ADR), European depositary receipts (EDR), Global depositary receipts (GDR) International Depositary Receipts (IDR).

American depositary receipts are the circulating securities issued by the U.S. banks, which have bought large amount of foreign equity, depositing them on trust accounts. Then they sell their shares in property in a trust, which are called ADR, to the investors. The number of issued ADRs can equal the number of the issued equities or be less, and then every ADR is equivalent to one or a few equities of foreign capital. When a foreign company pays a dividend, a bank converts it in dollars at the current rate of exchange and distributes the received funds among the holders of ADRs proportionally to the amount of receipts per each of them.

ADRs are in free circulation on the U.S. stock market. This is the most common form of depositary receipts, as the U.S. stock market has large and a large number of potential investors. Normally, the companies are starting to produce ADR, when they enter international capital markets.

First ADRs were issued in the USA in 1927 on the equities of company Selfridges, which owned chain of department stores in the UK. ADRs are registered in the U.S. Securities and Exchange Commission (SEC). The greatest popularity this type of investment instruments achieved in the last 5 years. Nowadays, in the United States around 1900 ADR issues are in circulation, with more than 450 of which are traded on three main exchanges, while the rest are sold on the OTC market. Leading depository banks are The Bank of New York, JP Morgan Chase, Citigroup and Deutsche Bank. Issue of ADRs also involved Chase Mellon Bank, Mitsubishi Trust & Banking and other financial institutions.

The mechanism of issue of ADR involves by the broker on behalf of potential investors through a local broker, the equities on the stock exchange of the country. Equities come to the storage to the depository bank, which issues then the dollar certificates of the established number of equities.

There are exchange and OTC markets of ADRs.

The cost of ADRs is closely related to the value of foreign equities represented by them.

Price of ADRs is determined by the value of the basic assets, converted into dollars at the current exchange rate and adjusted taking into account the ratio of receipts and equities, and transaction costs that are related to ADRs.

$$\text{The ADR price} = \begin{array}{c}\text{Price of the foreign} \\ \text{equity in dollars}\end{array} \times \begin{array}{c}\text{The number of equities} \\ \text{included into ADR}\end{array} + \begin{array}{c}\text{Transaction cost} \\ \text{related to the ADRs sale}\end{array}$$

Banks collect a fixed fee for issue and maintenance of ADRS in circulation.

Generally, large companies issue ADRs in order to mobilize capital, the distribution range of investors or the acquisition of foreign company. Depending on the purpose of company or investors, the ADR programs are divided into sponsored, non-sponsored and private allocation.

Now sponsored ADRs are the most popular that are imposed by issuers of equities. They are issued on the basis of an agreement between the issuer and the depositary bank. Foreign firms that emitted the securities and wants them to be sold on the U.S. market, pays all the costs of creating and registering sponsored ADRs. The bank that issued these ADRs will provide investors who purchased them, services with information on the status of the company, the financial statements of the company. There are three levels of sponsored programs. For the ADR program of the first, simplified registration procedure in SEC is used. The main problem solved by issue of ADRs of this level – spread the circle of shareholders. Depositary receipts are traded on the OTC market. For today, the ADR of first level – the fastest growing segment of depositary receipts.

The same requirements of SEC are imposed on ADR programs of II and III levels due to registration and disclosure as to American corporations. Programs of the II level include providing level II ADR listing in major American stock exchanges: NYSE, Nasdaq, AMEX. ADRs and II levels produced in securities that are traded in the secondary market. Thus these two levels of ADRs are issued on the basis of existing shares in companies and of themselves do not allow issuers of equities to raise funds. For companies on the basis of which equities are issued ADRs and II levels, so access to the world's largest American stock market is profitable, especially given the opportunity to expand the range of its shareholders outside the domestic market and improve its image as issuer among the international public investors.

ADRs of III level issued equities at their original location. They make it possible to attract additional investment as providing additional issue of equities under this program. That is why the ADRs of III level causes issuers the high interest. However, this issue requires from the issuer higher level of "transparency".

Non-sponsored ADR programs are programs that are created and offered to investors without the formal consent and participation of the equity issuer. The foreign company does not pay depositary costs incurred by investor and has fierce obligations with respect to time and the provision of information to investors. Several depository banks can implement the launch of these programs. These ADRs are traded exclusively on the OTC market. Now non-sponsored programs are not used.

In the case of private placement of ADR to the programs of depositary receipts the minimum requirements are imposed and registration with the SEC is not required. These ADRs are placed among a limited circle of investors. Vouchers are purchased by individual large "qualified" institutional investors or by non-American investors.

The volume of agreements with ADRs and global depositary receipts, according to Bank of New York Mellon, one of the world's major depositories in

2011 amounted 3.8 trillion dollars, in 2012 – 2.79 trillion dollars. In 2012, companies around the world have registered 213 new programs of depositary receipts.

Among institutional investors, major holders of ADRs are mutual and pension funds, some of which are prohibited from buying shares of foreign company's directions. Thus, since 2469 institutional investors who manage funds of 9.525 trillion dollars and have assets in foreign securities, 1839 (74%) invest in ADRs and 630 (26%) invest in equities areas of foreign companies (Table 11.4).

Table 11.4

Leading institutional investors on the market of ADRs

Investors	Investments in ADRs (billion dollars).	Total investments in shares (billion dollars).	ADR share in total investment in equities (%)
Fidelity Management & Research	25,5	540,2	4,71
Brandes Investment Partners, LLC	20,1	40,2	49,88
Capital Research & Management Company	17,7	351,4	5,03
Wellington Management Company, LLP	13,4	236,2	5,66
Morgan Stanley Investment Management Inc. [US]	10,2	109,4	9,31
Dodge & Cox	10,0	70,7	14,14
Lazard Asset Management, LLC	6,8	22,6	30,06
Alliance Capital Management LP	6,0	214,6	2,77
Fisher Investments, Inc.	5,5	18,4	29,95
Smith Barney Asset Management	5,4	133,4	4,06

Source: [13, s.147]

European Depositary Receipts issued by European banks as a certificate of shareholding of companies located in countries outside the EU. They have free circulation in the European stock market, which is regulated, as a rule, by the law of Great Britain, and sold on the Paris Stock Exchange.

Global depositary receipts are offered and placed as on the stock market of the USA as well as on the stock markets of other countries. Their circulation is regulated by the United States. Typically, the EDR and GDR are denominated in U.S. dollars, but may be issued in any currency.

International Depositary Receipts are the deposited non-American foreign equities. They are issued by American Bank – depository in non-American currency outside the United States and intended for sale in Europe and other markets.

11.4. What is the essence of the international bond market?

State and municipal authorities released into circulation bonds on the security market to mobilize financial resources of corporations. ***Bond*** is a debt investment security that certifies the deposit of cash resources by its holder and confirming an obligation to recover him in the foreseen terms the nominal value with payment of the fixed percent from the nominal value of the bond. A bondholder (an investor) is not the joint owner of equity capital. He is a creditor and has a right to receive the hard profit and returning in the term of the nominal value of the bond or other property equivalent.

The attractiveness of bonds to investors is that they have a higher degree of reliability compared to shares, although the profitability – lower (in developed countries within 6-12%). The most reliable are considered state bonds and municipal bonds, which are guaranteed by the government and provided with the property. The disadvantage of bonds is that the fixed coupon rate is the periodic interest payments at regular intervals without inflation. To increase the attractiveness of bonds to investors the bonds are issued with a floating interest rate, which varies with the change of return and interest on loans, bonds indexed percentage of the price level for goods. Some bonds give the right to part of the assets of the corporation in case of liquidation.

Types of bonds are different, they are distinguished by:

1) the degree of reliability, backed by a pledge of property or other assets not backed by collateral;

2) term loans – short-term (3 years), medium (3 to 7 years), long-term (7 to 30 years), undated;

3) the frequency of accrual of income;

4) the mode of circulation – free circulation and limited circulation;

5) the principle of redemption – serial bonds that are repaid sequentially by series at regular intervals, and ordinary bonds, which are issued at the same time;

6) the nature of taxation – the usual tax, reduced taxes, which are not subject to taxation;

7) the mechanism for interest rates payment – nominal bonds, interest payments on which are directed to owners whose names are listed in bonds and bearer (not registered), to which are added coupons to receive interest on each payment date, etc.

Exchange bonds on the security market depends on supply and demand for them, which, in turn, is determined by income, which give bonds, the level of interest on loans, the degree of profitability of alternative investment funds. If there are several corporate bonds on the security market, the nominal of which is the same, then in case of other things being equal, the greater demand will be for those bonds that have a higher interest rate. Demand depends on the bond rating, which is determined by special agencies by analyzing the financial condition of the company and its ability to fulfill the obligation. The market price of each bond at a given time may be higher or lower than the nominal value, increase or decrease.

International bond market is a source of medium-and long-term capital in the international financial environment.

International bonds are divided into foreign bonds and eurobonds.

11.4.1. What is foreign bonds market?

Foreign bonds are securities issued by non-residents on the national bond market and denominated in the national currency of this market. For example, the French corporation that sells its bonds in Japan, issued in yen, is considered as a distributor of foreign bonds. Local investors, interested in buying bonds in local currency, are major buyers of foreign bonds.

Thus, the main distinguishing features of the foreign bond issue are:

1) the issue of bonds is emitted by non-resident (foreign) borrower;

2) the currency of bond issue is foreign currency for issuer;

3) the placement of bonds is carried out at a given national market and is guaranteed by a bank syndicate.

Foreign bonds are issued on some national capital markets because the interest rates on their outputs are defined at the level of the rates of the relevant markets. There is a rule according to which the interest rates on bonds in strong currency are lower and unstable currencies – higher. Interest rates on the bond markets of the world financial centers are established by local supply and demand.

Foreign bonds depending on the country of issue have special names: "yankee bonds" – in the U.S., "samurai bonds", "shybosay bonds", "daymio bonds", "shahun bonds" – in Japan, "bulldog bonds" – in the UK, "chocolate bonds" – in Switzerland, "the matador bonds" – Spain, "kangaroo bonds" – Australia, "rembrandt bonds" – in the Netherlands.

"Yankee" and "Samurai" are the most common foreign bonds. The structure of bond markets by type of issuers is listed in Table 11.5.

The main investors of the foreign bonds market are those that seek to minimize the risk of investment. These are savings banks, insurance companies and pension funds.

Not all borrowers have market access for foreign bonds and it is much more difficult compared to the Eurobond market. There are government restrictions, regarding the terms and amounts eligible for foreigners and directions for their use. The obtained capital may be limited to local use only with the help of foreign exchange controls. Only international investors with high credit ratings receive access to these markets. Developing countries have limited access. This selection of investors leads to the fact that borrowers with low credit ratings are disappearing from the foreign bonds markets.

Table 11.5

The structure of foreign bonds "Yankee" and "Samurai" by type of issuer,%

Issuers	Market "Yankee bonds"	Market "Samurai bonds"
1. Corporation	49,0	13,0
2. International Agency	3,0	8,0
3. Province or state	9,0	9,0
4. The state enterprises or state authorities	3,0	22,0
5. Enterprises of utilities sector	10,0	3,0
6. Banks	22,0	9,0
7. Sovereign borrowers	5,0	36,0

Source: [12, p. 149]

Issues of foreign bonds are realized through underwriting (guaranteed placement). Borrower with the bank manager plans to issue bonds on the most favorable terms: maturity, coupon, the possibility of early redemption, and the premium provided early withdrawal repayment terms.

Foreign bonds have long maturities – 20-30 years. Interest coupons on bonds correspond to the level of interest rates markets, where they are produced, and are dependent on the creditworthiness of the borrower. Typically, public borrowers have the highest rating "AAA" and corporate borrowers vary depending on the creditworthiness of their financial status and regional risk.

After agreement on the terms of the bond issue the group is created that provides underwriting. This group includes investment domestic banks, the banks of the borrower and other countries where there may be potential investors. These banks should have sufficient own resources and underwriting experience and be capable of placing bonds to local investors and among investors of the borrower.

Manager of the bank and a group of underwriting get profits as the difference between the income from the sale of bonds and the amounts, paid by the issuer. And managing bank receives ¼ of the profits for the preparation and organization of the work, the group of underwriting – ¼ of insurance risks that arise when buying and storing bonds for resale. The remaining income goes to pay commission fees for selling to the bond sellers [9, p. 189-196].

11.4.2. What is the eurobonds market?

Eurobonds are long-term debt securities that are placed at the same time in several markets by transnational syndicates and the currency of their issue is foreign for investors, who buy them.

The emergence of Eurobonds is connected with the globalization of the world economy and demand of transnational corporations for new financing sources for its operations. The restrictions on placing foreign bonds in the domestic market were an impetus for the development of the Eurobond market. It was introduced by the U.S. administration in 1963 and the Vietnam War, which caused restrictions on the export of capital from the country. For further development of the Eurobond market in the USA influenced the introduction of direct administrative limits on investing outside the U.S. and the imposition of euro, as it reduced the exchange rate risk for investors. The development of the Eurobond market was accompanied by the creation of adequate infrastructure of payments and document processing. All payments were made via New York that required physical movement of certificates, which were often lost during shipping. American bank "Morgan Guarantee" created the depositary and clearing center for trading Eurobonds for solving these problems in 1968 – "Euroclear",the similar center "Cedel" was created in Luxembourg in 1970, which was later renamed as "Clearstream". Due to these systems, the effectiveness of settlement of transactions has increased significantly.

Depository clearing centers are controlled by a large number of banks, securities-companies and their annual turnover is estimated in the tens of trillions of dollars. In 2002 "Euroclear" merged with some European depositories, and "Cedel" – with depository clearing system of the German Stock Exchange (in 1999). Thus a common mechanism of payment was created.

Eurobonds have a number of valuable features.

1. They give a right to choose the currency. The exchange factor plays an important role in the Eurobond issue. But not any currency is suitable for expression of Eurobonds. Currency should have free circulation, and payments must be expressed in this currency without any risk. Too stable currencies are undesirable from the standpoint of the borrower, and stable – from the point of view of the lender. When choosing between two variants of Eurobond expression there is a compromise between interest rate and currency stability. In some cases, Eurobonds are issued in multiple currencies, allowing the lender to demand payment in one of several currencies, which reduces the risk, connected with exchange rates, and expanding the range of investors. However, both interests and principal sum of Eurobonds are paid in U.S. dollars in most cases.

2. Bonds have a high degree of currency flexibility both as the composition of currencies expression and as weight of Eurobonds denominated in a particular currency in their total mass.

3. Eurobonds provide greater capital mobility in the international scale as they attract a greater number of borrowers and investors than other international financial instruments.

4. Eurobonds provide investors with greater portfolio diversification and higher income than investments in domestic bonds.

5. There is a close link between international Eurocurrency market and the Eurobond market. For example, Eurobonds dealers can get loans to finance their operations in Eurocurrencies.

6. Income, received on Eurobonds, is not taxed. Eurobonds are especially attractive to investors, who pay relatively high taxes on their declared income and less – for investors, whose activity is not taxed (insurance companies, pension funds).

Eurobond market has no particular geographical location, although new issues usually take place in London, Luxembourg. Eurobond market is multicurrency and largely anonymous, as Eurobonds are issued "to bearer", this is convenient for many investors (providing anonymity). The period of cancellation of Eurobonds is shorter (5, 10, 15 years) than period of foreign bonds. Interest rates on Eurobonds tend to be determined by the rates of the same currency on the domestic capital market, but are often lower due to the higher efficiency of the Eurobond market. Eurobonds are issued with fixed and floating interest rate. The total loan sum is from 50 to 100 thousand U.S. dollar. Quotation is fulfilled in the world's financial centers.

The main figure in the Eurobond market, as in every security market, is issuer. The structure of this market, according to the categories of issuers is following: corporations – 56%, banks – 25, sovereign borrowers – 7, supranational institutions – 7, others – 5% [15, p. 152].

The major part of the Eurobonds is bought by individual investors. The benefits that they receive are tax anonymity and the possibility to get speculative profits in the form of cash by increasing the value of the bonds.

Since 1990 the volume and number of Eurobonds issues were increasing at the average 20% and 14% each year, respectively. The volume of Eurobonds was 3.91 trillion dollars in 2009. This is due to the increasing demand for funds by multinational companies, governments, international organizations, the emergence of new sources of funds that are looking for their areas of off-load; the advantages of the Eurobond market compared to foreign bond markets and a high degree of market flexibility, which provides the possibility of issue of new types of securities, the choice of bonds currency. However, due to the deterioration of conditions of Eurobond placing, the volume of their production declined and accounted 3.2 in 2010, and in 2012 – 3.17 trillion dollars. The issuance of securities was mostly reduced by U.S. and European corporations. Eurobond market is growing in developing countries.

The structure of Eurobond emissions according to the maturity is following: from 1 to 3 years – 16.79%, from 4 to 9 years – 49,33, from 10 to 29 years – 29.75, more than 29 years – 2.32, perpetual bonds – 1.81%.

The first place in the currency structure of Eurobond emissions is occupied by U.S. dollar – 37%, euro – 35, pound sterling – 11, Japanese yen – 13% [13, p. 152].

The underwriting of Eurobonds is executed by an international syndicate, in which banks from different countries participate. The advantage of such bond flotation is risk sharing and efficient implementation of issue.

Eurobond flotation in comparison with international bonds is considered to be riskier activity. In foreign bond underwriting the main risk is the raise of interest rates in the local capital market. The Eurobond market is characterized by higher risks and costs of organizing the sale of bonds. They are compensated by doubled higher gross profit of underwriters. In the Eurobond market investors buy securities in those currencies that provide the greatest profit. Changes in exchange rates are a source of risk when making underwriting.

The development of the Eurobond market caused such types of eurobonds: the bonds with warrants, which give the right to buy shares of the same corporation, Eurobonds with fixed and floating rate, bonds with zero coupon, global bonds.

Global bonds are the medium- and long-term debt securities that are issued simultaneously in major financial markets of the world. They are mostly denominated in U.S. dollars and registered in the SEC; are included in the listing of several stock exchanges in different countries; are applied by various forms of national regulation, as are located in different countries. Global bonds issue is made by highly reliable borrowers with a credit rating of AAA, because of that, they have the highest quality and the lowest interest rates. The period of their circulation is 1-40 years.

The International Bank for Reconstruction and Development (IBRD) plays the leading role in the global bond issue, made the first issue of global Eurobonds in yen in 1992.

International bond market is characterized by the data, given in the Tables 11.6 and 11.7 [9, p. 294].

Table 11.6

The volume of international bond market in the 1993-2011 (trillion dollars).

Types of bonds	1993	1999	2003	2004	2010	2011
Corporate bonds	11,7	20,5	30,8	31,5	60,8	68,3
Public bonds	10,5	14,5	20,5	21,2	32,4	34,3
Total	22,2	35,0	51,3	52,7	93,2	102,6

Table 11.7

The regional structure of the international bond market

Countries	Corporate bonds, trillion U.S. dollars	Public bonds, trillion U.S. dollars	Market size	
			trillion U.S. dollars	**%**
USA	36	12	48	20,1
Eurozone	29	21	50	21,0
United Kingdom	30	7	37	15,4

Eastern Europe	3	20	23	9,6
Japan	12	35	47	19,7
China	5	6	11	4,6
India	1	22	23	9,6
Total	116	123	239	100

The general structure of the international market by almost 80% is formed by the markets of the USA, Europe, UK and Japan.

Due to the globalization process, the growth of government and corporate obligations, securities market becomes more transparent and more liquid.

The bond market is developing dynamically and over the past 10 years has increased by 2.5 times.

In contrast with stock market bond market is rather stable, especially in developed countries. The change of the value of fictitious capital, represented by bonds, depends on the current changes in interest rates, which vary in minor quantities. Fluctuations in the prices of bonds on the developed markets are 4-10 times lower than on the equity markets.

The globalization of bond market is evidenced by the fact that foreign investors own 25% of short-term bonds and about 44% of government bonds. For example, the People's Bank of China has invested in U.S. public bonds over 262 billion U.S. dollars. [15, p. 211].

"Credit Suisse *First Boston"* identifies the following trends on the international bond market:

- *the further globalization of international bond markets*. The flotation of international bonds is increasingly taking more international character. Bonds are distributed among a large number of international investors, in contrast to well-established practice of redemption of such issues mostly by local institutional investors;
- *changes in the traditional structure of European bond markets as a result of the introduction of the euro, and the rapid growth of the volumes of bond issue denominated in this currency;*
- *the increase in the diversification of loan portfolios of international institutional investors*. Investors are actively reviewing their investment portfolios, directing a higher percentage of funds, that are managed be them, to investment in riskier bonds, which respectively have a higher income level;
- *the constant search for ways to improve liquidity of Eurobond markets*. Grows the popularity among large investors (so-called jumbo) of Eurobonds issues accounting 1 billion dollars and more. A wide range of investors participating in the placing of these issues, provides a sufficient number of buyers and sellers of such bonds;
- *the development of pfundbrief market*. Pfundbrief are bonds that are issued by banks secured by a pool of private mortgages. They account about 18% of the total bond issue denominated in euro;
- *the growth of the European bond market with a high income*. In the early 21st century in this segment of Eurobond market the funds totaling 16.6 billion

dollars were attracted, and the total volume of high-yielding international bonds issue with European element reached 40 billion dollars. [15, p. 211].

11.5. What is the nature of the international market of financial derivatives?

Over the last three decades many new financial instruments, which are called derivative securities or derivatives, appeared on the financial market. Financial derivatives are defined as financial risk trading instruments; their prices are tied to a financial or real asset. Derivative is a standard document which certifies the right and (or) the obligation to buy or sell an underlying asset on certain terms in the future.

If classical securities are intended for attraction of long-term capital, than derivatives are a mean of hedging, i.e. insurance against price risks. Derivatives take the first place among different instruments of risk management in financial markets.

The terms of derivatives are determined by agreement of parties.

Contracts must include the following requisite elements:

- the name of the contract;
- the parties of the contract;
- the underlying asset[5] of the contract and its characteristics (issuer, type of security, its face value, period of circulation, and other information for the securities; the currency – for funds, portfolio – for other products);
- exercise price;
- the quantity of the underlying asset, the value of the contract, the procedure of payment for the underlying asset sold (in forward contracts);
- the type of contract (with or without delivery of the underlying asset); the amount of the contract; the amount of the initial margin; the unit of price measure (in futures contracts);
- the type of option (with or without delivery of the underlying asset), the option type (option to purchase, option to sell); the procedure of payment for the underlying asset acquired, the rate of option (for options);
- the term of contract;
- contractors' liabilities;
- the dispute settlement procedure;
- addresses, signature and bank account requisite elements.

According to the classification of the Bank for International Settlements there are following four types of underlying assets, for each of them the derivative can be tied:

- goods (derivative price is tied to the price of a particular good or to the movement of the index for a group of products);
- equities (derivative price is tied to the price of a particular equity or to the movement of the price index on a group of equities);

[5] Underlying asset – commodities, securities, funds and their characteristics which are the subject of discharge of obligations on derivatives.

- foreign currency (derivative price is tied to the exchange rate of one or several currencies);
- interest rate (derivative price is tied to a fixed, floating, combined interest rate).

The main derivatives are options and futures on goods, securities, currencies, interest rates and stock indices, swaps on interest rates and currency and forward contracts.

When buying and selling derivatives, counterparties exchange not assets but risks which arise from these assets.

Derivative price is determined by the movement in prices on commodities, financial instruments, indices or differences between the two prices.

Derivative contracts are closed by cash payment. Wherein the change of owner or delivery of goods are not provided.

The objectives of the derivative are:

- fixation of the future price of any asset today, which is achieved by concluding a forward or futures contract;
- cash flows or assets exchange (swaps);
- acquisition of the right but not the obligation to carry out the transaction (option contract).

11.5.1. What are the main types of contract in the international derivatives trading?

By the method of financial organization there are two main types of contracts in the international derivatives trading: forward contract and option contract.

Forward contract is a bilateral agreement of the standard (default) form, which certifies individual's obligation to buy (sell) an underlying asset at the appointed time on certain terms in the future with the fixation of prices of the sale during the conclusion of a forward contract.

The following types of forwards are distinguished:

- commodity forward – a forward contract for delivery of goods;
- equity forward – a contract for delivery of an equity or of a set of equities in future by the price fixed today;
- forward interest agreement – a contract, according to which the interest rate, which will be paid or received in the future, is determined during signing of the contract;
- direct forward – a contract for exchange of two currencies at an agreed today exchange rate for more than two working days after its signing.

The forward contracts include the futures and swaps.

Futures are the same forwards, but they are traded in standardized form on the exchanges. Futures contract is a standard document which certifies the obligation to buy (sell) an underlying asset at the appointed time and on certain terms in the future, with price fixation at the time of liabilities conclusion by contracting parties.

The subject of futures transactions are underlying assets, but the futures contract may be sold, regardless of whether there are indeed the listed assets at the time of the transaction. It is sufficient to be stated in this contract an interest rate, exchange rate, index of prices and so on.

The meaning of the futures contract is that it is a fixed-term agreement (within three months): there is a gap in time between the conclusion of the agreement and its implementation. Borrowers tend to insure themselves against the interest raise and to make the price of received loans stable, but lenders – against unexpected decrease in the interest of loans that they provide during the conclusion of a futures contract. Therefore, the borrowers conclude futures contracts for selling and lenders – for buying futures. Moreover, each hopes to make a profit on the price difference due to their fluctuations.

The attractiveness of a futures contract lies in the fact that when in the common agreement of sale the income of one party is caused by the loss of another, the results of the implementation of a futures contract may vary in futures agreement.

The increase of current price in relation to the contract price will cause:

- in case of complete liquidity of object of the agreement - to obviously missed income of the seller and the obvious income-making of the buyer;
- in the case of low liquidity of object of the agreement - to the probable loss of revenue of the seller and the probable real income of the buyer.

The reducing of current price will cause:

- in case of complete liquidity – to obviously averted loss of the seller and obvious real loss of the buyer;
- in the case of low liquidity – to probability of loss prevention of the seller and buyer's probability of real loss.

The buyer is dominated by the desire to win on fluctuations of prices, the seller – to protect him from the effects of these fluctuations.

Swaps are the forward contracts within the framework of which the parties agree to exchange assets on the basis of agreed rules.

There are the following types of swaps:

- commodity swaps – the exchange of two payments for one product, one of which is paid for its current spot price, and the second – the agreed price for this product in the future. A contract to exchange is formed by the price change of one commodity or index of commodity prices on the other;
- currency swaps – the contracts that provide the exchange of two currencies, excepting interest payments today and their inverse exchange on a certain date in the future at the exchange rate, agreed today;
- equity swaps – the contracts for the exchange of income on equities or equity index as a result from the application of fixed and floating interest rates;
- interest rate swaps – the contract according to which the parties exchange payments which follow from their differences in the case of fixed and floating interest rates;

Option is the standard document which certifies the right (but not an obligation) to buy (sell) the underlying asset on certain terms in the future with the fixation of the price at the time of signing the contract or at the time of the acquisition according to the decision of the contractors.

The peculiarity of the option is that the owner gets the right but not the obligation to buy or sell an underlying asset. Option buyer may renounce his right to buy the underlying asset but the seller, getting a fee (premium), may not renounce the obligation to sell them, if the option buyer requires the discharge of obligations. Option buyer can sell it to any third party, after that the option seller has to fulfill the contract terms in relation to its new owner. Option becomes a negotiable security.

There are the following types of options:

- commodity option – the contract that gives the buyer the right but does not impose the obligation to buy or sell a certain quantity of goods at the agreed price before a certain date;
- equity option – the contract for delivery or obtaining a certain equity or set of equities on a certain date in the future on the terms of the option;
- currency option – the contract that gives on the terms of option the right to buy or sell a currency at an agreed exchange rate over time;
- interest rate option – the contract for the delivery or obtaining an interest income on certain agreed sum in the future on the terms of the option.

The objective of the purchase and sale of the option can be either speculation on the exchange rate differences or hedging, decrease of risk associated with falling of prices for securities.

The positions of the buyer of the option "call" (which expects the increase of equity price) and the seller (which expects the depreciation of equity price) can be the following (assuming the contract price per equity – 100 dollars, and premium – 10 dollars):

a) if the current market price is lower than the contract price (for example, 85 dollars), the buyer refuses to purchase equities because he could buy equities on the market for 85 dollars. So, together with the premium it will be paid 95 dollars instead of 100 dollars, i.e. he gains a profit of 5 dollars. The seller in this situation will make a profit (premium) 10 dollars. This profit will be stable as long as the current price is below 100 dollars;

b) if the current price is equal to the contract price plus the premium (110 dollars), the buyer of the option "call" will cover the cost on premiums, but will not receive a profit. Result of the operation for him is that he avoided the risk, associated with the fall in equity prices;

c) in the range of price from 100 dollars to 110 dollars the result of the seller, as the price increases, will gradually deteriorate, but the result of the buyer – will improve. If the current price exceeds the limit of 110 dollars, the loss of a seller in the form of missed profit will increase.

The positions of the seller of the option "put" (which expects an improvement in exchange) and the buyer of "put" (which expects the depreciation) can be the following:

a) if the current market price is equal or above the contract price, than revenue of the seller is stable and the maximum possible (premium of 10 dollars);

b) income of the seller of option "put" is reduced in proportion to the reduction of losses of the buyer in the range from 90 dollars to 100 dollars;

c) less than 90 dollars an increase occurs in size of missed income in proportion to the increase of real income of the buyer.

Thus, the changes of profits and losses occur at increase of equity prices at options "call", and at options in "put" – at decreasing of the equity price.

Both parties take a risk in option transaction, but the option buyer's risk is somewhat less than the seller's, because he has the right to choose: the buyer buys or does not buy the equities and his loss will be expressed only in the amount of premium. The loss of the seller has the character of missed income (profit) as having sold his equities under option contract he loses the opportunity to gain jobber's turn by selling these equities on the spot market at a higher price.

The members of option transactions reduce the risk through various hedging techniques, for example by straddle (*opération de stellage* – French). The essence of the straddle is simultaneous purchasing of call option and "put" option on the same equity at one and the same price and the same expiration dates of contracts. There is one of the two options executed, depending on the level of equity prices.

11.5.2. What are the characteristics of the international derivatives market?

The international market of derivatives is characterized by the growth of volume of transactions with derivative instruments. It has increased by 125% for the last 5 years. This is due to the high instability in quotations and increasing risk of loss in conditions of declining exchange rates. Recently the market of derivatives has been filled up with new members. Management companies and corporations participate in operations in addition to the institutional investors. The possibility of insurance and minimization of the risk of loss from the depreciation of financial assets on the market of derivatives helps to avoid further their depreciation and significant reduction in operations with them on the stock markets. The turnover of derivative market is in 8 times higher than world GDP. According to the Bank for International Settlements, the total volume of international derivatives market is about 300 trillion dollars [15, p.158].

International trade in derivatives is conducted on exchanges (15% of world trade in derivatives) and over the counter (85%). This led to the division of these financial instruments on derivatives, that are sold on exchanges (interest and currency futures and options, futures and options on stock indexes) and derivatives, that are sold outside the exchange (currency and interest instruments).

Almost the whole exchange trading in derivatives has focused on trading in interest futures and options (91%). The trading in futures and options on stock indexes (7.4 %) occupies the second place, currency futures and options are on the third place). The volume of futures trading amounted to 11.2 billion of contracts in 2012, options trading – to 11.1 billion of contracts.

The volume of trade in derivatives exchange is growing both in the global market in general and in particular regions. For example, in 2012 there were 8.9

billion contracts in Asia Pacific, 7.2 billion – in North America, 4.42 billion – in Europe, 1.53 billion – in Latin America.

Exchange trading in derivatives is concentrated in several leading countries: UK, the USA and Germany. Stock market provides, unlike over the counter (OTC), greater standardization of trade, the greater coordination of settlement mechanisms that reduce the degree of financial risk, developed interexchange system of electronic communication.

The growth of derivatives trading is mainly due to the OTC market, which is in 7 times higher than exchange market. The main part of the contracts, which are concluded in the OTC market, accounts for currency and interest derivatives. The role of commodity derivatives and derivatives on equities is insignificant on the stock market. Currency derivatives trading in OTC play more significant role, than on the stock market (which accounts for 16.5%). In the OTC mainly the trade in interest and currency swaps occurs and short-term contracts dominate (80% of contracts are concluded for a period up to 1 year).

The advantages of the OTC market, compared with the exchange market, are the flexibility of contract system, the rapid introduction of new financial instruments, the coordinated system of bilateral bank settlement.

New instruments of risk management appeared in recent years. Among them the most rapidly credit derivatives develop. Credit derivatives are the structured financial instruments that separate the credit risk from the asset for its further transfer to another party. The participants of the market of credit derivatives have the ability to reallocate the credit risk, not formalizing the transfer of property rights for the underlying asset. The market of credit derivatives is presented by the world's leading financial centers, where the operations of buying and selling of protection against credit risk are carried out. Thus, for 43% of trade in these derivatives is accounted in New York, in London – 29%, Asia – 21% and in other financial centers of Europe – 7%. The largest participants in this market are the leading investment banks: Chase Manhattan, Deutsche Bank, J.P. Morgan, CSFP, Goldman Sachs, Nomura.

Futures contracts are developing, where the underlying assets are macroeconomic indicators, such as GDP, inflation.

Characteristic features of the international derivatives market are:

- the specific gravity of derivatives, that are sold on an exchange is reducing;
- by the volume of trade the currency and interest derivatives completely dominate over commodity derivatives and derivatives on shares;
- more than half of derivatives trading is international;
- nearly a half of derivative contracts are placed in dollars.

11.6. Primary and secondary securities market

The securities market is a mechanism that facilitates the signing of contracts between buyers and sellers of securities. The securities market is divided into primary and secondary markets.

11.6.1. What is understood under the primary securities market?

Primary securities market is a market of the first issues and re-issues of securities, on which their initial placement among investors occurs. The issue of securities is legislatively established operating procedure of the issuer for the issuance and placement of securities. Securities (equities, bonds) are placed through their sale by issuer to the primary owners through signing of an agreement. The decision to issue is made by the founders of the joint-stock company with its approval at a general shareholders' meeting.

The primary issue of securities is realized with the help of mechanism of underwriting. Underwriting is the buying or guarantee to buy securities at their initial offering for sale to the public. Underwriter is an investment institution (or a group of institutions) that maintains and guarantees to the issuer the initial placement in the stock market on agreed terms for a fee. Underwriter purchases securities for resale to private investors. Underwriting services are provided by investment and commercial banks, brokerage firms, investment and financial companies.

Functions of underwriter are as follows:

- preparation of the issue, its estimation, evaluation of securities that are issued, establishing of links between issuers and key investors, members of the syndicate of the distribution of securities;
- distribution: the redemption of part or the entire amount of emissions, direct distribution (selling directly to investors), sales through the issuing syndicate, risk guarantee, the support of security rate in the secondary market during the initial offering;
- post-market support: the support of security rate in the secondary market;
- the analytical and research support: control of the security rate dynamics factors affecting it.

Within the framework of the initial issue securities are divided into "seasoned" and "unseasoned". Issue of "seasoned" securities means the additional placement of existing securities. "Unseasoned" are new securities or a primary offering of securities.

During securities offering investors have a problem of defining in which stocks or bonds to invest their money, and the issuer’s problem is to convince potential investors in the attractiveness of investment namely in his securities.

These problems may be solved due to the information about investment objects, which would allow estimating the possible profitability and the risk of investment in the company.

It is considered that data for making decisions about investing and reporting on the conditions of investment gives analysis of firm balance, income statement, statement of cash flows and data on share capital. Generalized picture of the corporate activity is received due to analysis of relative indexes that characterize separate reported data and connect them with one another, allowing identifying the strengths and weaknesses of the company. Thus, when comparing the indicators of separate firms of "medium" level, the companies with a high degree of risk can be identified. When comparing the data of the same company at different time periods we can justify about the deterioration or improvement of the company state (in detail see § 16.1.2.). The most popular indicator of financial condition for investor is index of return on equity (ROE – Return on equity), which is calculated as the ratio of net income to share capital:

$$ROE = \frac{Net \quad income}{Share \quad capital} \qquad (11.1)$$

ROE can be represented as the product of three coefficients, which give an idea of three factors:

- The favorableness of market to the company's production;
- The efficiency of the company's assets;
- The participation of own capital in the operation of the company assets[6].

$$ROE = \frac{Net \quad income}{Sales \quad volume} \times \frac{Sales \quad volume}{Value \quad of\, assets} \times \frac{Value \quad of\, assets}{Share \quad capital} \qquad (11.2)$$

The first multiplier – profit margin – shows the amount of profit in one dollar of sales. When choosing an object of investing is important that this ratio would have no tendency to decrease.

The second multiplier – asset turnover ratio – shows how many dollars of sales generates one dollar of assets. It indicates the efficiency of assets use.

The product of the first two ratios characterizes the return on assets (ROA – return on assets).

$$ROA = \frac{Net \quad income}{Sales \quad volume} \times \frac{Sales \quad volume}{Value \quad of\, assets} \qquad (11.3)$$

The third multiplier is called the leverage. This indicator shows the ratio of own and borrowed funds. The more is loan capital (i.e. debt), the more profit fall on one dollar of equity, but the less is invested capital of the owner protected by assets. If the greater degree assets are financed for account of equity capital, then, other conditions being equal, more stable is financial position of the company, but lower rate of return on equity. So investors face a dilemma: either to have less debt, i.e. a lower investment risk, or to get more income and higher risk.

The analysis of the financial condition of the company is the necessary stage of financial investment, especially in the primary market. However, it must be borne in mind that the stock market is living according its own laws, and state of a corporation on the stock market is a consequence of the interaction of set of factors that go beyond the internal state of company affairs.

[6] Such decomposition is called DuPont control system, since this index was first applied by managers of "DuPont".

11.6.2. What is understood under the secondary securities market?

Secondary market is a market where the purchase and sale of securities occurs, that were launched in circulation earlier. Buyers sign agreements not with the issuer, but with the new owners of the securities in the secondary market. The underwriters play the role of brokers, i.e. bring together buyers and sellers, and the role of principals, i.e. buy and sell securities in order to stabilize prices in the secondary market. The secondary market is the fundamental market, since on it occurs: a) trade in securities, issued into circulation earlier, and b) the determination of securities rate, i.e. the definition of the market price, which reflects all available information about a particular security.

The feature of the secondary market is the high level of liquidity, i.e. the possibility of rapid sale of securities. The more is the number of participants of securities buying and selling, the higher is market liquidity.

The secondary market consists of:

- organized stock market, which is represented by the stock exchange;
- OTC market.

Stock exchange, as an organized and regular functioning securities market, is the central market of shares of the largest monopolies. Totally there are about 200 stock exchanges in over 60 countries in the world. The largest of them are: stock exchanges of New York, Tokyo, London, Mid-West (USA) and others. 31 stock exchanges are part of the World Federation of Exchanges (WFE), located in Paris.

Most important exchange procedure is listing, that is the selection procedure of clients and securities for the next admission to exchange trading. Strict rules of entering companies to the exchange list are applied to improve the efficiency of listing. Although listing requires additional costs and is connected with the control over the activity of the company-issuer, it increases the rating of the issuer, provides high liquidity of the securities, the relative stability of prices. The stock exchange is responsible only for the operations with the securities which have gone through listing.

Quotations of securities are made on the stock exchange. The term "quotation" is usually used to describe an action or mechanism of fixing the securities price, also it means the possibility of circulation of securities (when securities are traded on the stock exchange, it is said that they are "quoted"). Although the quotation is made on the stock exchange, but the exchange rate is used also on the OTC market. Quotation of securities occurs: 1) according to the method of registration, which includes analysis of data of agreements registered in the stock exchange and 2) according to the method of establishing a single rate of securities of any kind. This rate is set on the basis of information about the number of securities which are being sold by the seller, and the number of securities which the buyer wants to purchase [9, p. 118].

The main criteria by which American exchanges are guided, when deciding on the admission of company shares to listing are:

1) the degree of national interest in this company;

2) the place of the company in the industry and its stability;

3) the belonging of the company to growing industry and prospects that would allow maintaining its position.

The index of capitalization of domestic companies, whose securities are listed on a stock exchange, usually is used for the purpose of comparison of exchanges with each other by size.

Another indicator of the exchanges size is the number of listed companies and trade turnover. For the leading trading platforms the turnover per day accounts for tens of billions of dollars.

The requirements for foreign firms, wishing to include their shares in the listing are much stricter than for national. Thus, in the New York Stock Exchange the requirement for inclusion in the listing is the actual net value of fixed assets in the amount of not less than 18 million dollars, for a foreign company – 100 million dollars.

In functioning of stock exchanges the significant changes occurred, that completely changed the accounting of exchanges for last 10 years:

- the transition to electronic trading system;
- the intensification of globalization on stock markets. Some stock exchanges begin to transit to the technology of leading organizers of trade; that created conditions for their merging. The integration of stock exchanges promotes the formation of investment space that functions according unified rules;
-the joining of classic stock and derivative exchanges;
-the transformation of stock exchanges in public joint-stock companies, i.e. business-organizations;
- the withdrawal of exchanges due to increased competition from national borders and offering their services in external market. They provide access to their trading platforms for foreign bidders, carry out listing and are conducting trade on foreign securities;
- merging of depository institutions.

OTC market is a part of the stock market, which is outside the field of activity of the stock exchanges. On this market the circulation of securities takes place, that are not registered on a stock exchange. The operations of buying and selling of securities are made by phone, by passing the trading floor of the exchange. Prices are set by negotiation between buyers and sellers. When there the set of applications appears, the auction is held.

The share of OTC stock market is not the same in different countries: in Japan it is 1%, in the USA – 25, Czech Republic – 60, Slovakia – 80, Russia – 90, in Ukraine – 98% [14, p. 301].

The advantages of the OTC market are as follows:

- it increases the volume of investment because it brings the stock market nearer to the retail investor;
- it finds promptly the most profitable objects of capital investment and sources of financing;
- it promotes the development of the stock market at the regional level, the development of services for market participants;

▪ it creates prerequisites for the development of stock market infrastructure.

An important aspect in the development of the OTC securities market was the use of own electronic brokerage systems by large banks. They are notable for low cost of service, the ability to trade in the hours, when traditional exchanges are closed, the anonymity of quotations and a wide range of instruments that are traded. Instinet (electronic equity trading system) refers to such systems, it operates globally, electronic communications networks, such as Island and others are included in electronic brokerage systems. There are about 20 such systems in the USA.

OTC market is heterogeneous due to the different degree of organization. Thus, the organized participants of OTC transactions are those, who are the members of either self-regulating organizations. So-called "street" market are distinguished within the informal OTC market, "third" and "fourth" markets. But the experience of developed countries shows that the OTC market can be organized.

"Street" market is an unorganized market, where random transactions of buying and selling of securities and mainly shares of privatized enterprises dominate.

"Third market" is a market where OTC trading on securities, which are registered in the stock exchange through middlemen, takes place. This market has emerged due to the fact that it was not profitable for institutional investors to trade in the stock market because of the:

1) quite large commission charges, the minimum rate of which is fixed. Therefore, the commission charges often exceeded marginal costs for large-scale commercial operations, while brokerage firms that are not members of the stock exchange, did not set limits on commission charges;

2) fixed time of tendering, while in the OTC market operations continue even when they are stopped on the stock exchange.

"Fourth" market is a market, where agreements of purchase and sale of any securities and even entire portfolios by institutional investors are concluded directly, avoiding stock exchanges and brokers through the computer system.

Investors conclude agreements of purchase and sale of securities in the secondary market mainly for two reasons. The first – an assumption that the current market price of buying or sale is overstated or understated and investor wants to play on a possible price difference. An investor, who believes that he has the information that is unknown in the market, is called oriented to information. The second reason is the desire of the investor to sell a certain number of equities in order to get money for his needs or invest temporary free funds in securities. Investor, driven by such motives, that is called oriented to liquidity. Concluding an agreement, he does not foresee that other market participants can incorrectly estimate the prospects of this security. In this situation, the dealer can take an active or passive position. Passively set dealer will wait until the prices are not determined by the market. Actively set dealer will try to get as much information as possible and to determine developments in the market, having changed prices for purchase and sale in advance, thus supporting the balance in the flow of orders.

The prices on the stock market can not only establish a balance, but also be a source of information. However, the information about buying or selling of a large set of securities can be interpreted differently if the motives of a seller or buyer are unknown. An investor, who focuses on liquidity, should inform his intentions in order to avoid adverse effect, which can influence on demand or supply for price at which he intends to make a deal. An institutional investor, who buys a set of securities, should announce that he does not believe that the price of these securities is undervalued. The firm, which wants to buy or sell a large set of securities at a price which does not meet the current value in its estimation, must hide its motive. The result depends on as far as the firm will achieve this.

Equity prices, which are quoted on the market, usually vary wavelike, as cycles: after the rise the fall comes, then rise again, etc. The market is called "bull" market in the recovery phase, in the phase of falling of equity prices – "bear" market.

11.6.3. What are the principles of forming of an equity portfolio of an investor?

The investor must follow a number of principles that generalize the practice of operating of securities market when he forms the portfolio of equities, considering the cycle phase and the forecasts of trends in the equity market (Dow Jones indexes or other) [15, p. 229].

The first principle of the buyer. The equities, whose price exceeded the overall (average) reduction on the previous cycle of "bear" market, are the most prospective in the sense of the following significant growth in the wave of "bull" market. There are two reasons for these conclusions.

Firstly, the equities with large price depreciation in the "bear" market are more "flying" than the total mass, which determines the average indexes.

Secondly, pessimism of "bear" market is usually exaggerated for many of these equities. If the equity price fell by 85%, 90% or even 95%, it could also mean that corporate profits have fallen, dividends reduce, the company's prospects are sad and bankruptcy is "near at hand". 90-95% of price reduction usually signals about serious problems, but it may also simply indicate that investors "panic" and that the real and future situation of the company at the end of the cycle of "bear" market is not much worse than at the beginning of it.

If this is true, then the prices of such equities will go up with a rate that exceeds the average level in case of the recovery in the market.

Thus, **Principle 1**: by the forecasts of the beginning of the "bull" market it is better to buy equities of corporations, the price of which decreased more significantly than the average rate during the "bear" market.

The second principle of the buyer is based on the fact that the equity price of corporations, in which the value of market capitalization is low, increases during the "bull" market more (in percentage ratio) than the average price of all the quoted equities, much more than the equity price of corporations with significant volumes of market capitalization.

For example, let us imagine a corporation A, which has issued 1 million equities and their current market rate is 10 dollars per unit. Then the value of market capitalization is 10 million dollars (1 million equities × 10 dollars). Suppose that in the first stage of "bull" market the level of capitalization will increase by 5 million dollars, and in the second – 5 million dollars more, i.e. was for this corporation 15 million dollars and 20 million dollars. As additional issue was not carried out, it means that the equity price increased in the first case by 50% per unit to 15 dollars, and in the second – by 100% (compared to the last market price in "bear" market) to 20 dollars per unit.

Now let us consider a corporation B, which has issued 5 million equities, which, as in the first case, in the end of "bear" market, are sold for 10 dollars per unit. Then the level of market capitalization is 50 million dollars (5 million equities × 10 dollars). If in the beginning of the "bull" market this rate doubles to 5 million dollars, that is 55 million dollars and 60 million dollars, in the absence of the new issue the market price of equities of the corporation will increase only by 10% in the first stage (from 10 dollars per unit to 11 dollars) and by 20% - in the second stage (from 10 dollars per unit to 12 dollars).

From the comparison of these examples is clear, that the rise in the cost of equity capital in "bull" market for one and the same amount (10 million dollars) in the first case (with corporation A) resulted in a doubling of the price per equity from 10 dollars to 20 dollars, and the second (with corporation B) – resulted in increase of rate only by 20% from 10 dollars to 12 dollars. This is explained by the fact that, other things being equal, the indicator of capitalization of the corporation B (5 million dollars) was 5 times higher than the same indicator of the corporation A (1 million dollars).

Thus, **Principle 2**: by the forecasts of the beginning of the "bull" market it is recommended to buy equities of the corporations with the lowest indicators of market capitalization.

The third principle of the buyer proceeds from comparing the quantity of value by the balance and their market estimation, which is determined by a buyer of market capitalization. If the indicator of market capitalization is higher than the value according the balance, then the state of corporation is overestimated by the market, otherwise – underestimated. However, the special importance in our analysis has the comparison of the ratio of net liquid assets of the corporation[7] to the number of issued equities with their market price. And when the market price of equities of any corporation is lower than the mentioned ratio (coefficient), then these equities are most advisable to buy the day before the beginning of the next cycle of "bull" market. Why? The answer is simple: consumer demand has significantly underestimated these equities. The corporation, which has enough liquid assets to cover its debts, is in excellent financial condition. So it is possible

[7] Recall that the value of net liquid assets of the corporation is determined from free financial balance as the difference between the amount of liquid assets and liabilities. Further differentiation is appropriate only when for the corporation this indicator is positive, because it can be negative.

to predict with a high degree of probability that when a wave of "bull" market begins, the equity price of these corporations will grow at a pace that exceeds the average level.

From here **Principle 3** proceeds: by the forecasts of the beginning of the "bull" market it is recommended to buy equities of those corporations, the current price of which is lower than the value of net liquid assets, which refer to the equity.

11.6.4. What principles define the behavioral strategy of the investor in the case of sale of his equities?

Similarly as at buying of equities, each investor should have a strategy of behavior in case of the sale of his equities.

The first principle of the seller is based on the analysis of price-earnings ratio (P/E Ratio), which characterizes the proportion between the current equity price and the value of the corporation's net income, which refers to one equity[8]. For example, if the selling price of the equity at the moment – 40 dollars, and net income of the corporation for the last financial year is 8 dollars per equity, than the price-earnings ratio is equal to 5 ($40/$8). If the stock price is 16 dollars and net income per equity is the same as the above ($8), this ratio will be 2 ($16/$8). Naturally, each equity has this coefficient, excepting those corporations which have no profit.

Price-earnings ratio is an indicator of how much compared to the average level will fall the equity price at the beginning of the cycle of "bear" market. Thus, other conditions being equal, the equities for which this ratio is higher, will "loose" more in price than those in which it is lower. The reason is that during the overall fall in exchange first of all "suffer" equities of those corporations, which price does not correspond to their real financial condition. And, as the foreign statistics shows, equity prices of corporations with high level of this ratio in the "bear" market decline in percentage ratio more than average indicators in general (for example, Dow Jones index).

Thus, **Principle 1**: by the forecasts of the beginning of "bear" market, it is recommended to sell (or sell for a period) equities with the highest values of the price-earnings ratio.

The second principle of the seller is based on analysis of the coefficient of dividend return on equities (Stock Yield), which establishes a relationship between the amount of the dividend and equity price. For example, if the equity price of corporation A is 60 dollars, and the dividend for the year has been charged to this equity in amount of 3 dollars, then the Stock Yield ratio is 5% ($3/$60). If at the same level of the dividend the equity price of the corporation B is 30 dollars, then this ratio is equal to 10% ($3/$30).

Ratio of dividend return is the second indicator of what is the expected trend of decrease in equities price of some corporations in conditions of "bear" market.

[8] As you know, this coefficient is one of the key financial values of corporation and is given in all exchange information tables that are published by western financial newspapers of countries where functions the securities market.

Typically, the equities price, for which this coefficient is higher, decreases in percentage ratio less than the price of those equities, for which it is lower. Here is observed the principle of investment profitability: the demand always will be greater for those equities that with the same incomes, which they bring per unit, cost cheaper for the investor.

Thus, **principle 2**: by the forecasts of the beginning of "bear" market it is recommended to sell (or sell for a period) the equities of those corporations that have the least values of the coefficients of dividend return on equities.

The third principle of the seller is the opposite to the first principle of the buyer. Clearly, that the equity prices of different corporations with different paces will rise in the wave of "bull" market. Ones of them will double or triple the value, while others will grow by only a few percent. Moreover, at first it is often the result of not only the optimistic expectations for the future flourishing of the corporation, but also speculative enthusiasm and excitement.

However, as a rule, unfounded optimism is changed by pessimism and feverish demand for equities rapidly decreases (especially when their price is already very high). So with the beginning of "bear" market, the equity price of such corporations begins to fall, leaving behind the average level in the same pace.

Principle 3: by the forecasts of the beginning of "bear" market it is recommended to sell (or sell a period) equities of those corporations, which price increased the most significantly (in percentage terms) during the previous "bull" market.

11.6.5. What kind of basic indicators of activity in security market are known?

The indicators, that are the stock market indices, are used to determine the effectiveness of the security market relatively to their certain types. Security market indices are indices of equity prices that circulate in the market, i.e. stock indices reflect the change in value of a particular security portfolio. The calculation of indices is done daily, monthly, quarterly, semi-annually and annually. The reference location is the day when the index value was 100 or 1000. Their average value increases or decreases with the growth or fall in equity prices, respectively increases or decreases the value of the index. Indices provide brief information about market prices or prices in the particular market segment. This allows drawing conclusions about the demand for certain securities in the context of a specific market segment, the total market, different companies and different countries.

According to the degree of summarizing, the indicators of security market are divided into:

- integral (averaged) that characterize the state of the market (or its segment) in general by one composite index (for example, the Dow Jones Industrial Average);

- partial that complements the integrated indicator with characteristic of either changes in the equity prices of certain companies, or dividend return of equities of companies etc.

According to the composition of objects, which are studied, there are such indices:

- international, which characterize the state of the market beyond the national boundaries. For example, MSCI indices (Morgan Stanley Capital International) cover both the entire global security market and its specific geographical sectors – North America, Europe, Far East, etc.;
- national;
- sector, which describe the state of a particular internal market. For example, the index of the New York Stock Exchange (NYSE Composite Index) describes the movement of the equity prices of all companies listed on this exchange; the index of the American stock exchange which is quoted on this exchange;
- subsector integral indices which characterize the dynamics of equity of particular groups of companies: industry, transport, finance, etc.

By the method of calculating, the indices are divided into two main types:

- the series of arithmetic average of available prices, which reflect price changes of securities groups;
- the series of primary market values of all securities in the group.

The principle of the calculation of price average is based on the sum of prices (average price) of a defined group of equities [15, p. 233].

$$\sum_{i=1}^{n} \frac{P_i}{D}, \qquad (11.4)$$

where D – devisor that provides the equity of index value and the moment of beginning of calculation of some given value (usually 10 or 100 points). For example, the stock index is calculated by equities of the two companies. The equity price of company A – 100 dollars, the equity price of company B – 10 dollars. Arithmetical mean value equals: $\frac{100+10}{2}=55$. If the equities of company B rise in price 3 times, the index will increase by 10 points $\left(\frac{100+30}{2}-55\right)$.

The first group primarily includes the Dow Jones indices – the average measures of the dynamics of current equity prices of leading U.S. companies. Among the system of medium-sized companies of the Dow Jones the best known index is DJIA (Dow Jones Industrial Average), which is the arithmetic average of equity prices of 30 major industrial companies on the New York Stock Exchange, which are leading in their industries.

The Dow Jones index is calculated by the formula:

$$DJIA_t = \frac{\sum_{i=1}^{30} P_{it}}{D_{adj}}, \qquad (11.5)$$

where *DJIA* – designation of integral Dow Jones index in the day t;

P_{it} – the equity price at the end of day it;

D_{adj} – adjusted divisor on the day t, which varies with splitting of equities. When equities are split, the divisor becomes smaller.

Besides DJIA index also is calculated DJTA index (Dow Jones Transportation Average), which includes equity prices of 20 transport companies, the DJGT index (Dow Jones Global Titans Index), which was established in 1999 and which is calculated on the basis of 50 companies of 8 major stock markets around the world: the USA, United Kingdom, France, Japan, Germany, Italy, Switzerland and the Netherlands.

The magnitude of the index may be affected by events that are not connected with the growth of company value, for example splitting of equities. Therefore, the average values (indices which are based on the average primary value of securities of certain groups) require adjusting and are calculated so:

$$Index_t = \frac{\sum_{i=1}^{n} P_t Q_t}{\sum_{i=1}^{n} P_b Q_b} \times B_{iv}, \qquad (11.6)$$

where index t – index value in a given day;

P_t – equity prices at the end of the day;

Q_t – number of available equities in circulation in a given day;

P_b – equity prices at the end of the base day;

Qb – number of available equities in circulation in the base day;

B_{iv} – primary index value.

Some other well-known in the world indices are calculated by using the average arithmetic mean. For example, Nikkei indexes – the average equity prices that are quoted on the Tokyo Stock Exchange; the International Stock Index EAFF, which takes into account the equity prices of more than 2000 companies from 21 countries, the World Index, which is developed by the company Morgan Stanley; FTW Index, which is developed by the Institute of Actuaries in the UK together with large brokerage firms; Global Index, which is calculated by the First Boston Corporation together with the magazine “Euromoney”. Besides that, the international institutions calculate regional indices and indices for rising markets.

There are the advantages of stock indices:

- provide information about the profitability of stock markets and provide an opportunity to compare the effectiveness of investments in different markets;
- allow to identify the trends in the market;
- they are the bases for specific financial instruments: fixed-term contracts for indices that allow insuring market risk (futures, options for stock indices).

11.6.6. How is the market value of equities determined?

Market price or the equity price is a price at which equity is actually bought and sold on the stock market. Equities price is directly dependent on the size of the resulting dividend for them and in reverse – on the level of loan interest.

$$Equity\ \ price = \frac{Annual\ \ dividend\ \ per\ equity}{Yeld\ \ rate\ \ per\ \ equity} \times 100 \qquad (11.7)$$

The determining of securities price is a result of the interaction of supply and demand in the stock market. But the factor that determines the demand and supply is the estimation by the investor of corporation's income in the future and the value of forecasted dividends. Supply and demand are affected by the value of the spread – the gap between the minimum supply price and maximum demand price. The most liquid are securities where the ratio of spread to the maximum price is the smallest (0 to 3%).

The procedure of tendering in securities markets and determining the market price is the following. All brokers with their applications gather in the exchange hall. Specially authorized stock agent declares the price, such as 940 dollars per equity. After that brokers try to conclude with one another agreements by this price. The brokers, who are ready to buy a number of equities by this price, and brokers who have applications for sale of equities by this price are identified. Preliminary agreements are concluded. But it turns out that the demand for the price of 940 dollars exceeds supply. Demand is 300 equities, and supply – only 200 equities. This means that the price of 940 dollars is too low for the seller. Then the agent names the new price, for example, 950 dollars. In this situation the preliminary agreements from the previous trading are completely canceled, and brokers again review their application packages. 300 equities are offered for sale at the new price, as demand charged only 200 equities. If requests for sale continue after preliminary agreements, but they remain without answered, it means that the price of 950 dollars is too high. Stock agent makes the next attempt and names the new price, etc. Only when a very small number of unmatched requests of brokers remains, the price is named final.

If we represent this process in the form of graphs of aggregate demand for buying and supply for sale, the point of intersection will show the price at which supply and demand are equal. Consequently, the market price of a security reflects the unique result of agreement and mutual opinion about the prospects of a particular security.

Describing the state of the stock market, it is talking about efficient and irrational market.

Absolutely efficient market is the market where the price of each security is always equal to its investment value. **Investment value** is the value of the security for now considering prospective evaluation of price and demand level for it in the future, which is calculated by knowledgeable and capable analysts, which may be regarded as the fair value of the security. In such market there are no underpriced and overpriced securities, new information is immediately reflected in market prices. This, of course, is a benchmark. In reality, market definition follows the graduation degree of market efficiency: weak, medium, strong. Three degrees of efficiency are based on different predictions about the degree of mapping in the rates of securities of information about them. **Irrational market** is the market where prices are not connected with the investment value, price fluctuations are random. Irrationality is a rare phenomenon on a well-developed and free market. Main U.S. stock markets are estimated closer to effective than to the irrational.

Market participants tend to identify undervalued and overvalued equities in comparison to the investment value in buying and selling agreements. The tool is used to determine the true value of ordinary equities, which is called the model of dividend discounting.

Algebraically true equity value (V) equals the sum of the expected dividend payments (D) at time (t) and the corresponding discount rate[9] for the financial flows (i.e., the difference between income and expenditure) of the given level of risk (K):

$$V = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} + \frac{D_3}{(1+K)^3} + \ldots = \sum_{t=1}^{\infty} \frac{D_t}{(1+K)^t} \qquad (11.8)$$

To determine the true value of ordinary equities with different dividend changes during the time are used particular models:

- zero growth model, in which is assumed that the amount of dividends in the future remains unchanged, i.e.

$$D_0 = D_1 = D_2 = D_3 = \ldots = D_\infty :$$

$$V = \sum_{i=1}^{\infty} \frac{D_0}{(1+K)^t} \quad or \quad V = \frac{D}{K} \qquad (11.9)$$

- constant growth model, in which is assumed that dividends will increase from period to period in the same proportion, i.e. with the same growth rate (q):$D_1=D_0(1+q)^t$.

The formula for the model of constant growth:

$$V = \frac{D_1}{K-q} \qquad (11.10)$$

[9] Discount - present value of each dollar of revenue from security, which must be obtained through a number of years $d_t = 1 / (1 + S_t)$, where S_t – spot rate for t years – coefficient of discounting. Discounting – the process of calculating the present value of the given flow of payments.

- multiple growth model, which assumes that by the moment T for each period, the investor makes an individual forecast of the value of dividends – D_1, D_2, D_3, ..., D_t, predicts the occurrence of moment T and forecasts that after the moment T dividends will grow with a constant rate q.

The formula of calculation according to this model looks like:

$$V = V_{T-} + V_{T+} = \sum_{t=1}^{T} \frac{D_t}{(1+K)^t} + \frac{D_{T+1}}{(K-q)(1+K)^T}, \qquad (11.11)$$

where V (T–) – present value of dividends paid by the period T inclusively; V (T+) – present value of all dividends paid after the period T at point of time 0.

An important parameter in estimation ordinary equities is marketability, i.e. the equity trading should active enough in order to make the agreements carried out without unnecessary jerks in the dynamics of prices. As the prices of ordinary equities fluctuate significantly, and dividends may not be paid at all, these equities are not for all investors. In the application of a new client, that is filed in a brokerage firm, is required to set out clearly the investment objectives and emphasize that namely they determine his investment actions. Investor should recognize that the risk, associated with the purchase of ordinary equities, corresponds with his financial state.

When taking decisions about investing in privileged equities is necessary to pay attention to: the terms of an agreement, the behavior of equities in the market and ratio between income and degree of risk.

To determine the investment value of the privileged equities, the following variables are used:

1) fixed dividend rate, which the owner hopes to get in the end of each period (for example a quarter or year);

2) current discount rate or the minimum profit rate which is acceptable for the investor.

The mathematical formula for determining the investment value of the equity is following:

$$VP_0 = \sum_{i+1}^{\infty} \frac{D_p}{(1+r)}, \qquad (11.12)$$

where VP_0 – approximately calculated investment value of privileged equities;

D_p – expected annual dividend payments;

r – expected minimum discount rate.

For privileged equities there is no maturity date, but for them the fixed sum of dividends is paid for an indefinite period of time (D).

If the expected minimum discount rate is constant, the equation for determining the actual value of the equity can be simplified:

$$VP_0 = \frac{D}{r} \qquad (11.13)$$

For example, the investment cost of privileged equity, for which the company pays 10 dollars dividends and provides 12-percent income, is equal to 83.33 dollars.

$$VP_0 = \frac{10}{12} \times 100 = 83{,}33.$$

The expected revenue is an important characteristic which is used by investors to determine the income on the privileged equities.

It is determined by formula:

$$i = \frac{D_p}{P_0} \ , \qquad (11.14)$$

where i – expected income on privileged equity;

D_p – annual dividend payment;

P_0 – current market price of privileged equity.

Privileged equities may be redeemed at face value and the previous award. Previous award is the value of the dividend level during 1 year. Assuming that the equity will be redeemed in 5 years, dividends will be paid annually and the repurchase price will be 110 dollars, the current price per equity – 85 dollars, then the income on the date of redemption approximately is calculated so:

$$I_c = \frac{D_p + [(P_c - P_0) / Y_c \ ]}{(P_c - P_0) / 2}, \qquad (11.15)$$

where I_c – income up to the date of redemption;

D_p – annual dividend rate;

P_c – the market price at the moment of redemption;

P_0 – current market price of a privileged equity;

Y_c – number of years to the date of redemption.

Using the above data, the estimated income to the date of redemption is equal 15.38%,

$$I_c = \frac{10 + [(110 - 85) / 5]}{(110 - 85) / 2} = 15{,}38\%.$$

Realized gain as the average annual profit rate on privileged equities between the date of purchase and the date of sale is calculated so:

$$I_r = \frac{D_p + [(P_t - P_0) / Y_{pr}]}{(P_t + P_0 \ ) / 2}, \qquad (11.16)$$

where I_r – realized gain on privileged equity;

P_t – sales revenue;

Y_{pr} – the number of years of equity ownership;

D_p – the annual dividend rate;

P_0 – current market price of privileged equity.

If the equity was purchased for 95 dollars, sold for 99 dollars, dividend on equities – 10 dollars, tenure of a equities – 4 years, than

$$I_r = \frac{10 + [(99 - 95)/4]}{(99 - 95)/2} = 11{,}34 \; .$$

11.6.7. How is the value of bonds determined?

Bond prices are determined by five basic aspects:

- the level of loan interest;
- the credit rating of the issuer;
- the period of cancellation;
- the presence of sinking or purchase fund;
- the conditions of primary and next bond issues.

The bonds of the first issue are more appreciated than the next.

The bond prices decrease with the increase of loan interest and inversely. The stronger the financial position of the borrower is, i.e. the higher its credit rating is, the better the conditions of the loan are, under which it is borrowed. For example, the state, a large well-known company, and so on can borrow at lower interest rates. The money borrowed over the long term is more expensive than the money borrowed for a short period of time. Thus, for the bonds with a discount the closer maturity date is, the lower the discount is from the nominal value. The presence of purchase fund for early repayment of the bonds has a positive effect on the price of issue. With the increase of the level of loan interest the prices of long-term bonds reduce, usually at a larger value than the prices of short-term bonds. The sharp rise in prices of ordinary shares, which are exchanged to convertible bonds, may lead to the sale of bonds with a substantial premium over nominal value.

Investor tries to identify cases of market’s incorrect assessment of bonds during the transactions on the stock market. The economic method of detecting incorrect assessment of bonds is the method of evaluation via capitalization of earnings.

This method assumes that the inmost value of any asset is based on the discounted value of payments that the investor expects to receive in the future by owning the asset. Application of this method for the bonds evaluation consists in comparing the value of the yield (Y) before the redemption of bond with a value of "correct" (Y_n), to investor's mind, yield by repayment.

The yield before the redemption of the bond (or promised yield before the redemption) is defined by the following formula:

$$P = \frac{C_1}{(1+Y)^1} + \frac{C_2}{(1+Y)^2} + \frac{C_3}{(1+Y)^3} + \ldots + \frac{C_n}{(1+Y)^n}, \qquad \text{or}$$

$$P = \sum_{t=1}^{n} \frac{C_1}{(1+Y)^t} \;, \qquad (11.17)$$

where P – the current market rate of bonds with a residual period of redemption of «n» years;

C_1, C_2, ..., C_t, ..., C_n – provided payments to the investor in the first year, the second and so on;

Y – the promised yield before the redemption.

For example, a bond with nominal value of 1000 dollars and the current value of 900 dollars has the residual period of circulation 3 years. Coupon annual payments before the redemption are 60 dollars.

Yield of this bond by the cancellation is:

$$900 = \frac{60}{(1+Y)^1} + \frac{60}{(1+Y)^2} + \frac{1060\,(1000\ +60)}{(1+Y)^3} = 10{,}02\%$$

Y = 10,02%.

If the next analysis indicates that the interest rate should be equal to 9%, then this bond is undervalued, since $Y > Y_n$. If the yield before the redemption is higher than the "correct ", the bond is undervalued, and then it is a candidate for purchase. If the yield before the redemption is lower than the "correct", the bond is overvalued and then it is a candidate for sale. So, if the current market rate is lower than the true value of the bond, the bond is undervalued, and if it is higher – then overvalued.

The internal value of the bond (Y) can be calculated also by the following formula:

$$V = \frac{C_1}{(1+Y_n)^1} + \frac{C_2}{(1+Y_n)^2} + \frac{C_3}{(1+Y_n)^3} + ... + \frac{C_n}{(1+Y_n)^n} \text{ or}$$

$$V = \sum_{t=1}^{n} \frac{C_1}{(1+Y_n)^t} \qquad (11.18)$$

As the buying price of a bond is its market rate (P), then for the investor the net present value (NPV) is the difference between the value of the bond and the buying price:

$$NPV = V - P = [\sum_{t=1}^{n} \frac{C_1}{(1+Y_n)^t}] - P \qquad (11.19)$$

For our example:

$$NPV = [\frac{60}{(1+0{,}09)^1} + \frac{69}{(1+0{,}09)^2} + \frac{1060}{(1+0{,}09)^3}] - 900 = \$24{,}06$$

If a bond has a positive NPV, it is undervalued.

If an investor determined that Y_n is 11%, the NPV of a bond would be -22.19 dollars, i.e. the bond would be overvalued.

If the investor defined the value of Y_n approximately equal to Y, then the bond would be considered as accurately estimated.

A key component of the bond analysis is determining the normal for an investor value of Y_n, since it is not easy to calculate because it depends on the subjective estimation of the investor both of some characteristics of the bonds and current market conditions.

PART 5. INTERNATIONAL TAXATION

Chapter 12. Features of international taxation

12.1. What are the general features and specifics of the world modern tax systems?

The globalization of world economic relations objectively creates the need of harmonization of national tax systems, which allows:

- the coordination of tax policies of particular countries;
- the convergence of tax levels;
- the unification of methods for determining the tax base;
- bringing in correspondence the criteria for granting tax concessions.

The international community is still at the very beginning of the formation of a common world economic space. It is still graded by numerous degrees of unity.

The global harmonization of tax system is just beginning to be comprehended. The concept of impartial taxation proposed by an American economist *Doernberg R. L.* is interesting in this important case.

The Doernberg's concept of impartial international taxation allows the adoption of system of such impartial tax standards that could not act either against or in favor of any type of activity. The tax system, according to R. Doernberg, should remain in the background, and the decisions on economic activity and investment should be made according to the principles that are unrelated to taxation.

Doernberg's concept of impartial international taxation has three basic rules [9, p.215].

The first rule: impartiality in relation to the export of capital. The tax system satisfies this rule, if the question of taxation does not affect the taxpayer's choice between investing in his own country or abroad. In this case, the corporation will decide to invest on the basis of business rather than tax factors. With perfect competition the impartiality in relation to the export of capital will lead to the efficient allocation and use of capital.

The second rule: impartiality in relation to the import of capital. This rule is met if all firms operating in the market are taxed at the same rate.

The third rule: national impartiality. According to this rule the total profit of capital, which is shared between the taxpayer and the budget, should be equal regardless if the capital was invested in own country or abroad.

The present level of development of the world economy requires such situation in international taxation, when each country conducts fiscal policy based on its national interests. Considering the specifics of taxation in different countries, we will dwell on its features in advanced countries and in transition economies.

12.1.1. What is taxation in industrialized countries?

The general trend in the formation of the tax system in industrialized countries can be expressed in such a way: rational taxation should avoid methods and forms that prevent the accumulation of wealth by all participants of the reproduction process. Of course, the system is influenced by specific historical conditions (economic and geographical, political, religious) which determine its long-term development in each country. So tax systems of different countries even within the Western European region differ although the accelerated development of integration processes facilitated convergence of tax laws in the European Community. In these countries the multilevel system of tax collection has been formed. In countries with federal regimes it is a three-level system and in unitary states – two-level. Taxes are divided into national and local. The taxes of particular regions, provinces and autonomous entities in federal states are added to them.

One of the most stable tax systems that have been established and are functioning without significant changes since the XIX century *is in the UK*. Here it is two-level one, which consists of state and local taxes. An important place in national taxation is occupied by the income tax, which brings two-thirds of all tax revenues to the budget. This tax is paid only by individuals, while legal entities such as corporations pay profit tax. Income tax varies significantly, depending on the income of citizens. Family status, financial situation of the taxpayer are taken into account when the tax is imposed and given all circumstances exemptions and discounts can be applied. When this tax is paid there are three basic rates: 20 %, 25% and 40 % of revenue for the richest.

Profit of companies is taxed at 33% and recently it is significantly lower than it used to be (10 years ago the rate was 52%).

Another source of replenishment of the treasury is inheritance tax. Moderate property (up to 150 thousand pounds) is not levied at all, and the more expensive legacy is taxed at 40 %. Social security contributions are singled out into a separate article. They are differentiated, depending on the earnings or income and range from 2% to 9%.

Value added tax is the major tax among the indirect taxes in the UK. As far as the amount of revenue is concerned (17 % of total tax revenues) it is the second after the income tax. The tax base is the value added in the manufacturing process and subsequent sale to the cost of purchased materials and primary products. It is the difference between the value of the sold goods and the cost of purchases from suppliers. The tax rate is 17.5 %. One of the other important indirect taxes is the excise tax.

Excise duties are imposed on alcohol and tobacco, fuel, cars. The rate of excise duty varies between 10-30 % of product price.

In England local taxes are charged on real estate including land. These taxes are set by the authorities and they differ greatly in size in different regions of the country.

The current tax system *in France* is similar to English tax system by the general direction. The tax burden also falls mainly on consumption rather than on production. The main source of budget revenue is an indirect tax – value added tax. It accounts for 41.4 % of all tax revenues to the budget. The rates of value added tax (VAT) are differentiated by commodity groups in the country: while the main rate is 18.6%, the rate for basic goods and services does not exceed 5.5%. The highest rate is 22%, it applies to cars perfumes luxury items. Reduced rate (7%) is imposed on goods of cultural nature. Medicine and education are exempted from VAT as well as private teaching activities, medical practice and spiritual activities (literature, art). VAT in France is supplemented by excise taxes on alcohol and tobacco, certain types of vehicles and aircrafts.

The most important among the direct taxes is the individual income tax in France. Its share in the country's budget is more than 18%. Legal entities – companies, corporations are subjected to the profit tax and the taxation is net profit object in this case. The basic tax rate is 34 % and tax rate, imposed on profit from agriculture and securities, ranges from 10 % to 24 %. It should be noted that the share of profit tax in total tax revenues does not exceed 10 % in the budget. This serves as compelling evidence of how the French authorities actively protect domestic producers. Similarly desire can be seen in the law that exempted all goods, produced by French companies for export from VAT. Very low tax rates are imposed on agricultural products as well.

The tax system in *Germany* is focused on the same basic principles as the tax systems of these above-mentioned European countries: the rational distribution of the tax burden between production and consumption, social justice, protection of domestic entrepreneurs. The federal structure of the country obliges the government to allocate the main tax revenues on an equal footing: about half of the funds, gained from the income and profit taxes, are transferred to the federal budget, while the other half is directed to the budget of the state, where these taxes were collected. Since the industrial potential of different states varies significantly, the value of the budget in "rich" states exceeds the value of the budget in "poor" ones by far. With the help of the mechanism of the federal budget the so-called horizontal alignment of income is conducted: industrialized states (e.g. Bavaria, Baden-Württemberg, North Rhine-Westphalia) subsidize poor ones with financial resources (Saxony, Schleswig- Holstein).

Germany is a country with a typical three-level tax system. Tax revenues are distributed among three parties: the federal government, state governments and local authorities (communities). The largest source of the treasury replenishment is the individual income tax. Its rate varies from 19% to 53%, taxation is differentiated. When the salary tax is determined, 6 classes are set, which consider various life and property circumstances. Social charges on payroll account are equal to 6.8%, their sum is distributed evenly between employer and employee. The second most important direct tax is a corporate income tax. It is levied at two rates: on income that is redistributed - 50%, on income, which is distributed as dividends - 36%. Substantial tax discounts are providing in case of accelerated amortization. In the agricultural sector the law permits to write off up to 50% of the equipment to the depreciation fund in the first year, and 80 % in the first three years. So the government encourages technological re-equipment of production.

By the size of budget receipts the profit tax is inferior to the main indirect tax - value added tax. VAT brings 28 % of tax revenues to the German treasury. The basic tax rate is 15%. Basic foodstuff and products of cultural and educational purposes are taxed at a reduced rate, as in France.

Indirect taxes are supplemented by the excise. The same products are subjected to them, as in the UK and France. Revenues from excise taxes (except excise duty on beer) are directed to the federal budget.

The local governments benefit from the industrial tax (levied on companies and individuals that are engaged in industrial and trading activities), land tax and property tax. In general the evolution of taxation in Germany takes place in line with the trends, observed in Western Europe: reducing tax burden on profit, extending the range of tax incentives to encourage technological progress and business development in general and small businesses in particular. Tax reforms, conducted in the 90's, made significant changes to the direct taxation practice, provided significant relief to domestic producers.

The U.S. tax system belongs to the developed tax systems that successfully perform fiscal and regulatory functions. It has developed over two centuries, and serves as an effective instrument of economic regulation nowadays. The USA also has a three-level tax system and 70% of revenues refer to the federal budget. At the same time the absolute value and share of local taxes and the taxes of individual states remain high. For their account (from 70 % to 90 %) the maintenance of health, education, social security and local police are funded.

As in Germany, the largest proportion of the U.S. treasury revenue is brought by the individual income tax. This tax’s nature is progressive: its rate increases with the income. Prior to 1986 income tax rates were differentiated. They were divided into 14 standards from 11% to 50%. Since 1988, this tax is levied at 5 rates: 11, 15, 28, 35 and 38.5%. The maximum value of non-taxable income has been increased and maximum tax rates have been lowered. The tax system has been simplified in general and the number of tax benefits has been reduced.

The contributions to social security funds are the second most important contribution to the federal budget. Contributions are also obligatory and are divided equally between an employer and an employee; the value of these contributions is growing. For example, it constituted 12.3 % of wage fund in 1980 (i.e., 6.15 % for each of the parties), it was 15.02% in 1988. It equaled 15.3 % in the early twenty-first century.

The third major tax by the size of budget receipts is a corporate income tax. It also has a trend tax rates reduction. The rate was 46% up to1986, it equaled 40% in 1987, it was 33 % in 2002, and now - 30.6%. Corporate income tax rates of U.S. multinational corporations continued to decline in 2004 despite the increase in their profits. This is due to: the expansion of multinational corporations in foreign markets, which allows them to pay the smaller percentage of their income in the U.S. and other countries, where they operate; the relocation of production to countries with less stringent tax system; production growth in international markets. The reduction in income tax rates allowed 68 U.S. multinationals to save 8 billion dollars in 2004. The current tax system provides that for the first 50 thousand dollars of profit it must be paid 15%, over the next 250,000 - 25% and only the higher amount of income is subjected to maximum tax rates. This differentiation seriously encourages small business development and expands the tax base of the country. Accelerated amortization is widely used in the U.S. as in some other countries. It allows encouraging scientific and technological progress with the help of the mechanism of tax incentives.

Unlike other states, the federal excise taxes do not occupy a significant place in the U.S. budget, as the major part of this tax is charged by local state authorities.

Inheritance tax plays a significant role in federal budget revenues. Its rate varies from 18% to 50%. Non-taxable minimum is equal to 10 thousand dollars.

Local authorities and state governments possess substantial power in the field of taxation. Individual income tax (apart from the federal one) is introduced in 44 states. In addition to individual profit tax the state budgets levy their own corporate income tax, sales tax and business activity tax. The great source of replenishment of local (municipal) budgets is property tax. In New York, for instance, it provides 40% of budget revenues.

At the same time despite significant revenues from various taxes - direct and indirect - local governments, especially in large cities, cannot work without subsidies and subventions from the federal budget. In general, the three-level tax system, which has historically formed in the U.S., has a beneficial effect on the rational distribution of the country's industrial facilities and on the increase of business activity in less developed regions. According to some experts tax policy, which had been conducted since mid-80s, had a positive impact on the economic development of the country, especially in small business area and helped to reduce unemployment and to increase people's welfare.

It should be noted, that even after reduction of tax rates during the tax reforms at the end of the 20th century, which were carried out in the USA, Germany and the UK the share of taxes in GDP continued to grow but this growth rate slowed down considerably. The share of income tax in total tax revenues continued to rise over the last 30 years, but over the past two decades there was a fall in France (-0.2 points) and in the UK (-2.2 points). For both periods the share of excise taxes decreased in the total amount of tax revenues. However during these periods the share of social security taxes increased although its growth pace slowed down during the examined two decades.

An important feature of recent decades in the tax policy is a significant decrease of corporate income taxes in industrialized countries. For example they were reduced by one-third in Spain, Denmark, Sweden, Austria and Ireland. The noticeable decrease was observed in the United States, Japan, Canada and other countries.

However, this decrease was not reflected in the total budget tax receipts of these countries. In fact, their share in GDP even increased. This occurred because of the lower tax rates on profits, which had led to the expansion of the tax base. The level of taxation in industrialized countries is presented in the Table 12.1.

Table 12.1.

Major tax rates in different countries

Countries	Basic VAT rate	Individual income tax	Corporate income tax	Social security contributions
European countries				
Austria	20	10-50	34	41,8
Belgium	21	25-57	34	47,3
The UK	18	20-40	30	15,6
Germany	16	25,9-53	40	38,2
Ireland	20	27-48	12,5	22,2
Spain	16	30-56	35	38,7
Italy	20	10-51	36	57,9
The Netherlands	19	6,35-60	35	54,7
Norway	23	37,5-23,5	21	24,5
France	19,6	12-54	33	56,3
Switzerland	6,5	11,5	24,1	22,8
Sweden	25	30-50	28	32,3
Average	18,7	20,4-46,2	33,7	37,7
Ukraine	20	10-40	30	39,55
Australia	32	20-47	36	0
Canada	7	17,31	29	14,8
New Zealand	13	24-33	33	2,7
The USA	-	15-39,6	30,6	21,5
Japan	3	10,50	38	31,5

Source: [2, p.179]

12.1.2. What are taxes in transitive economies?

Taxation in industrialized countries serves as a reference point in the analysis of tax systems formation process in emerging market economies. Worldwide experience has shown that taxes are inherent in the market economy and constitute its integral part. You can promote the efficient operation of businesses with their help, can form the modern structure of the economy within the framework of separate countries, regions and globally. Nevertheless the same world practice shows that the departure from the market forms of economic management and corresponding tax principles pushes a particular country to a roadside of the historical progress. The tax system has evolved usually in the opposite direction to the process of global development in totalitarian countries. They occasionally used administrative methods of enterprises profit collection and redistribution of funds through the budget instead of taxes. Complete centralization of funds and the absence of any independence of enterprises in dealing with financial matters deprived economic managers of any kind of initiative and gradually led to the collapse of these countries.

Reformation of post-socialist countries' economies, which started in the 1990s, was focused on the transition to liberal market model from the very beginning. In contrast, to the socially oriented model, which involves a high degree of state paternalism and the corresponding high level of taxation the liberal model is based on the insignificant state intervention in economic life and relatively low taxation. In order to reform the economy, according to the liberal model, in these countries following legal principles of the tax system had to be restored, which had already passed the trial by time in a number of industrialized countries. There are:

1. Legal equality towards the law for all economic entities. The creation of tax neutrality and its strict compliance.

2. The guarantee of tax policy stability due to the country's legislative power.

3. Tax benefits (privileges), granted to different categories of taxpayers should be established only by law.

4. The prohibition of retroactive tax law.

5. The functioning of tax liability institute, based on the presumption of guilt of a taxpayer in combination with a flexible impact on those, who evades taxes.

6. The simplicity and transparency of the tax system.

7. The end of the tyranny of tax administrations.

8. The proportionality of tax revenues with the expenditures in strict accordance with the budget law for the next fiscal year.

Adherence to these principles is essential for the functioning of any market economy, but to an even greater extent this applies to the liberal market economy in the creating process. The success of market reforms is dependent upon the creation of an efficient and reliable tax system. Rapid advancement through market reforms in Poland, the Czech Republic, Hungary and Slovenia was due to the fact that these countries speedily reformed the tax laws, provided its stability and reliability, bringing it maximally close to European models in the early 1990s. This law provides effective measures of development and protection of domestic production.

The process of tax system legalization in Bulgaria, Romania and the former Yugoslavia stretched for a longer period because of political and socio-economic reasons.

The tax legislation formation process in the course of economy reformation in the former Soviet Union countries is very difficult, inconsistent and contradictory. The difficulties of objective nature lie at the heart of these conflicts. Unbalanced economy, hypertrophied share of its military-industrial complex and underdevelopment of industries, that produce consumer goods reinforced gigantically with the collapse of the USSR. The care for covering current expenditures on social sphere, the maintenance of the army and the administration has fallen on the shoulders of young independent states. The tax system that can provide budget fullness had to be created from scratch in these countries. In this case the passage of above-mentioned legal principles in the creation of a new tax system in the countries of the former Soviet Union proved to be very difficult. Since most public enterprises were either unprofitable or produced products which were not intended for sale on the market (the spheres of the military-industrial complex and others related to them), the brunt of the tax burden was put on profitable enterprises which worked for the market. The principle of the legal entities equality towards the law was clearly trodden and this has had negative economic and social consequences. Due to political circumstances tax legislation was subjected to numerous changes that lead to the disruption of economy. The principle of tax benefits was repeatedly violated. This happened due to political reasons and because of lack of understanding among both authorities and also a number of economists of the fallacy of the idea of applying generous tax reliefs.

In the first years of economic reforms the result of this tax policy was the mismatch of the economic system which was being formed in the post-Soviet countries (excluding the Baltic States) with the liberal market model. The main features of the liberal market economy model are low tax rates, stability, reliability and simplicity of the tax system. Instead of this a cumbersome, complex, complicated tax system was created in most countries of the former Soviet Union. This system was a heavy burden for the producer and moreover it changed constantly.

The formation of the tax system runs hard in post-socialist countries. Ukraine is not an exception in terms of overcoming these difficulties. The tax system formation process in Ukraine proceeded with trials and errors, owing to huge difficulties of both objective and subjective nature - the inexperience of most legislators and their desire to solve immediate problems in the first place and to put an end to the economic and social difficulties in a simple and the most affordable way as it seemed to them.

In Ukraine the tax system, which in terms of composition and structure is close to the European one, was formed in the past 10 years. But it was very far from being perfect. The tax burden on the entrepreneur is still huge and the distribution of income tax and indirect taxes among different segments of the population still does not fully correspond to the ideals of social justice.

The tax system is a living organism that stays in a state of continuous growth, development and repair. An important step towards the creation of a tax system was the adoption of the Tax Code of Ukraine in 2010. The tax system covers legal entities and individuals. Under this system the structure of tax revenues to the consolidated budget of Ukraine has been formed, according to which national and local taxes and fees are established.

National taxes include following taxes and fees: corporate income tax; individual income tax; value added tax; excise tax; fee for the first registration of the vehicle; environmental tax; rent for the transportation of oil and petroleum products through main oil pipelines and oil-products pipeline, transit of natural gas and ammonia through pipelines across Ukraine; royalties for oil, natural gas and gas condensate produced in Ukraine; fee for use of mineral resources; land fee; fee for the use of radio-frequency resource of Ukraine; fee for special use of water; fee for special use of forest resources; fixed agricultural tax; collection for the development of viticulture, horticulture and hop growing (used until 31 December 2014); customs tariff; fee as a surcharge to the current tariff for electricity and heat apart from electricity produced by qualified cogeneration systems; fee as a surcharge to the existing natural gas tariff for consumers of all forms of ownership.

Local taxes include: tax on real estate other than land; single tax.

Local fees include: fees for certain types of business activities; fee for vehicle parking places; tourist fee.

In general the development of the tax system is planned in key areas: tax unification, liberalization (rates reduction), promotion of entrepreneurship.

Tax Code of 2010 provides the reduction of the number of taxes from 29 to 17. In addition ten local taxes and fees are cancelled, gradual decrease of the profit tax is provided - from 25 % to 20 % in 2011 and further annual decline of 1 % to 16% in 2014. The changes have touched VAT. Its rate should be reduced from 20% to 17%. The tax rate for some operations can be set at a rate of 0 %. The income tax is 15 %.

Accelerated amortization was introduced as one of the incentives for capital renewals. Taking into account the international experience, a mechanism for innovation stimulation and investment development was introduced. The new tax reform will fundamentally enhance the investment climate in Ukraine, the state will rise in the ranking of economic freedom and attractiveness for business.

12.2. What are the international double taxation and its principles?

Double taxation is levy of a single tax object of a particular payer with the same (or similar) tax during the same period of time (usually tax period). International double taxation occurs mainly due to tax collection both in a particular country and abroad. It is often associated with profit and property taxes, imposed on income from work or from capital.

In determining the scope of its tax claims some states use the residency principle, that is all revenues of entities, residing or having residence in their territory, are taxed no matter in which country they actually received that income; or state adheres to the source principle (territoriality principle) that is taxing any income, earned in its territory regardless of whether the income recipient has residence in the country or not. Most of the states use the combination of these two principles.

Residency principle is placed in the construction base of the so-called unlimited tax liability. As regards individuals unlimited tax liability which means the taxation of all income regardless of its receipt place is applied to all persons, who are resident in a particular country or those, who are temporarily (over 183 days) remain in a country. The same rate of the income tax is imposed both on a person who does not even have a residence in the country, but stayed in it for more than 183 days during the accountable year, and on the person who, having a residence in this country, was not in it for a single day or did not leave the country, having a residence in it.

As concerns legal entities, unlimited tax liability covers enterprises with residence or administrative body in the country.

Unlike the unlimited liability rule the idea of limited tax liability is based on the principle of the income source. Individuals, who do not have permanent residence in the country or whose time spent there is more than 183 days in an accountable year and those, who arrived in the country on a temporary residence permit to work in foreign companies or in joint ventures with foreign capital, in the departments and offices of foreign enterprises and banks - all these persons fall under the obligation to pay taxes only on income from work on the territory of the country regardless of the place of remuneration payment and revenue acquisition.

Most countries outline their tax jurisdiction in the same way, which inevitably causes disputes with foreign economic partners. There are three possible situations:

1) when two country impose unlimited tax liability on the same entity (e.g., a person who is a resident in one state but lives in another state longer than for 183 days in an accountable year);

2) when an entity is subject to unlimited tax liability in one country and to limited tax liability in another;

3) when the laws of both states claim that the income was received on their territory and impose limited tax liability on the entity that received the income.

The phenomenon of international double taxation occurs due to the collision of tax orders of two or more countries. International double taxation is universally recognized as a negative feature and not only by taxpayers but also by tax authorities of several countries. This is because it leads to excessive fiscal burdens upon economic activity, which is a serious obstacle to the development of international economic cooperation, especially in terms of foreign investment attraction.

12.2.1. What is the role of the international treaties on avoidance of double taxation as a tool for tax minimization?

The solution of the double taxation problem has two ways. First one is about providing residents one-sided offset of taxes that are paid abroad. The second is concerned with the distribution of taxation between the country, where the income is derived, and the country of residence of the recipient. In this case an agreement on the double taxation avoidance is concluded.

Tax treaties are usually concluded bilaterally. However recently multilateral treaties came into effect, for example, treaties established between the Benelux countries, Northern Europe or the countries of the British Commonwealth of Nations.

Two basic models of tax treaties are used in international practice: the OECD Model Convention and the UN Model Convention. They serve as an example and a legal basis for bilateral and multilateral agreements.

The basis of the first one is "Double Taxation Convention on Income and Capital", approved by the Committee of Fiscal Affairs of the OECD in 1977. The main objective of the Agreement on avoidance of double taxation is to facilitate the smooth transfer of goods, services, capital and labor by eliminating double taxation. At the same time, international agreements should not be used for tax evasion. The last fact is possible with the help of artificial adjustment of the concrete existing state to the situation that is economically more beneficial for entities, which seek to evade taxes.

The basis of this model is the principle of residence. The country of income origin yields a significant part of the income tax to a country of taxpayer's residence, according to this model.

In terms of return (repatriation) of income in the form of interest, dividends and royalties, this model provides a low tax rate or its complete abolition in the country where such profit was obtained and income is mainly subjected to taxation in the country of residence of the taxpayer.

This model, however, was unacceptable for developing countries: as in the case of adoption they lose a significant part of revenue. Therefore, the UN developed and recommended another model of a typical tax agreement between industrialized and developing countries in 1980 to ensure the receipts of revenues from taxation of multinational corporations in favor of developing countries. The principle of territoriality is used better; it provides the taxation of all income, which was formed in the developing countries according to the UN model. This principle also allows applying higher tax rates, than in the OECD model, for profit repatriation to industrialized countries.

There are general and special agreements in addressing the problem of double taxation in the modern world practice. General agreements solve the problem of avoidance of double taxation of income and capital in all sectors of business activity, and specific agreements regulate tax relations in certain sectors, such as the transportation of goods or communications.

Tax treaties provide solution of the double taxation problem in such ways:

1. The distinction of tax jurisdiction towards agents engaged in foreign economic activity is indicated in texts of treaties, the range of businesses and individuals, who are the subjects to this treaty is set, the way of settlement of double taxation is settled, which ensures the reduction in tax expenditures for these individuals is determined.

2. Internal taxation level is set in accordance with the taxation level of foreign contracting country to avoid taxpayers' discrimination.

3. Points, concerning the order of information exchange and about the relationship between tax agencies in the process of combating tax evasion, are set in the agreement.

4. A special procedure for settlement of disputes and conflicts in the sphere of taxation with the assistance of the court instances, if necessary.

International treaties on the avoidance of double taxation are the part of international law and therefore prevail over national law. This means that, if in respect of income from foreign economic activity there are relevant paragraphs or provisions in a tax treaty, which provide higher or lower tax rates, than adopted in this country preference should be given to the rates of international tax treaties.

These treaties provide a system of tax credits and tax offsets. *The system of tax offsets* (tax deductions) assumes that the amount of taxes paid abroad due to the principle of income generation territoriality of a foreign person or entity shall be deducted from the tax base when calculating the taxable income of the company in jurisdiction of its residence.

The system of tax credits allows deduction the amount of taxes paid abroad from the amount of tax liabilities of an individual or a legal entity in the jurisdiction of its residence.

Tax credit brings taxpayer a bigger relief from international taxation, than tax credits. Consider an example. The profit is transferred from a foreign country A, where the branch of corporation K is located to country B, which is the jurisdiction of residence of the corporation. The sum is 1500 dollars. The tax rate in country A equals 20% and in country B - 40%.

In case of application of the system of tax offsets, the order of tax payment for the corporation is the following.

Tax liabilities of K in country A are: 1500 x 0.2 = 300 dollars.

Tax liabilities of K in country B are calculated in such a way. The tax base of K in country B will be: total income minus taxes paid abroad that is: 1500 - 300 = 1200. As the country's tax rate is 40% K's tax liability in the state B is: 1200 x 0.4 = 480 dollars.

The total amount of taxes paid by the corporation K is: 300 + 480 = 780 dollars.

Net income of the corporation is 1500 - 780 = 720 dollars.

Now let's calculate what sum of taxes the corporation K would pay if there were a point about the use tax credits instead of the point about tax offsets in the treaty's text.

Then in country A corporation K would pay the same amount of tax as in the first case (300 dollars). However in the state B where the tax rate is 40 % it would have to pay 600 dollars (1500 x 0.4). Nevertheless, the system of tax credits allows the deduction of the amount of tax which has been already paid in A (300 dollars). Therefore the corporation would pay 300 dollars (600 - 300) to the state B. The total amount of taxes paid by the corporation K to countries A and B would be 600 dollars (300 + 300). Net income of the corporation would be 900 dollars (1500 - 600), i.e. 180 dollars more than in the case of tax offsets system.

Thus, the system of tax credits is more suitable for taxpayers. However, it has a significant limitation: a tax credit is available only for the amount of tax paid abroad that does not exceed the level of taxation in the own country. If the tax in a foreign country is higher than in the country of residence such overpayment of taxes is not included in the tax credit and the taxpayer bears the financial loss.

Treaties on avoidance of double taxation are constantly improved and supplemented by new provisions and articles aimed on the one hand at the exclusion of any possibility of repeated taxation of the taxpayer and on the other - at the construction of barriers for those wishing to hide their income from tax authorities and to evade taxes. However, corporations are making efforts to take advantage of tax treaties in their manipulations that are carried out to evade taxes.

12.2.2. What is the essence of "Tax Treaty Shopping"?

The term "tax treaty shopping" literally means "obtaining the benefit from tax treaties". These include primarily the treaty on avoidance of double taxation, which aims, in addition to avoiding repeated taxation of the same entities, at blocking fraudulent schemes or tax evasion in the countries that have signed the treaty.

Tax treaty, signed between the two countries, provides benefits for their residents. Additional objective of the treaty on the avoidance of double taxation is to deprive the residents of third countries to gain the benefits, arising from the content of the treaty. The paradox, however, is that these treaties allow businesses from third countries to circumvent tax laws by hiding huge amounts of money from taxes with the help of financial manipulations, called «tax treaty shopping». The essence of this system is the fact, that investors from other countries that did not take part in the treaty create intermediary companies in these countries and use them to direct investments to one of the countries that became a member of the treaty on the avoidance of double taxation. Due to skillful use of the advantages of this treaty, businesses gain the following benefits:

1) the reduction of taxes in a country that has signed the treaty;

2) low or zero tax rates in the income recipients' country;

3) low or zero tax rates in the country of residence of the person, who actually receives the income.

The first of these situations occurs when the content of the treaty on the avoidance of double taxation provides low taxes or no taxes on certain types of income (such as dividends) in the country of their origin.

The second situation arises in an offshore center jurisdiction, where all incomes are taxed by low taxes or favorable terms of taxation of certain activities such as holding companies are offered.

The third situation is connected with the fact that offshore centers do not charge taxes on income "at the source" of its receipt that is at the place where profit is created.

Mechanism of «tax treaty shopping» looks like this. Country A has signed tax treaties with the offshore center B. A taxpayer from the third country C will be able to reduce tax payments through «tax treaty shopping» by receiving income not directly in the country A, but using tax treaty between A and B and the treaty between B and C if such exists (Figure 12.1).

The "tax treaty shopping" formula can also be used in the case of the foreign loan when the borrower from the country with high level of taxation and foreign lender create a company in an offshore center, where the tax rate on interest is very low. Here is the following example.

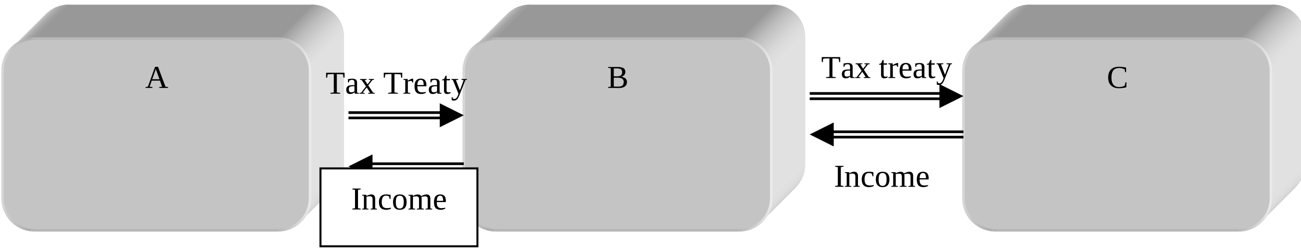

Fig. 12.1. “Tax treaty shopping” mechanism

Suppose that the businessman A, who lives in the Bahamas, receives interest from the capital invested in the United States. The amount of such interest in this example is 1,000 dollars and according to U.S. law it is taxed at 30% that is at 300 dollars. Thus, businessman should receive after-tax income in the amount of $ 700. However, using a treaty on the avoidance of double taxation between the United States and Honduras businessman can successfully evade taxes. Since Honduras, as well as the Bahamas is the offshore center the intermediary company (B) is set up in Honduras to use the procedure of "tax treaty shopping". Interest payments are directed from the United States to the account of this company which according to the agreement on double taxation avoidance is transferred to Honduras in full amount without tax deductions, i.e. in the amount of 1,000 dollars. Company B remits the same amount of 1,000 dollars without any deductions to the dodgy businessman in the Bahamas (Fig. 12.2) [9, p. 235].

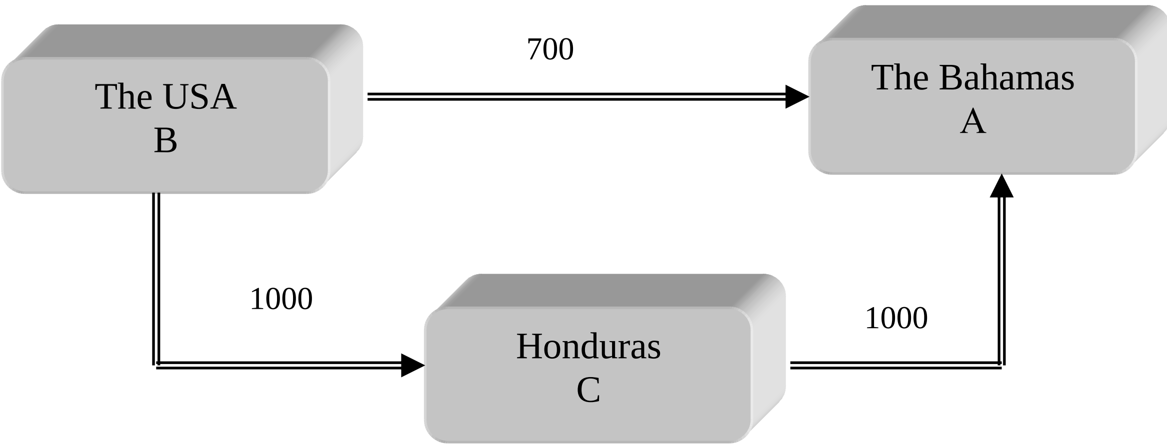

Fig. 12.2. “Tax treaty shopping” mechanism in case of a foreign loan

To evade payment of taxes on a permanent basis at the source of income receipt, as it was in the case with American borrowers, financial companies are established. Multinational corporations often serve as their creators. Financial companies created by them open their branches in offshore centers, the favorite place for this is the Dutch Antilles. Branches of financial companies borrow huge sums of money in third countries (often they do this on the Eurodollar market) and transfer borrowed money in the form of loans to their parent companies in the U.S.

The U.S. company is not subjected to taxation of interest paid on loans to its subsidiaries located in the Antilles as there is the treaty on the avoidance of double taxation between the U.S. and the Dutch Antilles. At the same time interest paid by the same subsidiaries to third countries also are not subjected to taxation at the source of income as in the Antilles offshore center this tax does not exist. As a result the participants of the "tax treaty shopping", procedure have to pay a single tax that is the tax imposed on the amount which is the difference between interest rates on loans received by branch in Antilles and on credit of the same amount of money given to its parent company. The rate of this tax that is levied at the offshore center in Antilles is extremely low.

Similarly the firms that provide patents, licenses, trademarks and receive different types of income for this can evade taxes at the source of their income. Those payments, which are transferred directly to residents of other countries by companies (those who own the rights for granting patents, licenses, etc.), are taxed at relatively high tax rates (30% profit). Payment of such taxes by American firms can be avoided by forming a holding company in the Netherlands. This company is given the rights of ownership for patents, licenses, trademarks, etc. and the possibility of giving the right to use them in the U.S. Income from this activity, coming from the USA due to the conclusion of treaty on avoidance of double taxation between the USA and the Netherlands, shall be taxable only in the Netherlands. At the same time holding companies pay minimal taxes in this country.

In addition, investments to the United States can be made through a holding company, established in the Netherlands by any non-US corporation. Such holding company can easily establish its branch in the United States. On the base of the treaty between the U.S. and the Netherlands the dividends, paid by a U.S. branch in favor of the parent holding company, will be taxed at the source of income at 5% rate instead of 30% that are paid by local firms under the domestic U.S. legislation.

In the case, when the Dutch company opens its branch in Antilles it is able to pay dividends to it without their taxation at the source of income according to the terms of the tax treaty, concluded between the two countries (the Netherlands and the Netherlands Antilles). Strategy described above is illustrated by the following scheme (Figure 12.3).

The problem of fighting with abuses, which are related to the "tax treaty shopping" system, becomes increasingly relevant. This struggle became more difficult because of the fact that many countries have concluded the treaties with offshore centers on the avoidance of double taxation. The easiest way would be to refuse from the concluding of such treaties and other tax treaties with offshore centers. But such ban on an international scale is not easy to apply in the real life, because the appearance of tax havens is caused by complex economic, geopolitical and historical circumstances.

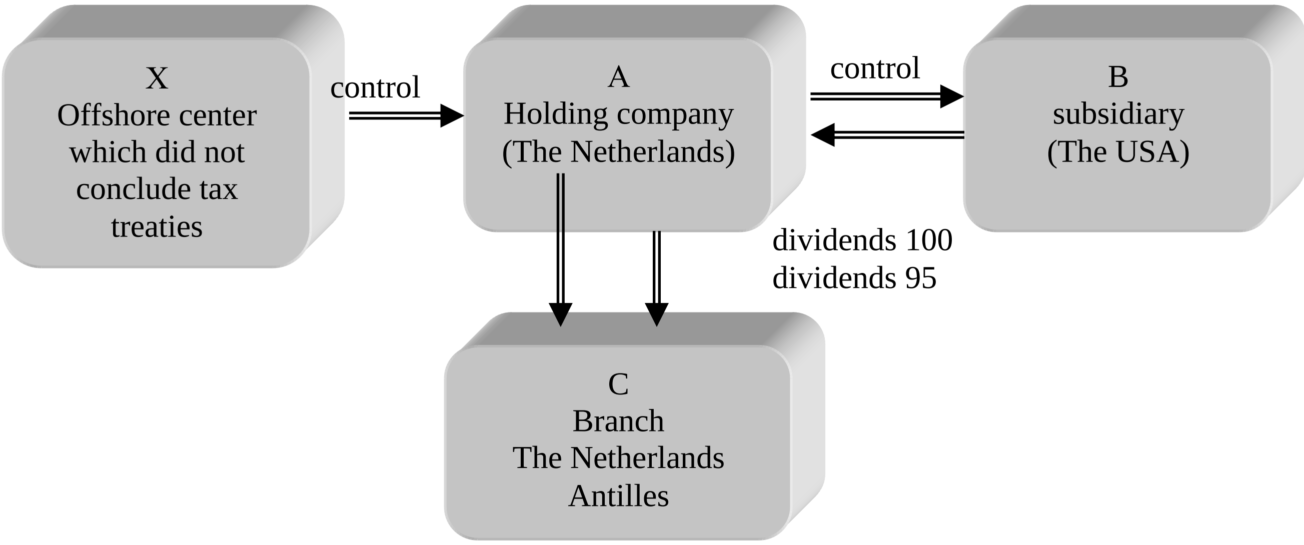

Fig. 12.3. Scheme of tax evasion strategy

In recent years a number of countries and international organizations make statements against the practice of "tax treaty shopping". The Ministry of finance of the U.S. protested especially vigorously against such fraud and abuse of the treaty on the avoidance of the double taxation. It acts with the requirements and recommendations, aimed at not signing new tax treaties, reviewing or terminating the already signed treaties that allow third countries to obtain the benefit in the taxation area. However due to the large number and great variety of tax systems in the world it is almost impossible to develop a universal model of provision (clause) that would limit the possibilities for abuse of tax treaties' terms. Tax relations between individual countries should be treated and regarded individually. The current system of taxation at source of income needs to be improved and modified.

The optimal "anti-treaty shopping" point (clause) becomes more widespread in international treaties. It provides treaty termination by one party of the treaty in case it brings evidence that the other party is unable to comply with the terms of this treaty.

Tax treaties also provide positions and rules which extract some functions of companies from treaties' control. As the example the tax treaties between France and Luxembourg are, as well as between Luxembourg and the United States concerning to holding companies. Similar provisions are contained in the treaties between France and Malta as well as between Cyprus and France concerning shipping companies.

In general, it should be emphasized that nowadays the tax administrations of concerned states have not developed effective methods of dealing with abuses in the sphere of "tax treaty shopping" as well as ways of dealing with other forms of tax evasion. Some countries (the USA, Canada, Switzerland, Germany, the Netherlands), having concluded treaties on the avoidance of double taxation, used in their texts the orders that pursue the goal of preventing the criminal use of terms of such treaties.

The treaties on the avoidance of double taxation are concluded in the interest of taxpayers. Their terms and regulations make the parties of the treaty more attractive to investors in terms of financial commitments. When viewed from this perspective, the conclusion of these treaties can be regarded as an attempt to restrict the use of offshore centers by entrepreneurs.

Chapter 13. Offshore centers in the system of international taxation

13.1 What is the nature of tax evasion?

Escape from taxation and tax evasion is a phenomenon as old as are taxes themselves. A reduction in public revenues which serve national and local needs is related to both those things. The use of offshore centers by businessman is connected with them.

Escape from taxes is the fictitious reducing tax liabilities to the level, at which the taxation is the lowest. Here we see the adaptation of a particular situation to one, which is more favorable to the taxpayer. You can also create a fictitious situation with taxes by fictitious distributing arable land between family members of the owner. It is possible to reduce the amount of industrial activity or change the location of production legally.

A large number of lawyers believe that any transactions conducted through offshore centers are illegal. Their opponents have the other point of view. They think that it is appropriate to use tax laws to reduce the tax burden referring to the services of offshore centers but without putting themselves at risk of administrative or legal responsibility for any abuse of the law. These lawyers do not see anything wrong in using offshore centers in order to minimize or evade taxes.

It is important for a taxpayer to know whether the operation, performed by him, is legitimate or not. The problem of the distinction between "tax evasion" and "tax escape" is a matter of third importance for him.

Qualification of procedure of the use of offshore centers as fraud or as legal "tax escape" depends on value definitions of these terms. These concepts are difficult to define. They are determined and formulated differently in various countries.

The term “tax escape” is vague and inaccurate. According to one of the most renowned experts in the field, I. van Hoorn, the term "tax escape" is filled rather with neutral than negative content. It should be distinguished from tax fraud due to the fact that the tax escape is not associated with attempts to evade taxpayer’s responsibilities in a criminal way.

It is difficult to distinguish between legal and illegal escape from taxes in practice. There are the criteria that can be useful for this distinction:

- the motives of the taxpayer activity (intended actions);
- the fictitious nature of activity;
-the amount of benefits, received with the help of tax evasion;
- the assessment, done by the competent authorities.

Escape from taxation has its own differences across countries depending on the orders of the tax laws functioning in these countries. A common feature of this procedure is to use the opportunities within the existing tax rules by searching for ways to reduce the tax liability as well as the tax:

1) the profit can be converted into capital by using the mechanism of payment of dividends;

2) the payment for goods or services may be made with the benefit for the manufacturer in the form of loans, often interest-free;

3) the use of legally formalized common property on a parity basis concerning the incomes or assets that can be transferred to the hands of a person, who uses tax exemption or is taxed at lower rates;

4) company's capital can be presented in the form of loans so the taxation becomes less burdensome.

Escape from taxation also becomes possible by carrying out a series of transactions each of which is quite legal, but the sum of which gives the taxpayer the benefit, not provided by tax rules.

The escape from taxation often happens under existing rules and laws, but its implementation is possible only with the help of action or behavior, which are inconsistent with the spirit of law and order. If this happens the taxpayer is concerned as the person, who abuses laws and should bear the responsibility for such abuse, although no legal sanctions can be applied against him.

Tax evasion has always been an illegal activity, incompatible with tax legislation. It may be, for example, in the form of fraudulent declarations presentation. The evasion from taxes from a legal point of view is a crime, punishable by law. This crime occurs in different forms and by different methods.

Individuals evade taxation by falsifying of tax declarations, submitting the false information or by the concealing the information which is connected with taxation or the address of their residence. The tax evasion in many Western countries is done by the abuse of rules, which governs the exchange of currencies.

Tax evasion takes similar forms in different countries. The most popular ones are:

-non-disclosure of information to regulatory authorities about the presence or activities in the country in which the taxpayer is located or is engaged in business activities;

- non-disclosure of income source and profit that is taxable despite the obligatory nature of such notice;

- non-disclosure of the full amount of taxable income, report of costs that did not happen or notification about their value which is higher than the actual one;

-use of benefit references in the income declaration that apply to children who the taxpayer does not have or use of deductions from income for depreciation of machinery and equipment that do not exist ;

- non-payment of taxes to tax authorities which are imposed on employees' wages hired by the taxpayer.

This list can be extended. Most of these abuses are complemented by compiling false invoices and tax documents falsifications.

One of the common ways of tax evasion in the own country is the moving activities or capital to another country, because of this fact they are hidden from national tax authorities. Getting of the information abroad becomes a harder matter for them than inside the country. Foreign financial documents overstating costs and understating sale revenues are more likely to be trusted by tax authorities than similar documents, prepared in their own country. In addition, the taxpayer may take advantage of the opportunity of relocation abroad to the offshore center.

In recent decades there was a noticeable strengthening of legislative activity related to the problem of escape from taxation and tax evasion on an international scale. The reason was the increased tendency to desire of businesses and individuals to reduce their tax liabilities in order to use savings as an additional source of funding. The answer to this was the adoption of measures that can protect the integrity and the achieved amount of budget revenues. Collision of interests of the taxpayer and the state increasingly encourages the taxpayer to use the possibility of a simplified transfer of capital abroad as well as the simplified possibility to travel there too. The increasing internationalization of financial transactions makes it easier to escape from taxation. The deepening of conflict between the treasury and the taxpayers results in the search for and use of gaps and holes in tax legislation and the use of offshore centers.

No wonder that in such situation a number of countries have come forward with an international initiative to prevent the tax escape from taxation and tax evasion. This problem is reflected in the work of the Committee on Budget Affairs of OECD countries, which fundamental report ("Escape and evasion from taxes") contains principles of tax policy. It is reflected in the activities of the UN. A group of experts that studies tax policy from the perspective of relations between industrialized countries with developing ones convened by the organization pointed out the importance of international cooperation in combating tax evasion. The group operates under the name "Experts of international cooperation ".

The problem of preventing escape from taxation and tax evasion is one of the central ones for the European Council, the Inter American Center of Tax Administrators (CIAT), the International Finance Association (IFA).

Losses for the state budgets caused by non-payment taxes are very high. The data presented in the reports show that revenue losses from tax evasion constitute 3% of total tax revenues in Finland annually, in the U.S. - 10%, in Canada - 10%, in England - from 3 to 3.5 billion pounds a year, in Hong Kong - 60 million dollars, in France treasury loses 23 % of tax revenues due to these reasons.

To combat with tax abuse effectively it is necessary to determine clearly which actions can be qualified as tax evasion and which - as a legal way to reduce the tax burden. This is especially actually for Latin America where legal rules concerning the prevention of tax escape are very loosely interpreted in judicial proceedings.

Fighting tax evasion is primarily concerned with the establishment (identification) of income's owner that makes tax authorities obtain information from a variety of sources.

Obviously, in countries such as the USA, Canada and Ukraine where the tax system relies mainly on the declaration composed by a taxpayer tax authorities have wide access to the information they need. There are countries where a general duty to inform about income earned during the financial year is established. This information allows tax authorities to identify unreported income or qualify unfilled declarations as a crime which is one of the ways to avoid paying taxes. This information is particularly useful with regard to such income forms as royalties or fees for patent use.

In order to stop tax evasion special legal rules are introduced in some countries. Financial Brazilian law, for example, requires that each remittance sent abroad must be announced to tax administration. In Germany there is also a requirement to notify tax authorities immediately about doing business abroad or taking part in a foreign business. The U.S. tax declaration contains points filling of which helps to identify the procedure of tax evasion or escape from taxes.

Many states consider foreign exchange control as an essential element of the fight against tax evasion. These countries include Australia, Austria, Brazil, Denmark, France, Greece, Norway, New Zealand, Israel, Portugal, Sweden, Ukraine, and Russia. Forms and extent of such control vary in different countries – from the duty of informing about currency transactions up to their ban until the taxpayer does not settle with the tax authorities. However, in some states tax authorities do not have access to information held by bodies exercising monetary control. Nevertheless generally there is a rule by which the income transfer by residents abroad or transfer of foreign companies' capital are permitted only after the fulfillment of tax obligations.

These measures represent the overall tax system of some countries and are not intended to address problems associated with the international escape from taxation or tax evasion. Therefore, most countries have taken special measures which allow combating this evil at the international level.

When it comes to international tax evasion the main problem is to establish the fact of violation of tax laws by tax authorities. Difficulties are often caused by situations where a local company controlled by a firm located in a country that provides a tax credit to companies receiving income from foreign branches and offices. This creates the possibility of obtaining significant financial benefits.

Basically tax liabilities are related to the status of the taxpayer. Full tax liability of legal entities depends on the location of their residences or locations of their actual administration. Due to this reason taxpayers strive to leave the country with strict tax regime and to move to the country with favorable taxation that is to offshore centers. In fact, offshore centers are often used to escape taxes without any intention to evade them. So instead of transferring incomes from foreign sources (dividends or fees) to countries with high taxation they are sent to holding companies in offshore centers. The use of these centers leads to the fact that this income is accumulated without tax burden (or with little taxation) and is later used as a source of future investments.

Many states are making special efforts to create a legal framework in the field of taxation and show great concern to the collection of taxes. These countries are doing everything necessary to minimize tax evasion facts. Activities in this area are conducted under domestic law and international agreements with respect to the problems of tax evasion in particular EU member-states. EU Commission links the problem of evasion from taxes to their harmonization within the EU, and in a broader sense – to ensuring objective competition conditions internationally. EU countries come to understanding that denial of the capital market regulation and the lack of ability to influence the transfer of capital cause large-scale tax evasion. Based on these views tax authorities pay special attention to multinational corporations whose activities create favorable ground for tax evasion.

13.2. Methods that limit financial transactions through offshore centers

13.2.1 What measures that limit financial transactions through offshore centers are accepted on the international scale?

Development and adoption of measures aimed at combating tax evasion using offshore centers has become one of the main objectives of financial bodies in many countries. It is recognized that such actions should be both intrastate and international. In the second of these options coordination of efforts in the framework of existing international organizations is needed as well as conclusion of special agreements between two or more countries.

The most influential international organizations which have begun to counter abuses occurring in offshore centers are the EU and OECD. At the same time countries that have established bilateral and multilateral agreements on this issue include the USA, Japan, Canada, France, Germany and the United Kingdom.

The EU has been working for many years on the problem of tax evasion. Results of these efforts are embodied in reports and methodological developments. Thus, the EU Commission insists on putting into practice principles of fiscal justice which would be able to prevent fiscal fraud and tax evasion; notes that high tax rates lead to an outflow of capital from the EU; indicates the feasibility of limiting opportunities of offshore centers associated with abuse of non-payment of taxes; is critical about tax manipulations practiced by TNCs. Europe Council's directives make it obligatory for tax authorities of EU countries to exchange information with each other, recommend to develop extensive contacts between tax inspectors from different countries, to practice the exchange of experience and learning practical achievements in the elimination of tax losses area.

Wide range of tax information intended for exchange is provided in the OECD model treaty which is the basis for the conclusion of bilateral treaties on the avoidance of double taxation. The vast majority of these treaties (and about a thousand of them were concluded before the training model agreement) contain orders about the exchange of tax information. However, for countries that have not signed a treaty on taxes and this apply to many offshore centers regulations of the model contract do not have any value.

TNCs that use offshore centers benefit from frequent refusal of foreign governments to provide tax authorities of resident countries with information of interest for them and from the cases of obstacles in collecting tax-related information.

A number of states have introduced an instruction that ensures the protection of particular interests of domestic companies in terms of keeping in secret their documents and information about their activities. Indeed it is closed for tax and other authorities from another state.

The need to obtain tax information abroad requires training of employees of tax authorities. The U.S. Internal Revenue Service has introduced special training for their employees on the issue of tax evasion practiced by multinational corporations.

Using the privileged position and leading role in the global economy the United States make effective pressure on some states in which U.S. taxpayers hide their capitals. Thus, based on the relevant legislation approved by Congress (Caribbean Basin Economic Recovery Act) the U.S. forced 24 mini-states all of which are de facto offshore centers to sign an agreement on the exchange of tax information with Washington. This data is transmitted at the request of the Treasury or the Department of Justice relate not only to taxes and finances but also to "dirty" money laundering, drug trafficking and organized crime.

The U.S., France and India belong to a small number of countries that officially sanctioned tax evasion and introduced a reward for providing information on tax evaders. For example, the Internal Revenue Service has already paid 500 thousand dollars to 578 informants. Code of Laws of France contains general provisions that allow the consideration of rewarding informants and by Indian laws the informant is entitled to receive from 10 to 20% of the amount charged by the State due to his statements on tax evaders.

OECD conducts analytical and research work on combating tax escape and evasion. A special body called the Working Group was set up for this purpose which in 1977 was transformed into the Committee of the problems of tax collection. This Committee includes representatives from tax authorities of OECD countries. The result of these efforts was a study entitled "The problem of international evasion and escape from taxation" conducted in 1987. This Committee also examines specific types and methods of such activities especially related to the use of offshore zones by tax evaders; its greatest interest is about abuses relating to the resolutions placed in the treaties on the avoidance of double taxation.

OECD member states exchange experience of fighting illegal practice of tax fraud between each other and provide each other with materials and documents on this problem. However despite these efforts they encounter difficulties when it comes to agreeing about the adoption of common directives aimed at the prevention of evasion and escape from taxation. This is due among other things to the serious problem concerned with national sovereignty on one hand and on the other to formal linguistic difficulties of the question related to the need to use at least 15 languages including Finnish and Japanese.

OECD developed a Convention on Mutual Administrative Assistance in Tax Matters. However, it is criticized because it:

1) provides access for different states to sources of information prior to the investigation and criminal proceedings;

2) provides the exchange of information leaving taxpayers ignorant and thus depriving them of the possibility of giving explanations;

3) allows the possibility of abuse of data and confidentiality of trade agreements;

4) is a multinational in nature although some countries have not reached the harmonization of tax legislation.

It should be noted that there are not many international organizations engaged in the fight against tax evasion. Among them we can mention the so-called group of four (France, Germany, the USA and the UK) and the Pacific Association of Tax Administrators (Australia, Japan, Canada and the USA). A bilateral treaty between the USA Internal Revenue Service and British tax authorities was signed. This agreement provides mutual access to information of each of these countries. Later it was expanded involving France, Germany and Norway. Germany has gone in this direction so far that appointed its tax officer in the USA. Its task was to monitor the changes in the functioning of the U.S. tax system and to assist the implementation of resolutions in the tax agreement between the USA and Germany.

The United States and Canada can serve as an example of the close cooperation between the two countries in the field of tax collection. Accounting control over taxpayers who receive income in both countries is practiced. In a growing number of cases the U.S. Internal Revenue Service makes pressure on the U.S. and Canadian banks in order to obtain access to the accounts of customers who use offshore centers. U.S. pressure extends to other countries such as Switzerland, the United Kingdom or Hong Kong.

Most of the small states of the Caribbean believe that relations with the United States are unidirectional transmission of information of course towards the United States. The latter, however, in many cases make it difficult to obtain financial information relating to the inhabitants of the Caribbean islands doing business in the United States. The reason for this situation is the lack of well qualified staff in tax departments of these countries who are able to start and bring to a successful result the collection of required tax information in the USA. The USA gained the permit to access tax information in Costa Rica, Dominican Republic, Grenada, Guiana, Honduras, Jamaica and St. Lucia only as a result of pressing on them. Similarly Guam, Marshall Islands and Samoa in the Pacific have agreed to transfer information on tax evasion instead of some American concessions.

13.2.2. What domestic anti-offshore regulation exists?

States, whose taxpayers hide in tax havens in order to escape from taxation, try to improve legislation to close the gate to 'tax haven' for their citizens tightly. Introduced rules and prohibitions are divided into two categories. The first category includes orders of general nature, the second - special rules. The latter category covers standards that govern the use of tax havens by holding companies and corporations controlled by foreigners.

The most treaties on the avoidance of double taxation concluded between the countries with high tax rates and countries with low tax rates have been recently revised. The result was the introduction of points (clauses) which makes it impossible to use the provisions of these treaties by residents of third countries in their attempts to evade taxes. Bilateral treaties between the USA and British Virgin Islands, between Cyprus and the United States, between the United States and Malta, England and Holland, Canada and Barbados can serve as examples.

Let’s consider the measures taken by some states to curb attempts to use offshore centers for tax evasion and escape.

The USA initiated and coordinated an international campaign against the transnational corporations and individuals who evade taxes. Anti-offshore regulation in the USA is carried out by a specially created subdivision F within the Ministry of Finance. In 1992 a law on income was adopted, which content limited the possibility of using tax incentives provided by Switzerland to American firms. However the possibility to escape taxes using the territory of the Dutch Antilles remained. In response the United States concluded a tax treaty with the Netherlands, which conditions apply to Dutch Antilles. As a result the opportunities for U.S. multinationals to transfer their income without paying taxes to Antilles have been significantly reduced. The UK followed an example of the United States in this regard.

The most significant result of the Internal Revenue Service in terms of combating tax evasion and escape from taxation by using tax havens is considered to be the so-called "Gordon's report". This document reflects the growing concern about the fiscal benefits and their use by U.S. taxpayers. It also stated the difficulties associated with the detection of adverse use of tax havens and mentioned impediments which make it hard for the U.S. authorities to stop and limit attempts to escape and evade taxes performed by U.S. corporations and individuals.

Legislative and executive powers of the U.S. prepared their own documents on offshore centers. Thus Senate commissions developed and presented a report entitled "Crime and its mystery: the use of banks and companies in tax heavens" and the Treasury Department prepared a document called "tax havens in the Caribbean". In these two documents special attention is paid to obtaining maximum information.

In 1979 Congress passed a law on secrets keeping by foreign banks. According to it fines up to 500 thousand dollars, imprisonment up to 5 years or both at the same time were introduced for an American resident who uses the account in a foreign bank to evade taxes. Residents of the United States according to this law have to give annual report to the government concerning foreign banking operations if the amount of the contribution exceeds one thousand dollars during a given calendar year.

In the U.S. a law "On fair taxation and fiscal responsibility" limits the possibility of the use of benefits arising out of the terms of international agreements, particularly ones on revenue taxation. In a later date tax reform strengthened the directives governing possibilities of use of tax offsets by U.S. firms that have foreign affiliates.

The UK is also one of the states which were the first to strive for the limit of the possibility of abuse of offshore centers in the international arena. High tax rates remain in this country. A special focus on offshore centers was in tax laws of 1970 and 1988. The latter is still active and requires that a British resident who receives income from abroad must pay taxes on it in the UK. The financial law was adopted here which largely corresponds to American orders that relate to the prevention of tax evasion through the use of offshore centers. Foreign companies are taxable if according to the English law they meet following requirements:

1) a foreign corporation is controlled by a British company;

2) British company together with UK residents own at least 10 percent of foreign corporation's property;

3) a controlled foreign corporation is a resident of the state or territory with low taxation.

Low level is considered the one the amount of which is less than half of the taxation level in the UK.

Germany is among the first countries that joined the fight against tax evasion conducted by individuals and businesses. Bundestag of Germany back in 1962 demanded the government to prepare a report on the effects of changes in residency by taxpayers and the differences in tax levels between countries. In 1964 a document which is a report on the situation in tax havens was drawn up. A year later a decree was issued concerning the transfer of income and assets from Germany abroad.

Stronger and more effective measures are reflected in the law on taxation of foreign economic activity. Among them:

- tax authorities are ordered not to recognize the price level or amount of fees paid by financially interrelated subjects as a real one;

-once limited, liability for non-payment of income tax, property tax, inheritance and gift tax was extended;

-a rule was introduced according to which immigrant from Germany is subjected to German income tax payment, who within five years of the ten preceding ones lived in Germany but travelled to a "tax haven".

France imposed orders against abuse of advantage of tax havens in 1973. Adopted in the same year financial legislation established that income earned by a foreign legal entity that has a residence in France is subjected to French taxation. This also applies to income derived outside of France.

In 1980 the so-called law on finance was passed which greatly limited the privileges and benefits enjoyed by individuals and legal entities that use the services of tax havens. The law requires that a French resident who owns directly or indirectly not less than 25% of equity in foreign companies operating outside France in locations where there is a "privileged" tax system should pay taxes in France. The tax base is the partial (in percentage) participation in company profits regardless of whether profit is distributed among owners or invested. Privileged tax system is considered the one which does not tax income at all or where tax rates are by two-thirds lower than those existing in France. Basics of this order of taxation are kept to this day.

In **Japan** in 1977 the parliament passed a resolution on the issue of tax evasion and escape from taxation, use of tax havens for this purpose. Then the "Law of the 1st of April 1978" introduced the regulation rule which limits the ability of tax fraud using such states and territories. The Ministry of Finance has recognized 41 territories as tax havens. At the same time it was recognized that "low" taxation should be considered the one with tax rates of 25% or less. April 1, 1992 resolutions of the Ministry of Finance have been abolished, tax authorities were offered to consider each individual case separately. However, the two main criteria remain:

- maintenance of company’s governance in countries that do not tax company’s income;
- clarification whether the level of taxation of the company is less than 25% in the country.

In both cases we are talking about companies registered in tax havens while 50 % of the shares or capital of these firms must be owned by Japanese residents.

In **Italy** the Ministry of Finance issued a decree in 1992 that contains a list of countries with preferential tax treatment creating in their territories possibilities of tax evasion. Same problems are addressed in Income Tax Code, adopted in 1991.

Italian law also borrowed 3 types of international principles which have been already introduced in a number of countries to prevent abuse of offshore centers use, such as:

1) orders approved in the United States in 1962 that tax the companies with residence in offshore centers;

2) the principle recognized by the EU according to which companies which have residence in one of the EU countries are not allowed to deduct from the tax base costs related to agreements concluded with companies registered in tax havens;

3) orders and regulations which act in Belgium, Luxembourg and the Netherlands applying to dividends paid to companies resident in tax havens.

The restrictions contained in the Italian tax code on tax havens do not apply to countries that signed the treaties on the avoidance of double taxation.

Chapter 14. Money laundering

14.1. The concept of “dirty” money. Money laundering as the process

14.1.1. What is the definition of "money laundering"?

In addition to the reputation of "tax havens" offshore centers have become notorious places where so-called "dirty" money are laundered and legalized. This term is used to name the money gained from crime. A set of actions that pursue the goal of hiding the true sources of such money and to give them attributes of legal origin is called "money laundering".

Money laundering is considered as an illegal act in criminal legislation of many countries, particularly in criminal codes of the United States, the UK, France, Germany, Switzerland, Poland. The most comprehensive definition of "money laundering" is given in the U.S. criminal code. According to this document the crime of "money laundering" is committed by one "who understands that the property involved in the financial transaction represents income from illegal activities which are aimed at:

-conduct or an attempt to conduct a financial transaction which includes such income with the intention of supporting such types of illegal activities involving any signs of criminal acts organized crime and drug trafficking;

-the implementation of financial transaction with an intent to breach federal tax code regulations;

-the conscious conduct of a financial transaction with the intent to hide in whole or in part the fact of the matter, place, source, the owner or controller of income received from mentioned illegal activities;

- the conducting financial activities with evasion of duty of filing the statement of cash flow.

In the modern market economy most transactions are performed without the use of cash while the illegal profits received by criminal organizations are in the form of cash. Therefore, criminal bosses and their accomplices in order to be in charge of the money received from crime should bring them into legal turnover through financial institutions, business entities using a long chain of financial and economic transactions (called legalization channels). Money laundering occurs mainly in the banking system, the system of insurance, capital markets as well as the so-called entertainment industry (e.g. using casinos and other establishments that are engaged in gambling). Besides, as major money-laundering channels those branches of market economy are used, where one can easily and in a big way apply fake bills, invoices, where understated or inflated prices are mentioned, where bogus reclamations and other attributes of criminal business are recognized. This is primarily related to such businesses as real estate, art, cars trade, sale of excisable goods. Business processes such as privatization of state-owned enterprises, participation in the creation of venture capital enterprises, bankruptcy and liquidation of economic entities should be also outlined as special channels of money laundering.

All listed sectors of economy and business processes have become an object of attraction of organized crime that launder "dirty money" because of the following reasons and the objective circumstances:

-versatility, speed and radicalism in some cases of changes in the legislation of several countries that have spread to these sectors; they influenced the effectiveness of changes in the functioning of the economy; (their negative display was expressed in the coexistence of different legal orders - old and new, often contradictory to each other, legal voids ("bottlenecks"), frequent changes in legislation, the advantage of the "broadened" interpretation of law) and similar ones;

-pervasive – from the top to the bottom - transformation of management structures, and creation of new units in management (with a lot of new positions), which is associated with qualitative changes in personnel, the establishment of non-governmental management structures (e.g. information systems), changes in ways of management;

-emergence of new forms of cooperation with relevant institutions abroad and arising in connection with this openness to the inflow of foreign capital, new management models, etc. and associated with them pathological forms that cause abuse;

-lack of appropriate mechanisms which protect the above-mentioned sectors from various types of violations and abuses;

-the vulnerability of the economy in relation to illegal economic activities as well as abuses in the conduct of economic policy (for example, with respect to "pressure groups" that lobby their interests in government institutions and parliament).

Due to the variety of illegal economic activities it is difficult to determine the extent of laundering of "dirty" money process with sufficient accuracy. Such difficulties are caused by the inability to obtain financial statements of criminal organizations as well as the existence of a huge number of unsolved crimes. Western experts argue that the worldwide amount of funds, that are derived only from drug trafficking and are subjected to money laundering, constitute hundreds of billions of dollars annually.

One of the indicators that assess the extent of the process of laundering of "dirty" money can be a number of questionable agreements registered by financial institutions and business entities that are ordered by authorities to provide such information to law enforcement agencies.

According to estimations of FATF (Financial Action Task Force) experts every year from 500 billion dollars to 1.5 trillion dollars are laundered worldwide.

However it would be a mistake to reckon that "dirty" money appeared exclusively as a result of the activities of organized crime. "Dirty" money became a constant companion of any economic crime and especially the one concerned with taxes.

The problem of tax evasion and the related problem of money laundering are relevant in all countries. The share of non-taxable income in the total mass of the national income is as follows: 10% in Australia, Belgium - 15%, Denmark - 6 %, France - 10%, Germany - 13%, in Greece - 50 %, in India - 18 - 20%, Italy - 25%, Japan - 5 %, in Norway - 17%, in Spain - 23%, in Sweden - 16 %, in the U.S. - 15% [15, p. 211].

Sphere of tax crime is an important but not the only source of "dirty" money in the business environment. The rich and varied arsenal of techniques and methods of getting felonious money is accumulated here. This system of double-entry bookkeeping and intentional errors in accounting, many ways of understatement of profit, manipulation of assets and liabilities, deals without billing, methods of concealed billing and hidden shady conditions.

The bribes are another source of "dirty" money. They are generally not taxable so immediately after taking bribe turn into "dirty" money and in cases of large amounts they need immediate laundering (of course, if the source of bribes have not already been "dirty" money). Interestingly under the laws of some countries bribe amount can be deducted from taxable income. Belgian legislation allows this for export transactions only if bribes are needed to overcome the competition, if they are widely used in the industry, if relevant documents are submitted to the ministry of finance, if bribe recipient’s name and address are called. If these conditions are not met and the recipient of the bribe is not named, then on the employer who pays a corporate tax an additional tax is imposed which value constitutes 200% of the bribe. Law of Denmark is even more liberal: bribe amount is simply deducted from the taxable profit if it is caused by production needs and is moderate. In Japan the money paid in bribes are treated as operating expenses if the name and address of the recipient of the money are claimed.

The similar attitude to this issue is in the Netherlands. In this country it is possible to deduct all expenses connected with business activities in different ways from the taxable profit. Decisive here are good intentions of the entrepreneur, for example, the desire to encourage the development of the company. Courts and tax administration in this country have no right to determine which costs cannot be considered as productive and therefore cannot be deducted from the amount of income subject to taxation. Terms about naming bribe recipient are not present. The entrepreneur should only convince the tax administration that such payments are made in the interest of the company.

In the UK it is allowed to deduct the amount of bribes from the amount of income that is taxable provided that the purpose of such payments was related to the interests of production. However, the tax office has the right to demand to give the name and address of the recipient of such payments.

The most stringent legislation regarding giving and receiving bribes and turning those into «dirty» money are in the United States. Although here as in the UK the bribes are allowed to be included in production costs but with the obligatory indication of beneficiaries this procedure is limited by a number of prohibitions including: bribery to all state and municipal officials as well as to employees of public organizations both in the U.S. and beyond is criminally punishable. In general despite the prohibitions and restrictions sums, which are paid in all countries in the form of bribes, form a huge mass of "dirty" money most of which pass the laundering procedure in different forms.

14.1.2. What is the importance of the organization of money laundering procedure?

Procedure of laundering of money received from criminal activities is very important for participants. British criminologist J. Mc Clean rightly notes: "From the perspective of the perpetrator the increase in profits from criminal activities is meaningless as long as there is no way to use them. This, however, is not as easy as it could be. Some part of income gained from criminal activities usually is directed at the development of illegal activities, but the rest the criminal would like to use for other purposes. If he intends to do so without putting himself at risk of excessive exposure of the money sources he needs to "clear" them before that, i.e. to fabricate a false, but completely legal and respectable "family tree" for them [18, p. 261].

14.1.3. What are the stages of money laundering process?

The process of money laundering consists of a series of stages or phases. Each process separately, of course, has its own peculiarities and differences. The general features are the features highlighted in the criminal law of a number of countries. These include: replacement of property (including money) obtained by criminal means, its movement, concealment, cover, purchase, possession, use, participation, cooperation. Such things as large hierarchical organizational structure of perpetrators, rational, planned and based on "division of labor" tasks, variable "technology" of crime conduct and a rich choice of ways to implement it seriously influence the complexity of money laundering. This arsenal consists of the use of financial institutions due to abuse by bank employees, diversity of bank accounts' species and, of course, a variety of ways of transferring cash across the border by using services of corrupt customs officials.

Activity related to money laundering – is always a transformation (modification) or movement. Transformation occurs when money change their shape. This happens, for example, when executor gets remittance or car for illegal "profit". Illegal incomes discard their form of cash and turn into a document that legalizes receiving money, movable or immovable property. We have to deal with the movement when the same money will change not shape, but their location. This is, for example, the postal or the telegraphic transfer of them to another location.

Money laundering usually occurs in three stages. However, it has repeatedly noted that the first stage precedes preparation of the whole process, which consists in transporting cash from the place of crime to another place that offers the initial guarantee of the success of the planned enterprise.

Illegal transfer process that precedes the placement of "dirty" money is called "training placements." The selection of this introductory phase into separate proceeding in the Western literature is connected with differences between "countries with criminal activity" and “money laundering countries”. The first category includes the countries, where the activity of organized criminal groups (especially drug dealers) is particularly intensive.

This is the USA, Italy, Thailand, Colombia, Nigeria, etc. The states that adjoin with the above mentioned countries, such as Canada, the major financial centers, such as Switzerland, as well as offshore are included to the second category.

The process of money laundering comprises three stages, besides the preparatory one (Fig. 14.1): placement, disguise and integration. The first stage – placement – a stage in which income, derived directly from the crime for the first time is placed in financial institutions or used for buying various types of assets (including securities). The second stage – disguising (hiding) – a stage, when the first attempt of concealing or disguising sources of origin and identity of the money owner begins. Finally, the third stage – the stage of integration (legitimation), in which money is introduced into the legal economic structures and financial system in order to their final assimilation of all means, presented there [2, p. 67].

The executors of the crime introduce cash, which is derived directly from the crime, in any bank or other financial institution - in the first phase. This stage is relatively easy to determine whether the investment of cash in financial institutions money is laundering, as well as to reveal the source of the “dirty” income.

Thus, the given stage of money laundering is characterized by the following features:

• the subject of laundering is the value obtained directly from the crime;

• often the subject of laundering appears in the form of cash;

• the actions of criminals take the form of financial transactions that capture by short-term as well as uniformity and simplicity.

Executor tries to separate money from its illegal sources, conducting a series of financial agreements (such as modification and movement) at the second stage. Executor hopes thereby to get the situation, when it was more difficult to find or even impossible the link of money that is laundered with the source of their origin. This stage is called the overlay of mask or disguise. Its completion leads to removal – both in distance and in time – of masked money from the crime, for example, by placement illegal lab that produces drugs, or wholesale supply base of such potion.

The third and final stage – is to frame-up the explanations about allegedly legal origin of laundered assets and putting them into the legal turnover by investing or buying property. Therefore, this step is called integration or legitimacy. The actions of criminal groups are focused on investments “laundered” money in the economic structures in the way that they re-entered into the banking system, acquiring necessary features of legitimate income, at this stage. Among the tools and instruments which are used to achieve integration, the fictitious sale of real estate is used, fictitious firms for providing unreasonable loans, involvement into illegal activities of bank employees in different countries, etc.

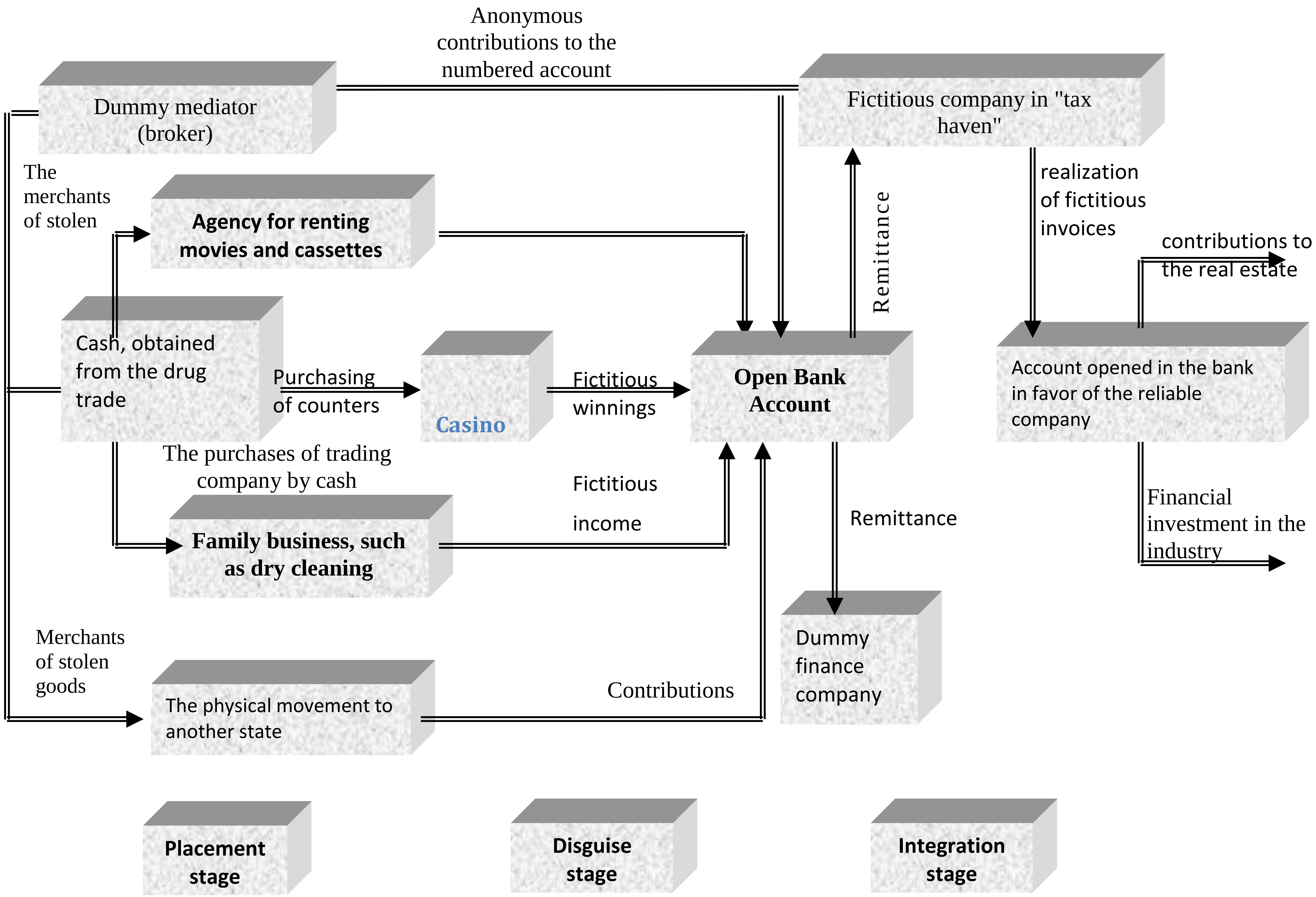

Fig. 14.1. Stages of money laundering

14.1.4. What is the essence of the methods of money laundering?

Actions that constitute the procedure of money laundering in the banking system, take the form of legal financial agreements (banking operations), but this form breaks internal banking statutes (bylaws and guidelines) or has the nature of illegal transactions, prohibited by regulations, implementation of which threatens the use of economic or criminal sanctions. There are other types of agreements in each stage of this process. Due to the fact they are usually illegal or break the decree of internal banking system, they are appropriate to call them as methods of crime (money laundering methods). The expression "technique of money laundering" can be a substitute to that definition.

Under this notion it is necessary to keep in mind a set of stable and repetitive features that characterize certain behaviors, which are associated with banking transactions; they define the scope and possibility of applying such transactions in the process of money laundering.

First of all, the differences, connected with financial nature of agreement, legal form of transaction, amount of capital, number of transactions, etc., effect on the diversity of methods of money laundering and also differences, which have non-financial character: the structure of criminal organization (simple, complex, hierarchical, internal functions, decision-making process, degree of trust among members of organization and related entities) (Table 14.1), socio-economic situation and relations, based on the plotting between criminal groups from one side, and administrative bodies and banks – from the other.

The effectiveness of the method of money laundering is considered to be high in the banking system, if the solution of three problems is provided:

• the hide of the true origin and of the owner of laundered money;

• the continuous control over laundered money;

•the change of the form of cash, procured by criminal way so that at the decrease of its quantity (weight, volume) its value is maintained or increased.

Table 14.1

Organized structures, which launder "dirty" money

1. Organized criminal group engaged in activity that brings great income
2. Intermediaries that link, for example, drug dealers with "launderers" of money "Slickers": ➢ send traders to "launderers" or "launderers" to traders; ➢ not interfere in the discussion of terms of the treaty on money laundering; ➢ determine the rate for services (but not the percentage of "laundered" money). Brokers: ➢ link drug dealers with "launderers" and conclude a contract for an extra fee

➢ 3. The organizers (sponsor) of “dirty” money laundering: ➢ organize the whole procedure on a large scale (large amounts); ➢ the participation of a large number of “launderers”; ➢ payment for services of each executor separately; ➢ the contact with a group that has “dirty” money.
➢ 4. Couriers: ➢ organize transport and procedure at the first stage of the process; ➢ are not associated with organized criminal groups; ➢ disclose their passport data; ➢ however, often use false passports and documents.
➢ 5. Currency changers: ➢ the owners of business units, these are often the currency exchange offices; ➢ there are illegal, street currency changers.
6. Professional advisers: ➢ make one or more services (e.g., advices in the field of investment, transfer of funds, registration of business entities on the surnames of third parties – dummy owners); ➢ make manipulation in finance and law; ➢ are bankers.

14.1.5. What are the features of money laundering at the placement stage?

At the first stage of money laundering – at placement stage– such methods are used as the investing of a large number of deposits in amounts below the limits, which oblige the bank employees to fulfill the registration procedure and identification of the depositor. This technology is called restructuring and covers in most cases the following points:

• multiple cash contributions (including currency) to the bank accounts of citizens of the country and foreigners (these are always amounts, which magnitude does not exceed the limits, beyond which banks are obliged to identify the customer) and similar contributions made by cash in a form of foreign currency, transported by smuggled way from abroad;

• transfer to the encashment of existing checks to bearer for an amount of lower limits that require identification;

• “smurfing”, i.e. the acquisition of easily transported property values by “dirty” money (in amounts that do not exceed the limits of identification), this applies mainly to bearer checks; multiple substitution of small face value banknotes into larger in amount that does not exceed limits of identification, without using bank accounts;

• various other cash transactions, conducted through a large number of bank accounts, branches, tellers or with the assistance of others, this includes operations among many cashiers by one person, in addition, there is a possibility to conduct the operation by one person or investment of deposits by cash into many different accounts to bearer, with a small amount of individual deposits, which form a very large sum of money in total.

Very popular and widespread technology of money laundering at the placement stage is the unification of “dirty” money with the income of legal commercial entity. This technology is called “mixing”. Hotels, restaurants, dry cleaners, bars, points of public services for the population are numerous types of economic activities that generate unstable income, which vary depending on the season, are not amenable to strict control and are therefore suitable targets for money laundering.

There are three options in the described technology:

• the owner of “dirty” money is the legal owner of commercial object or company which provides services during the process of money laundering at the same time;

• the owner of “dirty” money finds a legal firm to use it primarily as a “laundry” for money laundering;

• the owner of “dirty” money conclude a contract with another person (so-called contractor), which organizes the allocation of money through the company – “laundry”.

The mixing of “dirty” and “clean” money allows justifying the existence of large amounts of cash by links to legal economic activity without special efforts. The procedure of mixing money almost yields to exposure until the time, when the bank begins to suspect the client in abuse of their activities and in using of them for illegal purposes (noting, for example, income from business activities of the client too high, compared with those that he had before the emergence in this branch or in this area),

The introduction of strict legal rules in a range of countries forced the organized crime to attain penetration into some banking institutions of their accomplices or to strive to bribe bank officials and even the members of the Board.

A dishonest cashier may be involved in money laundering, the head of a department or of the whole bank (so-called “own” or “captured” bank). The technology of money “laundering” at the placement stage, which involves bank employees, includes:

• receiving of cash without documentation of the identity of the individual contributor and without the registration of the transaction;

• incomplete registration data, associated with taking cash;

• assistance in opening numerous false accounts for the purpose of admission cash contributions;

• the conscious rejection of the summation of multiple operations carried out within the same day;

• one physical cash receiving and accomplishment of deposits that are drawn as taken for several days;

• the registration abuse, which contains a list of persons, who use exemption from registration duties in the banking system, which is the order that requires the identification of customers.

The so-called “collecting of bank accounts” refers to the widespread technologies of money laundering in the banking sector. Immigrants from various Asian and African countries and from Eastern Europe invest small amounts of money (gratuity for legal work or “black” earnings) per account. This money is retransferred to the countries of immigrants’ origin.

One more technology became as result of lack of relevant legal regulations that govern the placement of large contributions to bank accounts in several countries. These are the deposits of currency contributions by citizens of these countries or foreigners. For instance, it is enough to show to the bank the custom declaration of foreign currency import in Poland and other countries, and it exempt from the obligation of the depositor identification. Such banking transactions extend to the amounts that exceed the limits of identity, especially considering the shortcoming in the accounting of registered transactions, carried out by the same investors.

Buying and selling of foreign currency, simultaneously with writing down on bank account, remains the simple technique of money laundering, or buying and selling of foreign currency by cash through the mediation of exchange offices in banks and beyond.

The so-called “contracts”, which refers to the exchange, differ from the mentioned method. The essence of this technology is that the “dirty” cash is invested into different accounts in different banks. Further the investor draws up a contract on exchange with the help of bank manager in the third bank, for example, a large amount of U.S. dollars for Swiss francs. A further step involves the implementation of the agreement on the currency exchange for the specified rate. Entities, engaged in the implementation of such agreement receive commission for it in the third bank.

It is also important to mention the technology, concealing of various items in cases of widespread money laundering of great sums and large concentrations of money in banking saves. This method is used as an auxiliary in the first phase of money laundering.

The technical operations of banks which replace worn or damaged banknotes, can be used for money laundering,

Remittance is often used for money cleaning, such as payment for services. Usually they are used in connection with evaluating of “dirty” money into the banking system of another country.

All listed methods, used in the placement phase of the criminal gains in the banking system, are supported by other criminal acts aimed at achieving this goal – “clean” of received funds and the transition to the next, that is the second stage of the process. All these methods are closely related to the maintenance of criminals by bank employees and by the specific nature of banking operations. In each case, the criminal action may take the following forms:

• forgery of documents, which is the basis for the acceptance of deposits by bank;

• bribery – refers to both bank employee, and legal entity (such as a commercial bank);

• misrepresentation, fraud concerning the individuals or legal entities, which are complicit in money laundering, without even knowing their complicity.

14.1.6. What are the methods of money laundering at the disguise stage?

These methods have direct destination – to hide traces of the origin of criminal income and to ensure the anonymity of the owner of “dirty” money.

One of the most accessible and widely used methods of money laundering at the second stage of the process is the remittance by using EFT (electronic fund transfer).

This method often serves as the initial element in disguise, immediately after the transfer of cash to the bank. It may also be an indirect link at this stage after an exchange of cash for monetary instrument. For the purpose of masking also can be used: the point of sale transfer (POS), deal with the use of ATMs, electronic direct deposits (such as payment of gratuity or social benefits), and the payment of bills for telephone calls. It can be postal orders, both domestically and international. Internal systems of interbank settlements that exist in many countries can be used for their implementation on the territory of one state.

The main advantage of the electronic transfer of assets from money launderers is considered the speed of movement of money (including banking orders and information). Assets transferred electronically, usually become available immediately after receipt to the account of money “launderer” in the bank that received the transfer. Therefore, immediately the possibility to start further criminal acts opens, which are related to money laundering: or the following masking of capital, or its integration into the banking system or beyond the banking system.

The second undeniable advantage of electronic transfer of assets (as SWIFT in general) is the frequency (intensity) of movement of fund. The quickly and easy transfers of the money contribute to the fact that many intrastate and international actions of the money masking can be made in a short time – in order to camouflage their true criminal ties.

The third advantage is the large distance (in miles or kilometers), which is not an obstacle for such transfers. Today, many financial systems of different countries attached to the electronic transfer of assets SWIFT.

The fourth advantage is the minimum number of documents, used for the relevant banking operations.

Several technologies for money laundering at the stage of disguise can be called in addition to electronic forms displacement of assets and funds.

This is primarily improved technique of wire transfers. It is the transfer of “dirty” money from various parts of the country or region on a single account, the so-called “distribution” drawer. If the balance exceeds a certain level, passes the set “threshold”, the assets are automatically sent out of the country. The use of such “threshold” helps criminal groups to avoid great losses in the case of removal or blocking the account by justice.

There is the technology in addition to this. It is single or multiple change of form of illegal income through purchase of assets, i.e. stocks, bonds, traveler's checks. Often this is done very quickly. The executor of such operations may, for example, buy bearer checks with bank payment assignments or change such order for traveler's checks. Such “transformations” very hamper the identification of criminal income sources. The documents, accompanying such “transformations”, have relatively small physical volume that simplifies their export abroad and return back. In some cases, casinos or other enterprises, engaged in gambling, simplifies money laundering, changing cash for tokens to play. Then “launderers” of money exchange the tokens for cash or checks.

Frequently such method of money laundering is used as the formation of already mentioned “enterprise cover” and usage of their bank accounts for clearing at this stage. These entities exist only on the paper. In fact, they are not engaged in economic activity (as opposed to so-called company-screens). Such companies are used to mask the flow of illegal money. “Enterprise cover” (usually a company) makes it possible to allude the commercial secret. Their real owners hide behind nominee partners, who represent them, and board members. These companies are quickly created and can be used many times to disguise money laundering.

For the same reason, at the disguise stage illegal intra-bank (between departments) and inter-bank transfers are used. This technology begins when an organized criminal group that launders money controls two or more bank departments or two banks in different countries (the already mentioned “own” or “captured” banks). Money, needed to be “laundered”, get to the bank department in the same country, but are detected in a bank in another country in the same currency or in any other. Considering that both departments relate to each other, there is no need to physically move assets. Of course, there is also no necessity for remittance by telegraph. This operation is done by phone or fax.

The characteristic feature of use of banking operations at the stage of disguise money laundering is a large number of counting checks that affect recognition (including those that are lower than the identification), including foreign checks..

It is used quite often to disguise “dirty” money, the technology that consists in reception of cash with a simultaneous closing of existing bank accounts to discover new, in other banks in the country or abroad. At the request of the client, it is executed termination of extension (erasing traces) of earlier made operations, while the bank cashier remittances money to other, mentioned client’s accounts, and simultaneously simulate the payment of this money in cash to the client.

14.1.7. What are the methods of money laundering at the integration stage?

After the successfully disguise of “dirty” money, often with using various technologies, the executor, who legalizes income of criminal activities, must find a legal justification for the possession of property. For this, he uses various integration technologies.

The contract of sale on durable goods, such as cars, boats, airplanes, antiques, real estate is used very often. Dummy companies are used to get property for the "dirty" money. Later the real estate is resold and the revenue from sale has now become quite "legal". In other cases, "launderer" buys for "dirty" money, for instance, a yacht, declaring the price that is much lower than its actual value.

He pays the difference to the yacht seller in cash (the so-called agreement "under the table"). Later, he can resell the same yacht, putting the price equal to its true value. Thus he justifies "legality" of income by fictitious revenue. There are numerous cases when "launderer" cooperates, for example, with dealer who sells cars or with the real estate agency. The owners of these mediatory firms are often covered by criminal organizations. Criminals use these firms for a variety of transactions and frauds. The goods that are obtained by these firms are also used for criminal activity, such as vehicles, facilities for manufacture of drugs, a refuge for members of criminal groups, etc.

Such technology which buys companies that go bankrupt becomes more and more widespread at the integration stage, in order to create visibility that the incomes derived from criminal sources are actually the incomes of the purchased company.

A very popular method of money laundering at the integration stage is the so-called technology of self-lending.

It consists primarily in creating a fictitious company receiving laundered money. Emergence of it overseas successfully hides the fact that this company is the property of person who is engaged in criminal activity. Criminals take a loan in one bank, and the second loan – usually much larger – from themselves as from fictitious company to use the money that is laundered. Legitimate loan is returned with interest from fake loan. It gives criminals money on hand that can be freely used in various purposes (e.g., to finance the further development of the criminal craft), and debt to itself (i.e. before fictitious company) opens the possibility of financing entirely legitimate business from the respected sources and still use tax benefits for the payment of interest or the inclusion of the same interest in production costs (depending on operating in this state tax regulations). In addition to the simplicity and accessibility, credits for itself have another important (in terms of criminals) advantage. They are difficult to expose the part of law enforcement, and they are difficult to find, given the lack of information about the true financial activities of criminal groups and their fictitious companies.

In many states, the method of money laundering relates to abuse by credit institutions is disclosed. This method is often accompanied by smuggling cash. It proceeds in two phases. The first phase is transferring of criminal income, which goes to another state and distributing them in the form of bank deposits. Later – the second stage – taken a loan in a bank, located in the country of origin of "dirty" money and ensuring of its payment serves transferred to the foreign bank assets (certificates of deposit). This method is also used for tax evasion.

Credit institutions and loans are used in another technology that consists in transferring funds on very favorable terms (for example, low interest rates, favorable conditions from the standpoint of loan repayment terms, refusal of guarantees, etc.) for the implementation of various types of investment projects financed, for example, by the local government.

At the stage of integration as in the earlier stages the cooperation with foreign banks is widely used for the legalization of the source of money that is laundered. These are usually the banks with residence in offshore centers, which adheres to strict bank secrecy, which almost makes it impossible to get access to information about their clients. Cooperation of criminals with foreign banks at the integration stage often occurs as a result of corrupting bank officials, which was at the placement stage of “dirty” cash in the accounts of banks or at the disguise stage. It is important that while criminals use these banks, their employees take from their client’s the unlikely (or even fantastic) “justifications” of money sources and the reasons for their depositing.

The use of invoices for imports and exports during the conducting the trade agreements, and the use of bank staff with the same purpose are the common technologies, which are used in money laundering at the stage of integration. This technology is used in four versions.

Firstly, these contracts are with dual source of payment (see Figure 14.2). Drawing up a foreign economic agreement (contract) for the purchase of goods (or raw materials) at an extremely favorable (very cheap purchase) when resale can bring profits which comes to 100%. In fact, the supplier (seller) accepts payment from two sources. The first payment, which is based on a single invoice, showed by the company, is no more than 50% of the actual value of the goods and formally executed by the buyer. The second payment is done mostly in cash (less transfer) or handed personally to the seller. The official profit of purchaser obtained during the resale of the goods in this way is “laundered” money. This technology is used in the purchase and sale of large quantities of high-value goods, such as electronic products, oil products, alcoholic beverages, and cigarettes.

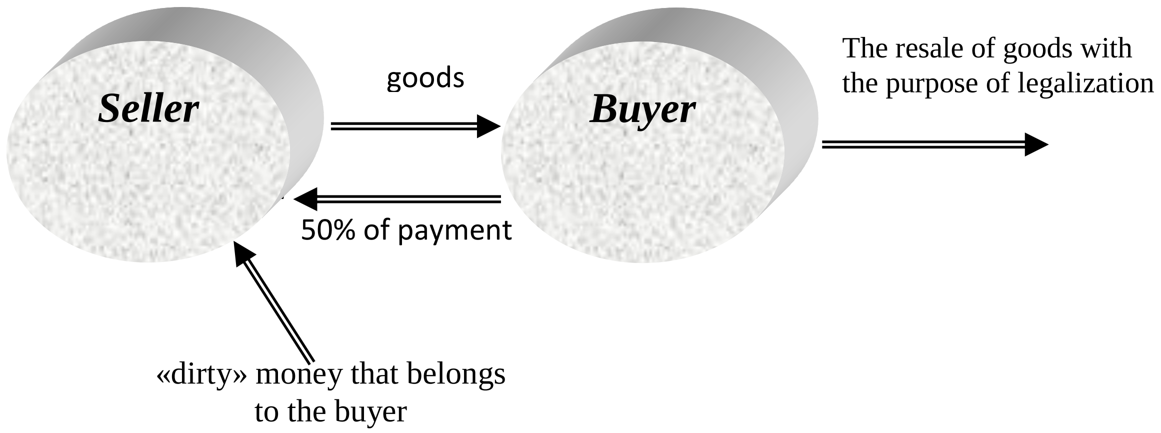

Fig. 14.2. Contracts with dual source of payment

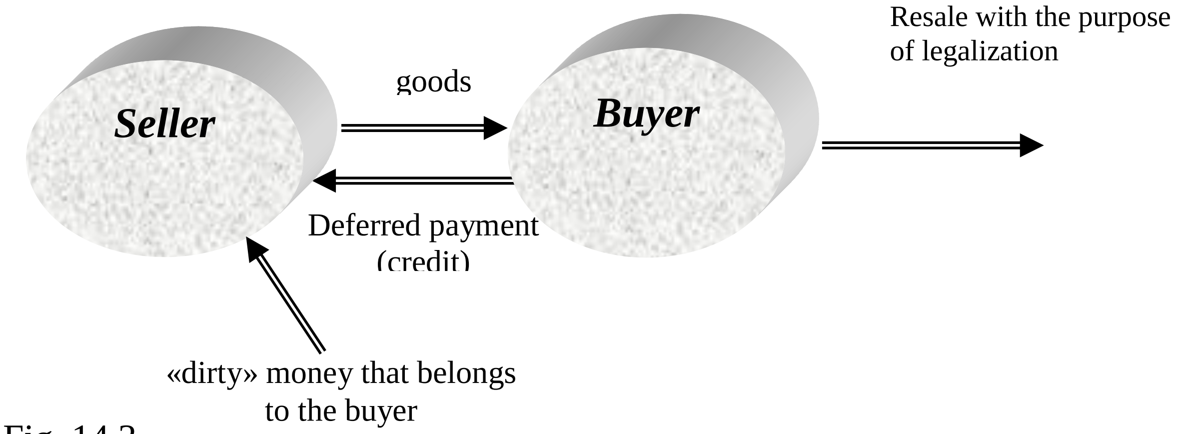

Fig. 14.3

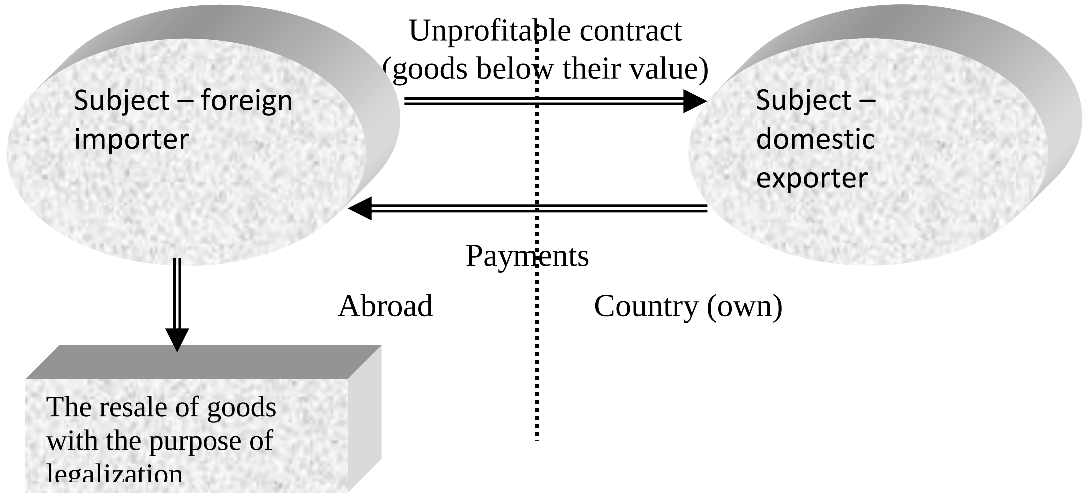

Fig. 14.4. Legalization of “dirty” money remittance abroad

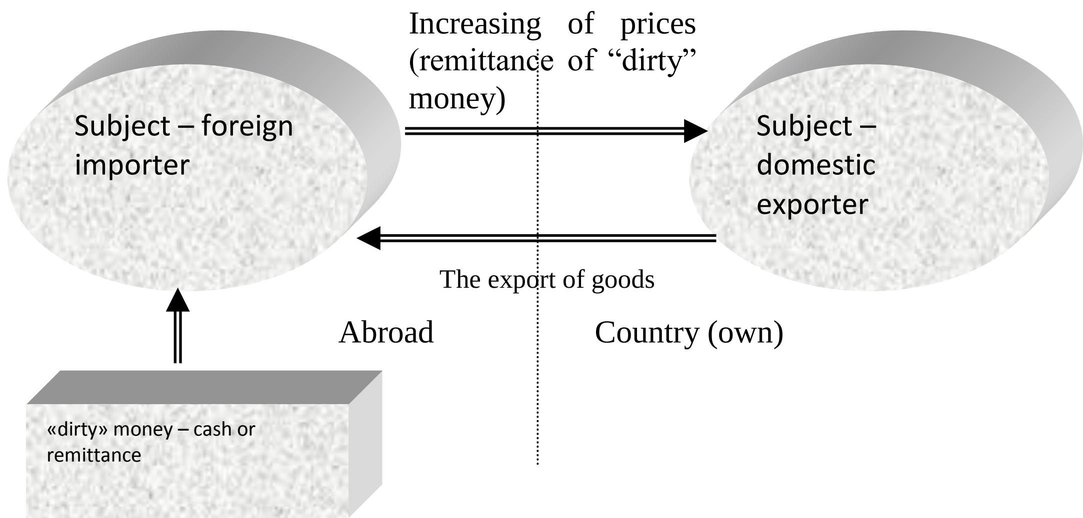

Fig. 14.5. Legalization of “dirty” money remittance to the own country Source: [18, p. 288]

Secondly, these contracts are particularly formal or false contracts (Figure 14.3.). This option is similar to the previous one, it is different only in fact, that it is used almost exclusively in large import agreements of trade firms. The essence of it is the fact that a certain number of contracts (20 – 50 % by value terms) are realized without any formal payment by buyer firm; usually everything is drawn up by fictitious loans. The contracts provide a significant deferral of payments, much less than the value of the realized delivery. The payments come from illegal foreign sources in fact. Banks with shady reputation, located in offshore centers are often used for financial payments under these agreements. In addition, the parties of the agreement are widely used in calculations of this type of credit.

Bank employees of different levels can play the important role in a variety of similar frauds, related to money laundering, - cashiers, accountants, etc. Great benefit can be given even by careful analysis of invoices. Coming from different parts of the world, from different regions and from different companies, they often have common, identical features that give the same vocabulary and even the same spelling mistakes. It is easy to guess under careful study that they have the same executor.

Thirdly, it is the legalization of "dirty" money through remittance abroad (Figure 14.4.). This technology is used in situations, when on the earlier stages of money laundering the funds appeared on the bank accounts of some domestic firms and there is an urgent need to remove them from the country, followed by legalization and investing abroad. It consists in that disadvantageous export contract on the sale of goods below their value is officially concluded. This leads to the results in financial losses for the domestic firm. At the same time, the foreign firm (which is usually under the control of domestic exporting firms) unofficially receives significant revenue from the resale of goods, which are the subject of the contract. Now profit becomes the legally earned income from trading activities.

Finally, fourthly, it is the legalization of "dirty" money through remittance to the own country (Figure 14.5.). This method consists in that the export contract, which is concluded, provides excessive price of the goods compared to their actual cost. Overcharge is successfully complemented with incomplete delivery of the goods (i.e. less than provided in the contract). Invoices, which are rendered by domestic firms, are paid in full, although some goods are not delivered and their cost is much lower than it is required by the contract.

The last two technologies of money laundering have the general name – "transfer pricing".

14.2. What is importance of the recognition of operations related to money laundering?

The recognition is important for informing law enforcement authorities about the crime of money laundering. The effectiveness of the procedure of recognition from this side is seen as a significant contribution to the successful operation of justice in the fight against organized crime.

The recognition of attempts to launder "dirty" money in the bank activity is regarded as a set of activities, aimed at organizing continuous or intermittent flow of information about customers and suspicious agreements. This information can be used for the appropriate action aimed at stopping unwanted financial connections. These actions usually involve the following steps:

• the gathering information about agreements that can potentially be used for money laundering, as well as creating the conditions for continuous flow of information;

• the processing of accumulated information through the variety of methods and the classification of suspicious and atypical (unusual) transactions based on various criteria;

• the monitoring of suspicious and untypical transactions;

• the preparation of conclusions on the basis of information processing, the result of recognition.

14.2.1. How is the collection and the storage of information carried out?

Gathering information for recognition is the first introductory stage of the process. It covers both active steps, which consist in the creation of appropriate tools that facilitates data acquisition and activities passively (indirectly) involved in determining the method of access to information that could potentially be used at the next stages of recognition. The information, needed for recognition comes mainly from the following sources:

• the registers of agreements (transactions) in cash that exceed the established quota, as well as similar agreements registers using cashless payments if the relevant internal rules indicate the mandatory introduction;

• the other bank statements and bank records;

• the documents about operations, implemented by different categories of bank employees in terms of broadly applicable policy of “know your customer”, especially the operations, performed at the opening of bank accounts for individuals and legal entities, during the introduction of these accounts when dealing with authorized representatives of clients, etc.;

• the statements of operations, performed by various bankers in relation to contacts with people – not the bank's clients, for example, which bring cash to the accounts of bank customers;

• the analysis of key financial indicators, related to banking activity;

• the database of bank employees;

• the database of bank customers, and others, who use banking services and used or attempted to use banking operations for criminal purposes.

The main source of information for the recognition of attempts of “dirty” money laundering in the bank is the register of existing transactions that exceed set limit.

The creation of a special database of bank transactions, made by figurehead is an important contribution to the recognition process. Gathering information about them should be as much complete as possible.

Another category of information that can be useful for recognition, it is all sorts of indicators that are particularly relevant to the work of involvement of investors. It is about the indicators of growing number of opened accounts for a certain period of time, fluctuation (raising or lowering the number) of cash contributions, the number of open so-called “frozen” (inactive) accounts for a certain time (e.g., quarterly, or six months), indicators relating to earnings of money on the accounts.

Different “historical” information terminates the part of the data, required for the recognition. This information relates to incidents and events, associated with money laundering or suspicion in this crime.

14.2.2. How is data processing carried out?

The information collected and accumulated in registers of available contributions, received from other banking sources shall be processed under the recognition program, adopted and implemented in several countries. This stage includes actions, related to correlation, addition, analysis, processing in the form of text, and the transfer of data, needed to detect attempts of money laundering.

Information processing should be carried out regularly. Its goal is to identify among all transactions, such type of agreements that pass through the banking system, which, most likely, can be used for “dirty” money laundering. The issue is primarily the detection of agreements atypical (unusual), i.e. those which differ from other previously many times realized customer data or certain categories of customers (e.g. trade enterprises that are engaged in sales of electronic equipment), and unexplained transactions, i.e., in whose financial characteristics fullness and completeness are absent or purpose of their implementation is uncertain and unclear. This type of transaction is often mentioned as suspicious.

Several methods are used for information processing. Often this is comparison, which consists in comparison of the elements that characterize certain deal with database, which is in advance prepared and adopted as a “template”. The last serves as a “benchmark” for comparison. The purpose of this method is the establishment of the similarities and differences in certain financial transactions, as well as the dynamics of the same transaction in time.

Another method, used for processing information is so-called structural analysis, which is to allocate and to study certain financial transactions. This method makes it possible to find the illegality of the transaction using a financial instrument, fraud cases, and money laundering.

You can use another method of systematization and grouping of data about financial transactions for data processing, which consists in bringing together some selected elements in order to establish between them cause and effect relationships. It allows, for example, to identify the duplicate transactions and to isolate the groups of subjects who can potentially become the participant of money laundering.

Identifying atypical and unclear transactions, using these methods can be facilitated if in the practice of banking activity the symptoms of using banks with the purpose of “dirty” money laundering will be identified in advance. For example, the symptoms, associated with the behavior of bank employees; with the atypical nature of the transaction with cash and saving bank account; with the unusual nature of the non-cash transactions, with the specifics of the bank customers; the place of origin of the bank customer, guarantor or beneficiary; and specific symptoms, related to either the level of indicators that determine the financial activities of banks or qualitative changes that occur as a result of compliance with the financial and legal obligations and instructions.

Different ways of transmitting the processed data are used during the processing of bank information, depending on the type of information, as well as on research methods. More than other these ways are used:

• the diagram of transfers which helps in flowing of financial resources;

• the relationship diagram that displays the link between bank customers, both individuals and legal entities;

• the calendar of events, which facilitates the analysis of transactions carried out at the same time;

• diagram of the frequency of financial transactions;

• sights, which are related to the most important observations of bank employees, who process information on the atypical and unclear agreements;

• the comparisons and the tables of features, which characterize the unclear and atypical agreements as well as specific symptoms of this type of transaction.

The data should be processed by using modern information technologies.

14.2.3. What is monitoring?

An important stage of recognition the procedure of "dirty" money laundering is the monitoring of transactions, selected as atypical and suspicious. The purpose of this process is monitoring the bank account of the client, as well as conducted his other banking operations. But the main result of this observation should be the confirmation of suspicions attributes of criminal acts of the client (or several clients) or removing of these suspicions and complete recognition. Monitoring makes it possible to exclude the adoption of any unreasonable decisions and as a result – to send the confirmed information to the prosecutor.

Monitoring should lead to the maximum accumulation of a large number of documents and information that will be needed to determine the nature of the suspicions that have appeared with bank employee, who is responsible for this procedure. Assumptions about the legal qualification of the criminal activity or rejection of the hypothesis of the involvement of the client in criminal activity are generally formed at this stage.

Monitoring should be productive. Efficiency lies in the fact that suspicions of criminal nature of transactions carried out by the client are dispersed in the process of its holding, and in fact that the suspicions are confirmed.

14.2.4. How is the completion of recognition carried out?

The decree about the end of the recognition process gives the official, who is responsible for the monitoring of specially selected transactions for this purpose. It is based on a document that serves as the reason for the message prosecution about the crime of money laundering or refusing the suspicion in such crime. The document concludes activities within recognition may take the form of:

• the presentation, aimed at Audit Branch of Bank;

• the offers to the Management Board of Bank to decide and give information to law enforcement agencies about suspicions of money laundering;

• the information, aimed the Chief of the Department of the Bank;

• the information aimed the Chief of the Department of Bank about the progress of monitoring;

• the report (for the period, such as six months), which includes information about suspected money laundering;

• the generalizing official note with the conclusions, which are related to reasonable suspicion of money laundering, which was observed in financial transactions, with the offer to take the required action.

These documents are sent to the Director of the bank later. The director decides individually or after discussion with their legal advisers (Advisers Group) to inform the prosecutor's office about the crime of money laundering or about the behavior of officials who have shied away from such notification.

Information, obtained in the course of banking recognition can be used to:

• provide the right direction for investigative actions, conducted by justice;

• study the value and the purpose of the use of funds, acquired as a result of the crime;

• facilitate actions, aimed at searching for criminal profit;

• bring the criminal case to trial;

• calculate illegally received income;

• facilitate the arrests of suspected persons.

14.3. The main directions of combating money laundering

14.3.1. What is the essence of international cooperation in dealing with money laundering?

Methods of money laundering become more refined and difficult to disclosure. The level and extent of money laundering procedures have achieved such enormous proportions worldwide that have become the threat to the stability of individual countries and to the external security of the regions.

There are the greatest dangers, associated with the procedure of "dirty" money laundering:

• *the destabilization of economies of individual countries*. The activities of powerful criminal groups, who rotate billions of dollars, may (as often happened) cause an disorder of monetary, customs and tax system of the state, falling exchange rate of national currency. Mass money laundering of illegal income often leads to the violation of the principles of economic competition and to deformities and distortions in the functioning of the macroeconomic system state. All these inevitably accompanied by the bribery and the corruption of public administration, which is involved in the regulation of certain sectors of economic activity. Eventually, whole sectors of the economy revealed in the hands of criminal groups;

• *money laundering, which occurs primary in credit and financial institutions, mainly in banks, will inevitably lead to the undermine of the banking system, causing bankruptcy of banks or causing them financial loss in some cases.* It causes the corruption of bank officials, who carry out suspicious transactions, and this encourages them to take economically unreasonable decisions that cause financial loss or other official abuses. As a result, there is the loss of depositor's confidence in the credit system in this country, as a result it undermines the trust of the international community in the state and its financial system;

• *the laundering of "dirty" money, as has been noted above, adds accelerated growth and the development of organized crime*.

The large-scale laundering of illegal earnings has become a worldwide problem long ago. Therefore, the international cooperation in the struggle against money laundering gets special importance, which is based on certain legal acts.

The main incentive, which prompted many governments to join forces in the struggle against international crime was a concern because of spreading across the world opium trade nearly a century ago. On the eve of the First World War (in 1912) International Convention in matters related to the sale of this drug substance was concluded, and it was replaced by a new Convention in 1931, which restricted and regulated the production and distribution of medicines in the worldwide, which contains drugs at that time.

The UN took upon itself the initiative to fight against the spread of drugs, and along with "dirty" money laundering after the World War II. The cornerstone, laid in the foundation of international law on this issue, is the United Nations Single Convention on Narcotic Drugs in 1961, subsequently supplemented and amended by the Protocol in 1972.

The second most important legal act, which regulates issues, related to the fight against drug business is the UN Convention on Psychotropic Substances of 1971, which significantly extends the scope of international control on a large list of synthetic drugs. This document has been ratified by over 140 countries.

However, the continued growth of drug trafficking, the expansion of its geographical boundaries, more sophisticated and dangerous form of criminal business forced the UN to come back to solving this problem. In November 1988 it was convened the UN Conference against Illicit Traffic in Narcotic Drugs and Psychotropic Substances in Vienna. The conference ended with the adoption of the text of an international agreement, which is known worldwide as the Vienna Convention. The most countries of the planet are acceded to this Convention now.

The requirement that the crimes of money laundering, and all other crimes related to drug trafficking, were considered by the courts of all States Parties of the Convention with particular diligence became the important feature of the Convention. In addition, it requires the introduction of articles on extradition of guilty in committed crime in the legal acts of the member countries, as well as confiscation of criminals' property.

According to prominent lawyers, Vienna Convention has played an important role in the development of international law and became a major contribution to the organization of international cooperation in the fight against drug trafficking and money laundering.

The Council of Europe plays the leading role in the strengthening of international cooperation on issues of criminal law in Europe.

Two multilateral conventions were recognized the highest achievements of the Council in the creating of international law instruments by foundation of European cooperation in the fight against crime. This is the European Convention on Extradition in 1957, and the European Convention on Mutual Assistance in Criminal Matters in 1959. In 1980, the recommendations, called "Measures to prevent the transfer and concealment of funds, which come from criminal offenses" were accepted. In subsequent years, the work on the preparation of legislation on confiscation of illegal income, coming from drug trafficking, was launched.

Another impetus for the acceleration of activity in this direction was the initiative of the Ministers of Justice, entrusted to the Council of Europe the European Committee on Crime Problems in 1986 to develop international norms and standards to ensure effective cooperation between the bodies of justice (and if necessary the police) on stay, extracting and confiscation of illegal income, property, equipment and items, derived from the illegal drug trade.

Another important document, which is the basis of international cooperation in dealing with organized supranational crime, is "The Convention on Laundering, Search, Seizure and Confiscation of the Proceeds from Crime", was signed in Strasbourg on 18 November 1990. The document was prepared by the Committee of Experts of the Council Europe. Experts in law consider this document as the most comprehensive list of regulations and rules that covers all stages of the legal procedure – from the beginning of the investigation to sentencing and confiscation of "dirty" money.

The aim of the Convention is deprivation of international criminal groups from their income and the creation of the current system of international cooperation to achieve this goal. Its content largely complements and develops the provisions laid down in the Vienna Convention, but nevertheless includes important, fundamentally different from the Convention, positions. The Council of Europe does not just require penalization, that is the announcement of criminal money laundering, but also requires that the act was considered as a crime, regardless of whether it is associated with drug trafficking, or such a link is not established. This term establishes criminal penalties for the laundering of proceeds, received and accumulated in the implementation of any grave crime. All states that have signed and ratified the Convention are required to fulfill this requirement.

The Council of Europe pays much attention to the organization of the search of criminal proceeds, their identification, and to activities that lead to the confiscation of criminal proceeds in any form. The measures that provide access to banking, financial or commercial documents are listed in the fourth article. There the procedure for monitoring bank accounts, organization of phone calls audition, entry into computer networks and other actions necessary to track procedures laundering “dirty” incomes within the same country and abroad are explained. It should be noted that more than one hundred countries around the world ratified the agreement, is the most comprehensive document that serves as the fight against money laundering for today. As well as the Vienna Convention, it played an important role in the perfection of the criminal law of many countries, focusing on the revitalization of its efforts to fight against money laundering.

14.3.2. What the practical measures in dealing with money laundering are implemented on the international scale?

The creation of legal framework through the preparation and the conclusion of international agreements is undoubtedly an important step in fighting with international organized crime. But even more important and difficult task is the using of practical measures to implement these agreements, and such measures bring significant concrete results. For this purpose it was adopted the World Program of Action in 1990, approved by the UN General Assembly during a special session devoted to international cooperation in dealing with illegal production, supply, demand and distribution of narcotic drugs and psychotropic substances.

The members of the United Nations also paid attention to the need for measures, aimed at undermining of the economic potential of criminal organizations. The Session of the UN noted that “huge financial gains which come from illegal trade in narcotic drugs and related criminal activity, open up the possibility to supranational criminal groups to penetrate into government agencies, to deprave and corrupt officials, to spoil the principles of law, and to threaten the sovereignty of states” [18, p. 336].

The specialized organization, which is called The United Nations Drug Control Program (UNDCP), established under the auspices of the UN, headquartered in Vienna, plays the role of the main coordinator of the economic activity against international crime. It has developed its own plan of action in fighting against money laundering and confiscation of the proceeds, received from drug trafficking. The UNDCP provides specialized support to everyone, who is drawn to it, by its own power or, if it needs, with the assistance of other organizations. There are different forms of assistance, for example, training – often thematically adapted to local conditions – for politicians, law enforcement officials, who are engaged in searching of members of drug trafficking. Training courses for operational staff, whose members – people who are responsible for the disclosure of economic crimes, are complementing to these programs.

The provision of legal assistance to those states that after the ratification of the Vienna Convention must undertake the difficult and painstaking job of adapting their legal systems to its requirements should be highlighted from various activities of the UNDCP. The greatest difficulties in this field are experienced by developing countries. Therefore, one of the most important initiatives of the UNDCP in this direction was the development of “model legislation” in 1993, adapted to the needs of countries, whose legal systems are based on the principle of Roman law. Strong emphasis is also made on the prevention of the use of financial institutions to launder money that comes from drug trafficking (and also the use of some other institutions, such as the casino).

The important role is played by the Department of crime prevention and criminal justice of Vienna Office of the United Nations in solving the problem of money laundering. It is engaged in various types of research that have attracted the attention of foreign governments to the enormous scale of the phenomenon of money laundering, received from all kinds of crimes except drug trafficking, as well as to the scale of the threat that comes from the growth of organized crime. The department is also engaged in the propaganda and the advertising of “model agreement” of the UN, such as mutual legal issues on cooperation in criminal matters and extradition of persons suspected in crime.

The Model Law on money laundering, derived from drug trafficking is very important document of international law which was developed by the experts of the United Nations in 1993 in addition to the “model agreement”. This law is based on the newest legislation of different countries, containing recommendations on the prevention of money laundering, derived from trade and drug trafficking, the identification of such acts and the establishment of sanctions for their perpetration.

Besides the United Nations and its affiliated organizations, special services actively participate in the fight against transnational organized crime and money laundering; these services complement and support the activities of the investigative authorities and justice throughout the world. First of all, it is the International Criminal Police Organization (Interpol) and the World Customs Organization.

14.3.3. What are the functions and activity of the FATF?

The leading international organization that struggles against money laundering and other property achieved by criminal means, is the Financial Action Task Force on Money Laundering – the FATF – an influential intergovernmental body established in 1989. The purpose of the FATF is the development and implementation of standards and measures at the international level to fight against money laundering. FATF monitors the implementation process of activities exploring ways and technique of money laundering, develops preventive and protective measures and helps to the implementation of global standards to struggle with money laundering. The FATF collaborates with other international organizations whose activities are also aimed at struggling against “dirty” money laundering in carrying out these functions.

The FATF has three main directions. The first direction is the extension of the adopted recommendations on all continents and regions of the world. The second direction is the verification of how the measures to struggle against money laundering, based on the forty recommendations of the Financial Action Task Force, which are the guide to action, are carried out in the member-states and how they are implemented in other states. The third direction is the tracking of global methods and schemes of the laundering of criminal capital and developing of countermeasures.

40 Recommendations were prepared by the FATF in 1990. The group was guided by the spirit and letter of the Vienna Convention and the Declaration of control principles over the banks by the Basel Committee of Banking Supervision, during their training. The authors identified three types of priority measures named as a basis for the concept of Recommendations. Specific proposals will be based on these Recommendations. The Recommendations (by the desire of the authors) were directed on elimination of the major obstacles that stand in the way of international cooperation and enhance their effectiveness. Three types of measures acquired the form of the following Recommendations that are distinguished in chapter A:

1. Each member state must, without long delay, take steps to ratification for the full implementation of resolutions of the Vienna Convention, and to begin the process of ratification.

2. The law on data protection, which operates in financial institutions, should be changed in the way to not interfere the state to adopt these recommendations.

3. An effective program of struggling against money laundering procedures should take into account the strengthening of multilateral cooperation and increase the efficiency of mutual legal assistance in the search, investigation and judicial process in extradition by the cases involving money laundering and in all cases when it is possible.

In the B chapter, Recommendations press the state to expand the definition of the crime of “money laundering” in a way that it covers all other crimes related to drugs; an alternative solution is the introduction of criminal penalties for money laundering, achieved, as a result of all serious crimes and (or) all the crimes, which bring large income. There is the possibility of the extending of criminal liability for money laundering on legal entities in the Recommendations; as well there is no analogue in the text of the Vienna Convention.

The third chapter of Recommendations (C) defines the strategy for attracting of financial system to eradicating of the phenomenon of money laundering without the violating of rules and conditions, which are necessary for effective financial transactions.

Another important area of the FATF is the monitoring of the typology of new methods of money laundering, which are used in the criminal underworld, and the verification of means to counter this phenomenon. Annual reviews for the preparation of which world-known experts are involved, as well as the investigation in cases of money laundering, witness more refined methods of increasing the professionalism of international criminal groups. Important tools of criminal activity are always remained in the view of FATF experts: dummy corporations, electronic transfers, non-bank financial institutions and other enterprises, such as shops and export-import firms [43, p. 352].

14.3.4. What problems of struggle against organized crime and money laundering in offshore centers exist?

Many governments pay great attention to the problems of struggle against organized crime and "dirty" money laundering exactly in offshore centers. Companies which are placed there, banks, funds, trusts have become the financial support of international terrorism, drug trafficking, and of almost all forms of organized crime.

Two regions raise particular anxiety: these are the states and territories of the Caribbean region and the states of the “golden triangle” – Burma, Thailand, Pakistan and Afghanistan.

States of this region are poor in natural resources, with an underdeveloped economy and poorly educated or even illiterate population. Since the 1960s they have begun to create offshore centers and tax havens on their territory that have become very attractive to financial and banking institutions.

The turbulent activities of financial institutions in conditions of low state and legal control have drawn the attention of tax authorities and law enforcement agencies of neighboring countries, and especially of the United States. The Internal Revenue Service U.S. Treasury did not stop even before the unilateral operative-investigative measures on drug traffickers and money “launderers” in these regions under the conditions, when the relevant international agreements, applicable to these regions were not signed and not ratified. But these measures brought temporary, limited results and were accompanied by international scandals and even by the deterioration of relations among the countries.

Countries use the strategy of the concluding of bilateral and multilateral agreements on specific issues, hold conferences to develop common approaches to the use of effective methods of struggling against money laundering, introduce in practice 40 Recommendations of FATF, use self-assessment procedure and mutual control of countries due to the degree of recommendations fulfillment to prevent the laundering of “dirty” money. In addition, there are created regional and inter-regional international organizations that decide whether to struggle against laundering.

The Organization of American States (OAS) developed the program in 1986 that was called the Inter-American Program of Action against the illicit use and production of narcotic drugs and psychotropic substances (CICAD). This program has provided the preparation of the new legal acts that expand the powers of law enforcement and fiscal authorities in establishing of the actual sources of funding. However, the resolution was confirmed to adopt the legislation about criminalizing of laundering of money that are accumulated as a result of crimes, related to drugs and about the confiscation of funds and property, which come from the illegal drug trade or are used for this procedure, regardless of such operations placement. In 1990, the OAS experts have developed a package of instructions, called “The sample orders, relating to crimes of money laundering, which are connected with drug trafficking and similar crimes”. In 1992, they were approved at the General Meeting of the OAS. “Sample orders” covers all the important elements of the modern strategy to struggle against money laundering. The preventive means of recognition are also provided, which are spread in the private sector. Authors of the orders have used not only banks for counteraction of this evil, but also a number of other financial institutions. There are brokers, who trade securities, the owners of currency exchange, as well as people, who are engaged in other kind of economic activity that is the subject of state-owned banks' or other financial institutions' control. These orders may be extended to other types of economic activity, where the operations with the cash in amount that exceeds the limit are provided.

Interregional international organization British Commonwealth of Nations made the significant contribution to the fight against the laundering of "dirty" money.

Over the years it has made great efforts to strengthen international cooperation and to improvement of criminal law. Agreements, which are related to the extradition, are the evidence of positive organizations' influence. Such agreements have been concluded between most of Commonwealth countries. The document of the Commonwealth "The Procedures of mutual assistance in criminal matters" is very important to solve the problem of money laundering, because it influenced the formation of the current mechanism of cooperation between the countries. Commonwealth succeeded of introduction of articles and amendments to local law that guarantee the implementation of measures aimed at the identification, exposure and confiscation of income, derived from all types of crimes.

The following international organizations enhance their activity in the fight against international crime in offshore centers:

- The Asia-Pacific Group on money laundering (APG), which has become an influential member of Interpol, the FATF and the UN today;
- The Caribbean Financial Action Task Force against Money Laundering (CFATF), which is not only contributed to the introduction of legislation in the Caribbean region of 40 FATF Recommendations, but also developed its 19 Recommendations on struggling against money laundering;
- The Expert Committee, which evaluates measures to struggle against money laundering (PC-R-EV Committee);
- The Offshore Group of Banking Supervisors (OGBS), which carries out, together with FATF, the evaluation and monitoring of the effectiveness of the approved "anti-laundering" laws in the member-countries of the OGBS. The main difficulty of group lies in the fact that only about half of the offshore banking centers are the members of the OGBS.

The international community, concerned about the pace of growth of organized crime, requires doing everything to stop the financial power of criminal syndicates, or at least significantly undermine it. The realization strategy of this goal involves three elements. The first one is a traditional, aimed at the improving of the efficiency of domestic criminal law that can guarantee compliance with the principle of "inevitability of punishment." The second element is the strengthening of measures, which deprive the offenders of results of their criminal activities. In addition to the purely criminal punishment this element of the strategy emphasizes the need for criminalization of the phenomenon of money laundering as well as creation of the basis for the search and confiscation of income received by crime.

These measures, according to the authors, have preventive-offensive nature. The third crucial element of the strategy comes from the belief that the efforts that begin in one country, for all their importance to overcome the local crime, are ineffectual in the dealing with refined international activities of “dirty” money “launderers”, based on the powerful support of “rear subdivisions”, which include highly skilled professionals and corrupt government officials of different countries in their ranks. Effective tools and mechanisms of international cooperation are needed to struggle against this evil.

PART 6. INTERNATIONAL FINANCIAL MANAGEMENT

Chapter 15. The essence of international financial management

15.1 What are the concept and basic functions of international financial management?

Financial management deals with financial firms, i.e. with own and borrowed capital. It is associated with a set of solutions concerning formation and maintaining an optimal structure of financial assets of the company in the market that is managed, which are conducted with the goal to maximize the welfare of shareholder or income owners. Financial management includes the following sections: financial analysis and decision-making system, planning of the use of short- and long-term financial resources, the analysis of possible risk, the establishment and implementation of decisions, the control over the implementation of decisions.

The goal of financial management is to achieve the highest possible dividend on ordinary equity while maintaining of sustainable level of income security of the firm. Profit and risk are the main parts of the financial management. Their correlation determines the specific decisions of the financial manager of the firm at any particular time. In this regard, financial management performs the following types of financial activity: 1) the increasing of profits and 2) the ability to perform its external financial obligations to other firms and organizations. The financial manager must choose solutions that provide the increase in ëequity price based on such factors as the long-term sustainability of dividends, the turnover of firms' capital, the protection against the risk etc.

An important task of the financial manager is also the development of financial strategies of the company, i.e. the concept of using financial resources, which are involved in order to achieve consistently high dividends or sustained growth of the equities on the stock exchanges; how and under which conditions the resources will be involved; how the payment for loans will be provided, how to build tax policy.

International Financial Management (IFM) is the system of economic decisions-making that occurs in case of the realization of the tasks of financial management in the internationalization of business activities of firms, or TNC.

International Financial Management, in addition to general financial management tasks, solves a number of specific objectives:

• the analysis of the balance of payments of a country;

• the planning of financial transactions from the perspective of international payments in different currencies;

• financing the export activity;

• international capital budgeting, the motivation of direct and portfolio investment;

• transactions in the eurocurrency, the eurocredit market and the euroequities market.

Implementing the company's tasks is determined by the choice of the geography of the international market. There are the following characteristics of the market:

• the elasticity, enough credit instruments and financial institutions operate in the market, which respond quickly to changes in interest rates and lending terms;

• the accumulation of free financial resources;

• the stability of financial levers and instruments, interest rates are unstable to external economic processes;

• low cost for operations in the market, there is little difference between the interest rate on the loan and the interest on deposits;

• the easy prediction of conditions of funds allocation on this market and of credit terms;

• relatively easy access to the financial resources of international bonds market.

15.2. What are the specifics of the external environment of financial decision-making?

The effectiveness of financial management decisions of international firm depends on whether it has knowledge of a particular situation, i.e. the circumstances of internal and external environment of its activity. Without knowledge of the specific set of internal and external factors the managers can't choose the most effective methods and techniques for managing the organization at a certain time and in a particular place. The management theory argues that there is no single "best" way to manage a company, because the most effective method of control in a particular situation is the method that corresponds to the given situation in a best way, to the given set of factors of internal and external environment. "The law of the situation" also declares that particular situation often determines which traits and skills are required in international business management. The knowledge of the external environment, the understanding of the forces in the global surroundings are important for international business, especially for TNCs.

This environment is a complex contradictory unity of national space, with its system of economic and social demands, and the multitude of the other national economic spaces with their special requirements and business conditions.

Duality is a specific feature of the external environment of international business and it is the main source of problems for IFM. As the production capacity of TNCs spread out across different countries, their external environment is characterized by high complexity, mobility and uncertainty[10].

[10] The complexity of the environment is a number of factors to which the organization is obliged to respond, and the variability of each factor. The mobility of the environment is the rate at which changes occur in an environment of an organization. The uncertainty of the environment is a function of the amount of information available to the organization regarding the specific factor, and the function of self-authenticity of this information. Getting information in a foreign language enhances the uncertainty.

On the one hand, the activities of TNCs regulate international production costs, the world prices, exchange rates, interest rates and stock market indices movements in global financial markets; on the other hand, IFM has to examine the specificity of each partner country carefully and thoroughly and coordinate their decisions and actions with such features of the international environment as:

- the fragmentariness and diversity of markets;
- the multiplicity of currencies, which are characterized by the stability and the real value;
- the differences in the levels of interest and inflation rates;
- the differences in pricing and taxation;
- the differences in wages and accounting;
- the differences in rules and regulations of doing business;
- the high probability of negative impact of government intervention on decisions and business conducting;
- the variety of financial climates, ranked from very conservative to the one with high inflation rates.

Obviously, companies that operate in the global economic environment must analyze the state of the economy and development trends of the countries in which they do or intend to do business: the GDP, balance of payments, transportation costs, exchange rate, inflation, bank interest rates, characteristics of the competitive struggle etc. Firms must reckon with the laws and regulations on taxation, patents, labor relations, standards for finished products, pricing, procedures for providing information to government institutions and others. For example, pricing is often regulated by means of Anti-Dumping Code of GATT / WTO. This code allows countries to impose bottom limits on the prices of products that enter their markets outside at lower prices than those prevailing on the domestic market.

The political factors should be evaluated and the forecasts should be adjusted as the new information comes, before entering the market of a particular country. Such factor as culture is also very important in international management– the major values in the society, beliefs, customs and prevailing attitudes, which affect the style of everyday life. International management often is faced with a much greater degree of risk and uncertainty on the global market, because managers don't know at a good level the culture, political and economic situation, the institutional structure of the distribution network, potential competitors and their actions, guarantees and legitimacy of intermediaries in a given country. Practically it is found and fixed in theory that the biggest mistake is made by those leaders, who believe in the incorrect prerequisite of the similarity of financial practices at "home" and abroad.

Financial manager of TNC must adapt to the external environment and remember about the close interrelation of the functions of financial activities and accounting. Accounting provides the financial director of the corporation with adequate and timely information about the nature and the value of company assets.

At the same time accounting must consider both the specifics of the TNCs environment and local reporting requirements and generally accepted principles and accounting rules in the country of origin of the company while preparation of summary reports.

Accounting standards differ greatly across countries. The main reasons of the differences are:

1) the differences in the understanding of the objectives, for example, between states and private organizations.

2) the discrepancy of viewpoints concerning the tasks of the financial statements in regard to conformity with the law and provision of the legal information.

3) the differences in the position and prestige of the profession of an accountant.

4) the impact of tax legislation.

5) the legal norms.

6) the misalignment of the main economic indicators.

7) the primacy of the state or the private sector in the development of accounting standards.

8) the reluctance to introduce the worldwide standards.

There are three main groups of countries, which follow similar approaches to the construction of the accounting systems [20, p. 217]:

- the Anglo-American model of accounting (UK, the USA, Netherlands, Canada, Australia, etc.). This model operates in the conditions of a developed financial market. Accounting is focused on the needs of investors and creditors. The principles and rules of accounting and financial reporting are regulated by the national standards, which are developed by the independent professional bodies of accountants, so they are not established by the national legislation. There are many variations of accounting within the generally accepted professional accounting methodology in countries with this type of accounting;
- the continental accounting model (Germany, Austria, France, Switzerland, Italy, etc.), which is focused on the state interests of taxation and the macroeconomic resource planning. It has a legal basis, i.e. accounting standards are approved by law and are obligatory for execution. There are: a unified chart of accounts and the methodology of the financial statements. Thus, the state methodology is typical for this model of accounting;
- the South-American model (Brazil, Argentina, Chile, and others.). It is oriented at the tax interests of the state, and therefore accounting is legally unified. The peculiarity of accounting standards is the disclosure of accounting methods in case of inflation.

It should be noted that this classification of countries, according to the accounting models, is rather relative. Countries that have a different model of accounting can influence the regulation of accounting in the other country; this is a result of the interpenetration of the capitals of these two countries in each other’s economy.

The EU has unified the accounting in order to remove barriers and promote the investment. International Committee for Standardization has developed accounting standards (not obligatory), which are largely based on similar U.S. standards. US Financial Accounting Standard Board (FASB) indicates that financial statements should contain information that is useful for:

- making investment and credit decisions;
- assessing the prospects for cash flow;
- the estimation of resources of enterprise, resources needs and changes.

We see how diverse and complex the key factors that directly or indirectly affect international business are. If a financial manager doesn't take into account at least one of the factors, not to mention the interaction of factors of internal and external environment, it can more or less significantly affect the efficiency of financial activity of the company. Therefore, the system-situational approach requires from managers the necessary adaptive management of finances.

The adaptation process is based on the control, which allows you to fix the changes that have occurred, to identify the problems and correct the activities of the company before these problems escalate into a crisis. The task of the monitoring is to obtain the information about changes in the conjuncture, which occur on all financial markets, and to convey this information to those people, who are entitled to carry out the necessary corrective actions.

The global financial sphere has been changing rapidly during the last decades. The Eurocurrency market, the international credit market, the international securities market are also growing quickly. The role of TNCs has strengthened, their activity has become more diversified, the amount of joint ventures has increased. The globalization of business and finance became an important factor of the external environment, which is based on computerization and telecommunications; it allowed to speed up international operations and to increase their amount. As a result, the flows of information and capital became faster; savings were attracted from the deposit pools all over the world and were sent to borrowers in terms of the highest income and lowest cost. Investment banks were able to conclude agreements in bonds and foreign currency through SWIFT. The financial engineering has begun to develop, that is the creative application of financial innovations (technology, tools), which can help to solve financial problems and use financial opportunities.

International financial integration has brought benefits to borrowers and lenders and increased foreign exchange, interest and political risk. An international debt crisis and financial crises that periodically repeat have become a new phenomenon.

The transition of industrialized countries from labor-intensive to knowledge-intensive industries, the success of the newly industrialized countries (NICs), progress towards a market economy of the CIS and Eastern Europe have led to the growth and changes in international capital flows; the new opportunities have arisen and new problems emerged to subjects of international business.

Governments, corporations and international financial institutions had to meet new challenges. The growing flows of global capital have intensified financial competition among countries and forced governments to provide a favorable legal, economic and social environment in which both international and domestic business could fully operate and develop.

15.3. What are the main specific operations of the financial management of transnational corporations?

The financial Management of TNCs performs common to all firms functions (although they have their own characteristics within TNCs) and also the functions that are common only for international management, these functions were caused by the functioning of restrictions on international trade and investment, political risk, special conditions of taxation and accounting in a heterogeneous environment, in terms of currency risk.

If you consider a company as an accumulation of capital funds, received from various sources (from investing in the company's capital, loans, incomes received as a result of company's activity) and aimed at different targets (acquisition of fixed assets, creation of commodity stocks, purchasing securities, cash, etc.), the management of such movement of capital is a function of financial management.

Here are the main specific operations of financial management of TNCs:

- foreign investment that includes:
  - the financial planning as a process of evaluating and selecting long-term investments, foreign direct investments;
  - the management of investment risk;
  - the management of portfolio investments and determination of portfolio diversification by countries:
- the budgeting of international investments, defining their payback;
- the selection of sources and the optimal level of funding;
- the determination of the loan currency and currency of loan repayments;
- the financing of international trade;
- the determination of the cost of capital and return on invested capital;
- the monetary transactions between subsidiaries in different countries;
- the sale and the purchase of foreign currency;
- the management of credit and financial risks;
- the identifying the ways of reducing the financial risk of TNCs;
- taxation issues;
- constant contact with the foreign exchange market , Eurocurrency market, Eurobonds market, and so on;
- the determination of dividend policy.

The role of TNCs is increasing on the international investment market. They conduct the vast number of transactions. Foreign direct investments are generally implemented through the creation of enterprises or the acquisition of existing local companies that provide production growth.

15.4 What are the features of investment activity?

The national governments and international organizations pursue the policy of liberalization of international investment space and elaborate the unified norms of state regulation of investment processes to facilitate international migration of capital. These norms are contained in the bilateral and multilateral international and regional agreements on the protection and promotion of investments, which operate in the framework of international economic organizations, including the WTO. The standards of state regulation of FDI include:

- provision of state guarantees by the home country and the host country. Multilateral Investment Guarantee Agency, established under the auspices of the World Bank, offers guarantees at a multilateral level. Investment guarantees are included in *Lomé Convention,* which was signed between the EU and many developing countries. "Agreement on Trade-Related Investment Measures (TRIMs)", signed by WTO members , contains a direct prohibition to use measures of the state industrial policy in relation to foreign investors;
- settlement of investment disputes. Thus, member countries of OECD have adopted the principle of international arbitration as dispute resolution (which is based on the national legislation of the country) often does not satisfy both home countries and the host countries as home base and host countries;
- elimination of double taxation;
- insurance of foreign investments;
- diplomatic and administrative support. For example, government negotiations with international partners on the creation of the favorable conditions for national investors abroad, or invitation of representatives of international business to be a part of international delegations in order to discuss economic issues.

In nowadays conditions of international production growth the major direction of TNC's investment policy is FDI, made through the agreements on mergers and acquisitions ("M&A"). The number of cross-border mergers and acquisitions is growing (average annual growth is 28,2%). The total value of M&A transactions exceeds 2 trillion euro; its share in the total amount of FDI is equal to 82%.

Cross-border "M & A" is the process of integration (based on shareholding) of companies around the world.

Cross-border merger is a consolidation of companies' assets, when the new company is created and the previous cease to exist.

When the cross-border acquisition takes place, a foreign company buys a national one and exercise control over its assets, i.e. the local company becomes the subsidiary of the foreign one. Lately the number of "aggressive" ("enemy") acquisitions is growing and consequently the number of "friendly" ones is decreasing. During "aggressive" acquisitions TNCs at first buy up the shares of foreign company on the stock market and then interact with the rest of shareholders on the General meeting of shareholders. The result of "aggressive" acquisition is a complete change of executives of absorbed company. In the case of "friendly" acquisition heads of TNCs at first reach an agreement on purchase and sale of equities. Then the exchange of equities between two companies takes place. Alternatively, the "friendly" acquisition is an acquisition in the form of transfer of a controlling block of TNC in trust.

Thus, the difference between mergers and acquisitions is technical and deals with the financial side of the agreement.

The prerequisites for the process of “M & A” are the globalization of information and economic exchange, technological changes, the liberalization of cross-border capital movements and trade regimes, the activities of powerful financial intermediaries. Financial intermediaries are, as a rule, large investment banks that are expanding their presence in many countries. They provide a wide range of services to their TNC – clients: from negotiations to "M & A". The number of consulting firms that operate in the world in the sphere of "M & A" and provide services for buying and selling companies is constantly growing. Top places are occupied by American investment banks «Goldman Sachs», «Morgan Stanley», a consulting company «Merrill Lynch». Several intermediaries may participate in the consulting agreement.

For example, when U.S. firm «Comcast» was buying the cable company «AT & T», the cost of which amounted to 72 billion dollars, it was the largest in the world "M & A" deal, «Goldman Sachs», «CSFB», «Deutsche Bank», «JP Morgan», «Morgan Stanly» and «Quadrangle Group» were participating and giving advices [40].

The large number of cross-border «M & A» transactions is done in industrialized countries (the USA, UK, France, Japan). However, in recent years a number of such transactions have been increasing in developing countries, it is connected with the privatization programs.

Worldwide, about 80% of FDI, which are connected with the growth of international production, is ensured through “M & A” agreements.

Places of TNCs in the list of the most prestigious companies are closely correlated with their participation in cross-border "M & A". This is evidenced by their share in the total value of such transactions over the last 15 years - about 20%. The growth of cross-border "M & A" transactions makes large TNCs even larger. Thus, the “British Petroleum” has spent 94 billion dollars on 98 cross-border "M & A" during this period, and “General Electric” has signed 228 agreements of this type. [41]

TNCs are entering the market of this or that country through the "M & A" for various reasons: the level of its economic development, investment and tax legislation, availability of a large number of competitive private enterprises, financial crisis of local enterprises, large-scale privatization in the country and so on. American TNCs due to the liberal laws carry most "M & A" operations on the U.S. market. Western European companies are looking for partners abroad as a result of national legal constraints. For example, for German TNCs the most attractive in terms of mergers and acquisitions are the USA (they participate in about 14% of the total "M & A"), Switzerland, the United Kingdom, the share of each of which accounts for 10%, Spain, and Italy (their share in the total "M & A"

- 9%). In Western Europe, companies are often bought by UK, USA TNCs [60, p. 72]. Factors of cross-border "M & A" agreements also include the desire to get rid of non-core, minor enterprises, to strengthen the position of subsidiaries, to acquire key or final link in the processing chain. The company «Norsk Hydro», which is one of the leading integrated producers on the world market of aluminum and which sought to gain control over major parts of each production stage (from alumina to rolled metal), acquired the assets of the Norwegian company «VAW», which was specialized in the production of bar iron. The acquisition of «VAW» company will have a significant impact on the industry. Flow of metal on the European market of aluminum will decrease, agreements with «VAW» will be considered internal and the volume of supply to the "free" market will decrease continuously. So, actually independent sellers of rolled metal will be gone because their opportunities in the processing chain will decline greatly. Non-integrated producers will become even more vulnerable [34].

Agreements on mergers and acquisitions can be concluded in the various sectors of the economy, but the priority industries change over time. Thus, from the 80s to the second half of the 90 years cross-border "M & A" operations of TNCs covered mainly manufacturing firms. Now the process of consolidation of business entities is going on in the financial, food and tobacco sectors, the services sector, telecommunications, information technology, consumer goods.

Cross-border mergers and acquisitions may be a result of bankruptcy (selling to foreign investor of inefficient private company), a result of privatization (the transfer of control over the former state company to foreign company on terms of ensuring its efficient functioning), as well as with the purpose of protection (to obtain competitive advantage) or growth (association of strong companies that are seeking to increase their effectiveness).

Consolidation of companies affects their activities ambiguously. On the one hand, for large TNCs it is easier to reduce production costs and increase investment in advertising, innovation or to continue acquisitions of other firms. They get economies of scale, accelerate the innovation process, eliminate excess capacity, provide their shareholders with higher dividends, and have access to specific corporate assets. On the other hand, for large companies it is more difficult to act quickly and to focus on the market, this can lead to an increase in their costs. In addition, the process of "M & A" is very long. Its implementation can last several years. Sometimes it is better to choose strong brands than the size of the company. The focusing on a small number of brands can bring more noticeable results. An example may be “L` Oreal”, that has sold its pharmaceutical business and focused on manufacturing products for hair care and skin, or «Danone» that sells only water, biscuits and yoghurts, and it is a world leader in all three areas. TNCs don’t have to strive to the cross-border merger or acquisition all the time. "M & A" operations make sense only when they are strategically justified, ensure sustainable competitive advantages and profits that exceed the average level.

Thus we can conclude that in today's conditions TNCs, while choosing their investment strategy, prefer not to create new production facilities abroad, but to invest in already existing companies that produce highly competitive products and have their share in the domestic market.

The structure of the investment activities of TNCs has shifted towards the services sector over the last decade. According to the UNCTAD survey, the share of this sector accounts for more than 60 % of the total FDI in the world. Developed countries still receive the major part of exported FDI into services sector, although the distribution of such investments between them became more uniform.

As for imports, the distribution of the total volume of FDI in the services sector is more balanced, although the main part of them is still received by developed countries. The most rapid growth is in Western Europe and the United States, reflecting the fact that the purpose of the main part of FDI in the services sector is to secure market position.

The structure of FDI in the services sector is also changing. Until recently, these investments were directed mainly in the trade and finance sectors. However, there is an increase of FDI in such industries as electricity, water, telecommunications and entrepreneurial services (including corporate services provided through information technology).

In addition, most services can’t be the subject of foreign trade: they must be produced at the place of their consumption and at the moment they are consumed. Regarding this, the main way to enter the foreign market with services is FDI. Moreover, many countries have liberalized their regimes, governing FDI in the services sector, which increased inflow of investment, especially in sectors that were previously closed to multinational corporations.

Despite the growth and benefits of FDI in the services sector, the degree of transnationalization in this sector is lower than in the manufacturing sector (for example, in the USA - 20% vs. 40%).

One of the most important factors that determine the contribution of FDI in the services sector in the development is the technology transfer. TNCs operating in the service sector can transfer material technologies (plants, equipment, and industrial processes) and "soft" technologies (knowledge, information, experience, organization, management, marketing skills). This kind of technology is embodied in skills, which in many cases is reflected in the salary. Data on wages of employees of foreign affiliates of U.S. TNCs in developing countries that work in the service sector indicate that the qualification of such workers is higher in comparison with workers of manufacturing companies.

UNCTAD reports on world investment are focused on the internationalization of research and development (R & D) undertaken by TNCs. This phenomenon is not new. When companies expand their international activity, they should adapt technologies to local needs and successfully sell their products in the markets of the host countries. In many cases, internationalization of research and development is needed for this. At the same time, traditionally research and development was made by TNCs mainly in home countries. Now there are some new features in the process of internationalization. In particular, the first time TNCs are placing the first time R & D (that is out of the frames of the adaptation to the requirements of local markets) beyond the developed countries. Thus, in some developing countries, South-East Europe and CIS the TNCs increasingly focus all their R & D on global markets, integrating them in the key areas of their innovation activities.

Today it is clear that only a small number of developing countries and countries with economies in transition are involved in the process of internationalization of R&D. At the same time, the fact that some of them are now considered to be attractive to conducting sophisticated R & D means that countries can build capacity needed to connect to the global R & D systems of TNCs. From the point of view of the host countries R & D internationalization gives them the opportunity not only to transfer technologies created in other countries, but also for their development.

This may enable some host countries to strengthen their technological and innovation potential. At the same time, it can increase the lag of those who could not join the global innovation system.

The evidence of the growing internationalization of R&D is the increased role of foreign affiliates in the research and development conducted in many host countries.

The share of host developing countries in global R&D systems of TNCs is growing, albeit unevenly. Most of these R&D is carried out only in a few countries. The Asian developing countries are the most dynamic in this respect. For example, the share of Asian developing countries in the R&D costs of foreign affiliates owned by American TNCs has increased from 3% to 10%. This increase was particularly noticeable in China, Singapore, Hong Kong and Malaysia.

The need to adapt products and processes to the needs of key markets of host countries has always been an important motivation for TNCs to internationalize research and development. At the same time, the recent rapid growth of R & D carried out by TNCs in some developing countries has been caused by the desire to reduce costs and to use the growing human resources of these countries. This process can be considered as a logical next step in the globalization of TNC's industrial cooperation. It is similar to the international restructuring, which was implemented in the export-oriented and ICT-related sectors, through which TNCs significantly improved their competitiveness by using the competitive advantages of individual countries.

Chapter 16. The general directions of international financial management

16.1. Capital budgeting

16.1.1. What criteria for evaluating the economic efficiency of investment projects exist?

One of the most important directions of activity of international financial management is capital budgeting (capital budgeting) - the process of analyzing the efficiency of investment, which aims at evaluating and selecting the best options for long-term investment. Financial resources, which material basis is money, have value over time. The value of financial resources over time can be considered in two ways.

The first aspect is connected with the purchasing power of money, which may change over time because of devaluation, which is a result of inflation. Financial manager should consider this fact when he prepares the analysis and forecast of the financial resources flows.

The second aspect is connected with the turnover of money as capital and with receiving incomes from this turnover. When considering investment options investor will prefer the option which is more efficient when money makes new money faster.

The efficiency of investment projects can be estimated by using several criteria. The most common criterion is the net present value (NPV). NPV is the present value of cash flows minus the present value of cash outflows. In other words, NPV is the difference between the market value of the project and the cost of its implementation. NPV method is the method of cash flow discounting to determine the effectiveness of long-term investments (discounting - the method of reduction of the future value of money to their cost in the current period). If the taken into account cash flows exceed the value of investments, the NPV criterion indicates that the project is acceptable.

The formula for calculating NPV:

$$NPV = -I_0 + \sum_{i=1}^{n} \frac{C_i}{(1+K)^i} + \frac{T_n}{(1+K)^n}, \qquad (16.1)$$

where I_0 – the cost of initial investment;

C_i – the cash flows associated with the project after taxation in year i;

T_n – the residual value or the liquidity of investments in year n;

n – the estimated term of the project or the planning period;

K – the value of capital used for realization of the project.

In addition to NPV, the analysis of international cash investment can be done by using an internal rate of return (IRR) and payback period of investment (PPI).

The internal rate of return for the investment project is the value of the discount rate (r), where the present value of expected cash outflows is equal to the present value of expected cash inflows, i.e. the value of r by which NPV = 0.

IRR can be calculated using the following formula:

$$I_0 = \sum_{i=1}^{n} \frac{C_i}{(1+r)^i} + \frac{T_n}{(1+r)^n} \qquad (16.2)$$

The value of r can be estimated using the data of the formula 16.2.

The formula for calculating payback period of investment:

$$PPI = \frac{I_0}{C_i}, \qquad (16.3)$$

where for simplicity of calculations it was assumed that the annual cash flows (Ci), related to the project, have equal values. For example, if the initial investment is 1 million dollars, and annual cash flow is 300.000 dollars, the payback period of investment is equal to 3.3 years.

The most acceptable methods for investment decision-making are NPV and IRR.

Economic analysis of investment efficiency contains evaluation of incremental flow of that part of cash, which is directly connected with the project. There should be estimated such cash flows:

- initial investment (purchase of land, enterprise, and equipment), investment in operating capital (cash, circulating funds, etc.), licensing costs, organizational costs;
- operating cash flow: revenues from sales of goods and services received after project realization, costs for raw materials, labor and management;
- secondary cash flow: protective tariffs on goods, administrative costs, local and federal taxes on income;
- final cash flow: the value of assets in the end of project.

The estimation of cash flows for long-term investment projects -is a difficult task. It requires a lot of experience and talent. Capital budgeting for TNCs includes analysis of the company's capabilities to undertake FDI, the evaluation of their efficiency and risk. Foreign direct investment determines the transnational nature of corporations; it is the source of funds for overseas departments multinationals.

16.1.2. How the evaluation of the financial position of the company is carried out?

If the TNC plans to invest in a foreign company, then it should primarily assess the financial position of the company, i.e. investment attractiveness. It is not enough to consider certain parameters (e.g. only ROE coefficient), they should be generalized. The indicators are usually divided into 5 groups:

Group1. Development indicators of the company:

- dynamics of sales = sales growth in accounting period / sales in previous period x 100%;

- dynamics of profit = profit growth in accounting period / profit in previous period x 100%;

- dynamics of assets = growth of the total amount of assets in accounting period / total assets in previous period x 100%;

- dynamics of equity = increase in liabilities to shareholders in accounting period / previous liabilities to shareholders x 100%.

Group 2. Return indicators, which help to evaluate the efficiency of the company:

- return on investment in the company = profit after tax / investment * 100 %. This is an indicator of company's management efficiency;

- return on investment in ordinary equities = (profit after tax and dividends on preferred equities / liabilities to shareholders - par value of preferred equities) x 100%;

- the main rate of return = (profit after tax and interest on loans / total assets - intangible assets) x 100 %;

- return on total assets = (profit after tax and dividends on preferred equities / total assets - intangible assets) x 100%;

- return on tangible assets = profit after tax and dividends on preferred equities / tangible assets x 100%;

- gross return on sales = gross profit / sales x 100%.

Group 3. Liquidity indicators:

a) coefficients of current liquidity, which give the possibility to assess firm are performance in short-term liabilities and its solvency:

- current coefficient = current assets / current liabilities;

- coefficient of critical (instant) estimation = (cash + marketable securities + accounts receivable) / current liabilities;

- duration of accounts receivable = accounts receivable / (sales on credit: the number of days of the year);

- accounts receivable turnover = sales on credit during the year / accounts receivable,

- negotiability of inventories = sales / inventories,

- duration of inventories = inventories / average daily sales of goods,

- accounts payable negotiability = total supplier purchases / accounts payable,

b) long-term liquidity coefficients:

- the ratio of liabilities and obligations to shareholders = total liabilities / obligations to shareholders,

- the ratio of long-term liabilities to shareholders and long-term sources of financing of firm = long-term liabilities / (obligations to shareholders + long-term liabilities),

- the ratio of cash flow and the total liabilities to creditors= cash flow / total liabilities,

- the ratio of cash flow and long-term liabilities = cash flow / long-term liabilities; indicator reflects the firm's ability to pay its long-term credit liabilities, especially bonds,

- negotiability of fixed assets (the use of fixed capital) = sales / balance value of fixed assets,

- negotiability of total assets (the use of total capital) = sales / total assets.

Group 4. Indicators of stability:

- indicator of indebtedness to lenders = total liabilities / total assets x 100 %

- indicator of indebtedness to shareholders = total debt to shareholders / total assets x 100 %

- coverage of the interest on the bonds by revenues = profit before taxes and interest payments / interest payments on the bonds. The indicator reflects how operating profit of the company can reduce before it has to pay annual interest to bondholders,

- coefficient of coverage of payments on long-term liabilities = (Profit before tax and interest payments + annual payments of lease liabilities) / (interest payments on bonds + annual payments of lease liabilities),

- the ratio of securities with fixed and non-fixed income = total liabilities / liabilities to shareholders.

Group 5. The indicators of share capital:

- earnings per equity = amount of dividends / equity price on the market x 100%

- income per ordinary equity = profit after tax and dividends on preferred equities / number of ordinary equities;

- the ratio of price and profitability of ordinary equities = current market price of ordinary equities / latest indicator of profitability of ordinary equity;

- the ratio of the market and balance price of ordinary equities = market price of an equity / capital attributable to one ordinary equity.

Thus, TNCs operate in such a way as to maximize the market value of the share capital of the company, distributed among its owners. To achieve this, the direct investment should contribute to the achievement of large volumes of sales, to increase of a market share and profits. To solve these issues it is insufficient to calculate NPV, IRR, PPI. Financial manager should have the ability to control risk, associated with FDI: to predict risk and to compare the outcomes of the planned investment risk, associated with the implementation of FDI.

16.2. Securities portfolio management

16.2.1. What is the diversification of the securities portfolio?

Recently, TNCs have become more interested in international portfolio investments[11]. TNCs have increased the issue of securities, and securities of

[11] The distinction between direct and portfolio investment is the ownership of 10% of the shares. The possession of less than 10% of the shares is a portfolio investment.

foreign affiliates in a considerable number of national markets. This growth is driven by:

- the desire to increase the profit of foreign investment and to diversify risks;
- the growth of international Eurocurrency market;
- the growth of national money markets, equities and bonds have become an alternative to the money market.

The primary economic motivation of international investments is the diversification of the securities portfolio (the distribution of investments in different directions), which reduces the risk of investment. International investments in equities and bonds open the possibility of efficient diversification.

It is believed that the equities are risky if the rate of return on investment fluctuates greatly. Investing should be done in equities not of a single company, but in equities of different companies in order to limit the fluctuation of profitability. Losses in one type of shares can be offset by income from other equities. Portfolio of different equities provides an average rate of return per equity, which fluctuates less. Such reduction of risk by choosing the volume of investment in various assets is called the effect of securities portfolio.

The correlation[12] between equity returns determines the volume of risk reduction that can be expected as a result of the effect of the portfolio. Equities with a high degree of correlation have similar changes in profit rates. So in this case, losses in some equities can hardly be offset by unplanned income. If equities in the portfolio have the lowest possible degree of correlation with each other according to their profitability, the reduction of risk due to the portfolio effect will be high.

All internal markets and Eurobond markets in one currency show a high degree of correlation. For the markets of government and Eurodollar bonds correlation is 0.84, and the correlation between different currencies is mostly 0.5.

Since the correlation between the different securities markets is quite low and sometimes negative, long-term interest rates almost do not coordinate in time, foreign investment reveal significant opportunities to reduce the risk.

With the help of foreign equities and bonds the risk of portfolio securities can be reduced to the extent at which earnings of foreign equities is not correlated with earnings of equities and bonds in domestic country or in other countries.

Weaker correlation of profitability in the securities markets in different countries compared to the correlation in the domestic market can be explained by such factors as differences in the levels of dividends and income from capital in different countries, which, in turn, depend on the technological, competitive, economic and political factors. Different countries have different inflation rates, corporate income taxes, price controls, and the phase of the business cycle and so

[12] Correlation – the statistical indicator of the degree of dependence between two variables. Maximum positive correlation means that a certain percentage increase in one variable is accompanied by the same increase in the other one. Maximum negative correlation exists when an increase in one variable leads to a proportional decrease in the other.

on. By purchasing equities of companies of different countries, investors can hedge the risks from influence of these factors.

Investment policy, which helps to reduce volatility of the securities portfolio due to lack of complete correlation in their profitability, is called diversification. The simplest diversification strategy is a random set of many different securities.

Another strategy is to change the correlation of individual equities and then to choose the portfolio among those, which are maximally not correlated with each other. This method allows achieving a high level of diversification; however, it is difficult to implement it in practice.

Hedging of securities in foreign exchange forwards and futures markets helps to reduce the impact of unexpected fluctuations on the profit.

Hedging on forward and futures markets provides the lowest risk for a given level of hedging.

There are several factors that hinder international portfolio diversification. These factors are as follows:

- the segmentation of foreign equities and bonds markets, caused by legal barriers that limit investment abroad;
- the prohibition for foreigners to own national companies;
- imposition of a tax that balances the interest rates;
- the difference in organization of market, of market practices in securities trading and operations (cash transactions or forward transactions);
- the procedure for establishing equities prices (quotations or auctions);
- operational and information costs.

The problem of taxation is often a major obstacle to international diversification.

Large companies can pay the costs of overcoming obstacles to international portfolio diversification, but diversification costs often exceed the benefits for smaller corporations. In recent years, new types of securities, financial mechanisms have appeared, owing to it investors with small funds can benefit from international diversification. The main ones are depositary receipts, including American Depositary Receipts (see chapter 8), and international mutual funds.

International mutual funds sell parts of ownership in their existing portfolios of equities. Co-owner of the mutual fund receives income from all securities held by the fund in proportion to his contribution to the overall portfolio. Investors make periodic payments, required for the operation of the fund.

International mutual funds have the following characteristics:

- people, who give their money to investment intermediaries carry risks related to investments;
- fund manager brings together money from many people into a single pool of money and thus averages the risks to members of the collective investment scheme;
- the schemes of investment funds do not provide pre-agreed fixed payments;
- investor can choose any form of investment.

The main economic benefits of international mutual funds:

- *efficiency and information transparency.* Investment fund offers such income which cannot offer any existing financial institution. Additional income is obtained by reducing costs through economies of scale, because the larger are the packages of securities purchased or sold, the lower is the cost of transactions. Disclosure of information by funds raises the awareness of depositors and their experience that is necessary for investment. Investors are able to control the investment decisions of governors of the fund. The prices in the stock market arise as a result of trade of informed investors and prices themselves begin to reflect all the information about securities. The market becomes less risky and more reliable, that is "efficient market";
- *diversification.* Due to investment funds, investors have the opportunity to create a diversified portfolio of securities. This reduces the risk because the investor holds the variety of equities in different countries and industries. In addition, investors have the opportunity to enter new investment markets and to receive incomes from new sources;
- *professional management.* Professional managers of mutual funds constantly analyze which securities to buy and sell; they are active in trade in order to increase income, thus affecting market activity they contribute to the stabilization of the market. This distinguishes them from small investors, which are dangerous for the market, they are usually guided by rumors and unchecked information;
- *liquidity*. Equities issued by investment funds are freely traded on the market without any restrictions, investor gets back his money and income within several days, when he is leaving a fund;
- *convenience*. The fund participant has a permanent right to have a share in the income of the fund, regardless to the period during which he is a shareholder;
- *preferential taxation.* In some countries, funds are exempt from taxation, there are schemes of tax credits, tax deferrals, when the worker invests a share of his income in the fund, which until retirement is exempt from tax, etc.;
- *strict control and regulation of funds activity.* This is done by government regulatory bodies, organizations that are self-regulated, which put high demands on standards of work of the funds and carry out oversight function. Mutual funds are required to be licensed and be responsible for all their actions [15, p. 338].

16.2.2. What is the nature of active and passive international portfolio management?

International portfolio management can be based on passive and active approaches.

Passive management is based on the hypothesis of market efficiency. When the price of the securities is identified on the basis of all available information, and the market responds rationally on this information, management should focus on the market being structured on the basis of the index investments method. This means that the portfolio manager may invest the whole portfolio or its significant part in the market (stock) index or set of securities, which expected dynamics largely corresponds to the market index (Standard and Poor 500, Nikkei 225, Financial Times All Share Index, Dow Jones Index etc.).

Passive management is understood as an allocation of portfolio funds on the top 20-25 national stock markets in proportion to the weight of these markets in the world's market index. The only required information is about the share of world market capitalization in each component of the index.

Active management requires a large number of forecasts and analysis. It is essential to select the stock markets and to diversify them. Markets with the best features are given the highest weight in the portfolio. Then manager selects equities in specific industry sectors. This requires a significant amount of information forecasts.

16.3. What is current capital policy?

The current capital policy is an asset and liability management of international firms in the short term, that is, working capital management.

Working capital management includes the management of:

1) cash;
2) accounts receivable and accounts payable;
3) the stock of materials;
4) short-term borrowings.

16.3.1. How cash management is carried out?

The cycle of cash flows covers getting cash from sales and paying by cash for factors of production. Management of this flow is one of the most important aspects of the current capital policy. Finance manager of TNC must: 1) identify the corporate and local needs in cash; 2) ensure that the cash can guarantee the repayment of obligations in hard currency; 3) minimize the cash "surplus" and as quickly as possible profitably invest cash if the rate of negotiability of cash and market security are relatively low; 4) focus on accelerating cash withdrawal and slowing down its spending.

International financial management should make decisions on these issues both within systems of cash payments of individual countries, and between these countries. In this case, the control and regulation of international financial transactions must be conducted in conjunction with other issues of financial decision-making, first of all – with the investment policy.

Process of control and regulation of cash transactions can be controversial. For example, manager is required to offset the balance of the corresponding size in order to be sure that there is always enough cash in the cash register. In this case, the decision of the manager is heavily influenced by his ability or inability to adapt to risk. Being not ready to strategic risk entails keeping a large excess of cash or securities in different currencies in case of making payments. This is a conservative strategy. It provides assurance that, if necessary, money will be actually available. But this confidence is achieved due to the fact that the manager will save funds that could be invested profitably. This approach is expressed in the thesis “low risk, low negotiability”.

Another situation: energetic manager, who performs the control and regulation of money transactions, may have a very small cash balance in securities and invest more money in business. This is an energetic approach, aimed at profitable investment. But this approach can suffer from few risks. If the cash need grows, the manager will have to take out a loan with an unknown interest rate. Manager carries out the risks, connected with foreign exchange risk. This approach can be called "high risk, high negotiability".

The desire to speed up the cash inflows and slow down its outflows is especially dangerous for international firms because of the risk of exchange rate fluctuations and high inflation, which result in the devaluation of currencies. If there is a delay in receiving money from operations in countries with rapid currency depreciation, the cost of these funds in national currency falls sharply.

In other circumstances the practice of energetic manager for the control and regulation of the money transactions leads to good results.

The efficiency of the current capital policy of international and transnational firms also depends on two factors: the speed of the transfer of funds from a bank in one country to a bank in another country and the degree of centralization of money transactions. By the usual wire transfer the operation takes from one to two business days. *Society for Worldwide Interbank Financial Telecommunication* enables to do a transfer transaction within minutes.

The current capital policy of TNCs is usually centrally managed. The lack of centralization leads to excessive costs and risk. The common method of centralization of money transactions management, control and regulation is the use of accumulated accounts.

Let’s suppose that the firm operates in Chicago, London and Munich. In each region financial managers analyze their cash flow at a certain date. The analysis provides a forecast of cash turnover which is presented in Table 16.1 (million dollars):

Table 16.1

The forecast of cash turnover

Indicators	**Chicago**	**London**	**Munich**
Expected inflow	2,0	3,6	1,7
Expected outflow	2,3	3,4	1,8
Surplus or deficit	–0,3	+0,2	–0,1

In case of using the centralized system of current capital policy Munich and Chicago operations require total amount of loans - U.S. 400 000 dollars to cover the expected deficit, while the result of London operations will be an excess of 200 000 dollars.

In case of using the system of accumulated account the needed loan will amount to 200 000 dollars on a given day. Consequently, firstly, interest costs by the loan will be reduced, as the interest rates, at which the firm can borrow money are higher than the deposit rates, and secondly, because the parent company is usually better known on the credit markets, loans may be provided at preferential (subsidized) rates.

When the centralized system of control and regulation of money transactions is used, cash flow is subordinated to the interests of the corporation as a whole. TNCs operate as a system of sources of money resources of users of these cash and financial coordinators. The sources of money resources are the subsidiaries, which have limited investment requirements, but great volume of sales and cash inflows. Users of money resources are such affiliates that have significant investment requirements, but limited sales and cash flow. These are usually more "young" and fast-growing divisions. Financial coordinators optimize the investment of cash, assist the avoidance of foreign exchange losses and ensure the relationship with the banks and so on.

Many large TNCs conduct operations with the international cash flow through a single centralized depository. All branches and divisions of TNCs conduct transnational cash transactions only through such depository. They are located in large international financial centers, as well as in those where it is allowed to conduct foreign exchange operations, which have good communication and banking services, where taxation is made at the lowest rates, and so on.

The main advantage of the centralized depository is the possibility of multilateral international netting. Netting is a mutual compensation of liabilities and assets between enterprises of TNCs.

TNCs open clearing accounts in the central office. Branches with the negative net position transfer funds to a central clearing account, then clearing account manager transfers these funds to branches with the positive net position. Net position reflects the difference between the accounts of debtors and payments with suppliers and creditors. Clearing account manager monthly receives information on all transactions and calculates the net position of each branch. Then he organizes the final settlement process.

Let’s consider the example of the process of multilateral netting (Table 16.2, Fig. 16.1).

Table 16.2

Net positions of branches (in USD)

Countries	**Accounts of debtors**	**Accounts with suppliers and creditors**	**Net position**
France	250.000	350.000	(100.000)
Germany	250.000	100.000	150.000
Italy	150.000	300.000	(150.000)
Great Britain	300.000	200.000	100.000

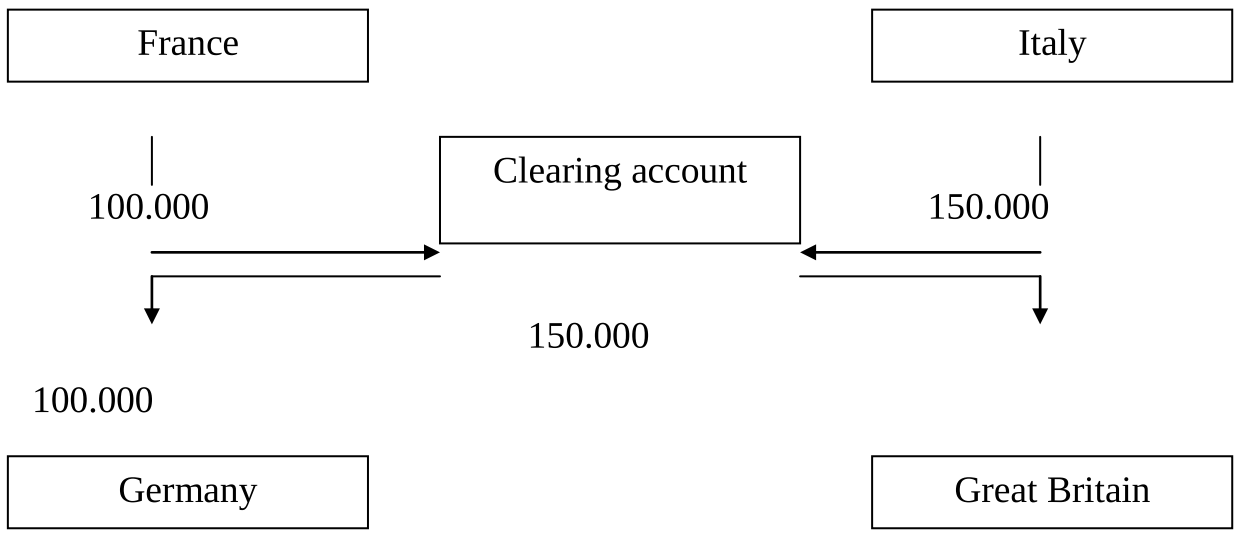

Figure 16.1. The process of centralized netting (in USD)

Multilateral netting helps firms to reduce the intensity of cash flows, to transfer it quickly and efficiently, to reduce the cost of currency conversion, fees and charges, paid for the transfer of cash, which is caused by the transfer of large amounts of money and by the decrease in the number of transactions.

Some large industrial countries, such as France and Italy, prohibit or restrict international netting in order to subsidize their national banking systems by increasing international cash flows that pass through them.

16.3.2. How the management of accounts receivable and accounts payable is carried out?

Management of accounts receivable and accounts payable[13] consist in finding an optimal balance between the cost of payable accounts as a financial transaction for the customer and the supplier's sales increase in case of using accounts receivable. The management of these accounts can be difficult because of the constant changes in exchange rates and the possibility of introduction of restrictions on remittances during conducting international business.

When financial agreements are small or casual, the "letter of credit" system is used in management of these accounts. However, this system is quite complicated and expensive. Receivable accounts are used as collateral for bank loans or they are sold in case of making large or recurrent deals, in order to avoid risk, it is the factoring. Factoring can be carried out with the right of recourse

[13] Accounts receivable is recording in the balance sheet of assets, which reflects the amount of money that the company's customers owe to the company. Accounts payable is recording in the balance sheet, which reflects the amount of money that the company owes to suppliers of goods and services.

(reimbursement of losses of financial organization that bought accounts by a company that had sold these accounts) or without it. Factoring of foreign accounts receivable is usually carried out without the right of recourse. The factoring of foreign accounts is riskier than the same operation with the national accounts, that's why financial institutions that are engaged in factoring want a higher discount (an interest rate) for these operations.

The countertrade is used in order to avoid the credit risk in international trade agreements. There are the forms of countertrade:

1) barter – sales and purchase agreement by which goods are directly exchanged for other goods;

2) compensation agreements by which an exporter of capital goods agrees to get the compensation in the form of goods, which will be produced by using the delivered capital goods;

3) counter purchase agreement, which provide compensatory repayment by products, which are not connected with the delivered capital goods;

4) replacement - an agreement by which the goods should be produced, using components, manufactured in the country of purchase.

16.3.3. What is the essence of stock management?

International financial management also faces difficulties in case of managing the inventory, caused by unforeseen fluctuations in exchange rates and prices, money remittances restrictions, quotas, tariffs and so on. Futures and options can be used to control the prices of raw materials and transportation. International companies often make advance purchases and stockpiling. During low demand firm can increase inventory of imported finished goods and raw materials and will use it when demand increases.

The impact of restrictions on international money remittances and the difference in the value of tax rates on corporate income in different countries can be avoided or mitigated by using transfer payments, i.e. payments within the corporation between its enterprises for the products that they supply each other.

Price changes in settlements between branches and subsidiaries of the same corporation, as well as increased rates of contributions of these subdivisions in the maintenance of the central office, are made to increase total corporate profits.

Finally, corporations in many industrialized countries use free trade areas for stockpiling in order to defer payment of import duties and taxes and to export this stockpiling when market conditions are more favorable.

16.4. Transnational financing

One of the objectives of TNC's financial management is to withdraw funds for financing foreign branches.

Depending on the goal financing of TNC can be short-term or long-term [5, p. 749; 15, p.334].

16.4.1. What is the nature of short-term financing of TNC's foreign affiliates?

The purpose of short-term financing is working capital replenishment, fulfillment of current obligations.

Sources of short-term financing are divided into internal and external.

Internal sources are retained profits and depreciation. Their redistribution within the firm is carried out with the help of intra-firm international loans. Thus, intra-firm short-term financing is loans in foreign currency given by different divisions of a company to each other, loans in foreign currency given by parent company to the subsidiaries and vice versa.

Intra-firm international loans can be given in such forms:

- direct international corporate loan. The parent company provides subsidiary with temporary free funds in the form of promissory note;
- compensative internal loan. The parent company puts trust funds on term deposit in international bank of its country, which uses its foreign branch for refinancing of received funds to a subsidiary in the other country;
- parallel intra-firm loan, that is the participants of the agreement give each other loans in the currency of their country for a specified period of time.

The external sources of short-term financing are bank financing and obtaining funds through the securities market. Bank financing can be done in such forms:

- credit line. This is a credit agreement between the bank and its client, which contains the bank's promise to provide the client with a certain amount of money up to a certain limit for a specified period;
- revolving credit. These are lines of credit that are renewed over a long period of time, and are the legally formalized contracts;
- term loan. This is a direct, unsecured loan for a period which does not exceed 90 days. It is issued in the form of a promissory note;
- overdraft. When providing overdraft bank fulfills writing off of amounts from the customer's account in amounts greater than the balance on the account, thus opening the credit.

Bank financing can be done in national and foreign currencies. So there is national, foreign and Eurocurrency financing (eurocredits). Financial manager decides, which currency it is better to use on the given market at the definite period of time in order to reduce the risk of loss, to which level currency risk should be covered by forward contracts and "swap" agreements, manager chooses the optimal portfolio of foreign exchange assets, i.e. how much money and in which currencies should have company at the moment.

Financing by instruments of securities market includes commercial securities issue, which represent promissory notes of a company. Promissory notes, issued by the company, are unsecured and are in circulation between 30 and 90 days, their face value is from 100 000 dollars up to 1 million dollars. There are foreign, Eurocurrency commercial securities and euronotes (short-term securities issued and guaranteed by a bank).

The advantage of commercial papers is that their interest rates are generally lower than the rates of first class loans.

16.4.2. What is the nature of long-term financing of TNC's foreign affiliates?

The aim of long-term financing is to obtain funds to finance long-term investment and other projects of the company, to create a profitable long-term securities portfolio, which leads to an increase in the market value of the company and its share capital.

Long-term financing is divided into internal and external according to its sources.

Internal sources of financing of the company are accumulated net cash flows that appear when international transactions are made. They are based on retained profits and accumulated depreciation.

Net cash flows of the company (NCF) are calculated by the formula:

$$NCF=NP-DIV+A_m, \qquad (16.4)$$

where NP – net profit of the company;
DIV – dividends paid;
A_m – amortization;

$$NP=TR-OC-IP-T\ , \qquad (16.5)$$

where TR – total revenue;
OC – operational costs;
IP – interest payments;
T – taxes.

The main external sources of long-term financing are:

- bank financing in such forms as: bank loan, and in form of a buying long-term securities of the company by bank that does not enroll in public sale, but that are privately offered to the large investors. Bank lending usually takes the form of syndicated eurocredits, but the role of this source of financing is decreasing because of more attractive financing through securities;
- raising funds by issuing equities and bonds. Non-banking financing includes foreign bonds, eurobonds and euroequities.

While solving the problem of long-term financing of TNCs, financial manager should find out:

- which kind of financing is best for the company: financing investment in the strong currency at low interest rates or in a weak currency, but with a high interest rate;
- how it is possible to accumulate loans in different currencies in order to reduce or eliminate currency risk;
- to what level multicurrency loan can be hedged from risk effectively.

Thus, the task of international financial management on issues of long-term financing is to minimize interest rates, taking into account specific level of risk.

The choice of TNC's financing sources is influenced by the following factors:

- the need for maintaining or strengthening the control over subsidiaries;
- need to obtain regular financial resources inflows from affiliates;
- selection of financing objects (fixed or working capital);
- the desire to minimize the amount of all taxes paid worldwide;
- business contacts with national and international financial institutions;
- the changes in interest rates, exchange rates and other financial costs that TNC can consider as a source of financing;
- the desire to minimize the monetary, financial and political risks.

16.5. International trade financing

16.5.1. What are the methods of financing exports and imports?

International trade financing (crediting) is an important element of economic development of the country, since a credit, such as the quality of the product and its price are important means of competition in the global market. Financing of export-import operations eases the sale of goods for the exporter and its purchase for the importer. Foreign trade agreements are financed by banks, government, exporters, importers, financial organizations.

The classification signs of trade financing are:

1) the stage of production of financed goods:

- the manufacture of goods for the exporter;
- the storage of goods in the exporting country;
- the transportation of goods;
- storage in a warehouse in the importing country;
- the sale of goods;
- the use of goods in the process of production and its depreciation;

2) the terms of credit, or financing, may be:

- short-term (working capital financing);
- mid-term;
- long-term.

Export financing is different ways of getting funds from various financial institutions by an exporter until he obtains payment from the importer.

All forms of credits are used in export financing, as in domestic trade, as well as other forms of financing, which are connected with the importer's payment terms [17, p.419]. Thus, the forms of export financing include:

- credit financing, which includes the money loan (short-and long-term) and opening of the line of credit (guarantees, the accepted loan);
- requirements transmission (forfeiting and factoring).

Funding can be obtained by conventional (traditional) methods of bank financing or by non-traditional methods.

Traditional methods of short-term financing of export:

- unsecured overdraft in national or foreign currency. The probability of crediting in national currency increases if the exporter has an insurance policy on export credit in order to reduce the risk of losses in case of importer's refusal of payment;
- the letter of credit with advance payment. It is used when it is necessary to finance the exporter before shipment of goods;
- advances under collection. Bank provides the exporter with such advances when the exporter asks the bank to carry out the collection on his behalf. Advance payment is determined in each case depending on the value of the credit risk. Usually it is 80-85 % of the bill of exchange;
- discounting or the purchase of bills of exchange / checks by a bank. Such working capital financing is carried out if an exporter sells its products on the open account, collection or documentary letter of credit with the accepted bills of exchange. The client immediately receives credit for his export debts, but he must provide a bank with a letter of deposit, in which he mortgages all his bills of exchange as a collateral for bank;
- the acceptance of the lines of credit, which represent an agreement under which the bank agrees to accept bills issued by an exporter against the collateral in the form of trade bill. The due date of trade bill should be earlier or match the maturity of the loan bill that has been accepted by the bank. The advantages of the accepted loans are in fact that the accounting of bills is done at the lower discount rate than the accounting of trade bills. Therefore, the accepted credit lines are cheap sources of short-term financing. The disadvantage of this method of financing is a significant amount of the accepted credit - at least 1 million dollars, and the right of recourse to the exporter by the bank;
- buyer's advances. The importer agrees to pay the part of the cost of goods (sometimes 100%) prior to its actual delivery. Advance payments generally constitute 10-30% of the contract value.

Non-traditional methods of short-term financing are export factoring, credits from export intermediaries, financing through the commission companies.

Such methods are usually used in the ***medium term exports financing***: bank loans in national and foreign currency, credits that are guaranteed by a special government agency. Non-traditional financing methods include forfeiting, counter trade, international operations of credit unions.

International Credit Union is an association of finance companies or banks in different countries that conclude mutual agreements to provide financing with partial payments. When a foreign buyer wishes to pay for imported goods through partial payments, the exporter may apply to the credit union in his country, which will give the order to provide financing through the member of the credit union in the country of the importer. Exporter will receive immediate payment without the right of recourse to him. Importer will receive financing with partial payments.

Long-term export financing involves the issue of equities and bonds, buyer's credit, project financing.

Buyer’s loans are given by the bank that serves exporter. It is provided by a bank in the exporting country to importer or to his bank in the amount of the contract. The forms of such credits: loans under certain contracts for the supply of machinery and equipment; lines of credit; loans for the construction of entire objects with the supply of equipment and the provision of construction and installation services. Contractual relationships between the parties of the agreement based on buyer credit are formalized in the following agreements: a contract between the exporter and importer, the loan agreement between the bank that provides a loan and the borrower (importer's bank); guarantee provided by the insurance agency of the bank that gives a loan. Such loans generally constitute 80-85% of the contract value.

Project financing is understood as all kinds of large long-term loans for realization of large projects in construction, extraction of raw materials, infrastructure and communications.

Non-traditional method of long-term financing is leasing.

Import financing is different ways of obtaining loans by importer from financial institutions to make the payment to the exporter if the buyer has a problem with a lack of cash [17, p.427].

Sources of financing for importers are basically the same as for exporters and the ways of financing include:

- Bank overdraft in national or foreign currency;
- A loan in national or foreign currency;
- Payments via the accepted letter of credit and the letter of credit with payment by installments, compensatory letter of credit;
- The financing of the buyer’s credit, guaranteed by the government agency;
- Bank acceptance (the acceptance credit). Exporter draws a bill of exchange for acceptance not to the importer, but to the importer's bank. Formally, the credit is provided by the exporter, but the acceptor is a bank that changes the mutual relations between the parties.

Non-traditional methods of import financing include leasing, forfeiting, countertrade, financing through the mediation of commission company.

16.5.2. How the state support of export is carried out?

The state institutions which support export are divided into two groups: those, who provide financial resources and those that provide guarantees and insurance policies, which help to obtain loans from the foreign bank [17, p.429].

To provide financial support to the development of export-import operations of the country, most governments have initiated the creation of specialized banks, institutions, the main functions of which include:

- Short-term and long-term lending of exporters;
- Guarantees and export credit insurance;
- Long-term lending of foreign governments and companies.

These banks provide loans to foreign buyers of goods of a certain country on more favorable terms than other organizations. The most important condition of such loans is guarantees of governments of the borrowing countries. These bank loans are regulated and controlled by the state. Although the credit agreements are concluded between banks, they are approbated by governments and in many cases are the parts of international agreements. That's why conditions of these loans differ from the conditions of ordinary commercial loans. These are target (export) loans that can be used only for purchasing goods in the country of the lender, not for loans for general corporate purposes.

Activities of specialized banks are generally subordinated to economic development trends. It's better to illustrate their operations on the examples of the major trading countries.

Export-Import Bank of the United States is engaged in foreign trade financing, apart from commercial banks in the **United States** (Export-Import Bank, Eximbank). This is a corporation that is in full possession of the U.S. government. The Bank performs the following functions:

- providing direct loans to exporters and importers;
- assistance to commercial banks and other financial institutions that provide export sales;
- export credit insurance and guarantees.

The ensuring of short-term (up to 180 days) export sales by Eximbank is based on export insurance program, which is carried out together with the Foreign Credit Insurance Association (FCIA), where more than 50 leading insurance companies in the United States take part. The Association conducts short-and long-term policy to cover commercial and political risks. Insurance coverage is provided at a rate of 90% or 100 % of the total loan amount of an exporter or importer credit.

Private Export Funding Corporation (PEFCO) is working closely with Eximbank on direct lending operations. It has share participation in more than 60 banks and industrial companies as well as its own investment office. The aim of PEFCO is to provide U.S. firms with an additional source of financing of export agreements. All PEFCO loans are provided under Eximbank guarantee by principal amount and by interest. This allows refinancing loans on long-term capital markets. With the help of mid-and long-term loans the purchase of goods and services by foreign buyers is financed, which are produced or provided by the United States (e.g., power plants, industrial buildings, railroad equipment, etc.).

Eximbank and PEFCO offer such export financing programs:

- long-term export agreements are provided with direct loans to foreign banks (importer's banks) and it is financed up to 61 % of the contract value. If the exporter is involved in financing, the quota of financing increases by 10 %;
- on the medium-term financing Eximbank may pay a subvention to the exporter if subvention financing is also proposed to foreign competitors.

Eximbank gives guarantees to private banks (cost is 0.5 % per annum) on the provided export loan. The part of the loan, provided by a commercial bank, is to be returned in the first place, that's why exporter's participation in financing has no risk.

Each year, Eximbank provides financing of export agreements in the amount of almost 13 billion dollars. Particular attention is paid to small businesses in the USA, whose support accounts for 2 billion dollars [6, p.457, 899].

In **Japan**, the financing of foreign trade is done by Eximbank (financial institute of the Japanese government) together with commercial banks and trade houses. Export financing is agreed with the general strategy of Japanese exports of machinery and equipment. Eximbank usually finances about 60-70 % of the loan at concessionary interest rate, the residual amount is provided under the terms of the commercial banks, depending on the market situation.

In the **UK** the financial support of export- import operations is done by Exports Credits and Guarantee Department (ECGD). Bank receives the difference between the loan interest rate and the rate of refinancing through subsidies that are paid by the ECGD. At the time of production of export goods ECGD does not provide financial support. It is given only in exceptional cases when the period of production is more than one year and the amount of the contract exceed one million pounds. Commercial banks, which provide export credits, are given guarantees by the ECGD.

Export financing in **France** is carried out by the French Central Bank (Banque de France), the French Foreign Trade Bank (Banque Francaise du Commerce Exterier, BFCE) and commercial banks.

Banks provide short-term loans at market conditions, mid-term loans - under conditions that meet the OECD agreements (the loans are financed both to exporters and importers). Long-term export agreements are financed through BFCE loans to contractor or refinancing of supplier’s loan in BFCE. BFCE refinances itself by issuing securities; the difference between refinancing rate and loans interest rates is covered by the state budget. Mixed credits can be used, that is joint financing of large projects by several credit institutions - both international and national. Such financing programs are a means of promoting national export. Loans are available for up to 25 years, interest rates are minimal due to subsidies and government [17, p.432].

In **Germany**, most of the export financing is provided by two special institutes: Consortium of German commercial banks “Export-credit” (Ausfuhrkredit GmbH / Frankfurt am Main, AKA), and Credit Institution for Reconstruction (Kreditanstalt fuer Wiederaufbau, KfW) [17, p. 432].

AKA provides medium and long-term loans to finance only German export agreements on the basis of its three lines of credit:

- Fund A that was created without government support. Loans from this fund are available only through the banks-participants of the Consortium;

- Fund B, which amount determines the maximum amount of financial bills of AKA. German bank accounts it at a lower rate, and these bills are drawn on the basis of the export agreement through participation of any German bank;

- Fund C, which provides loans to supply customers, but the loans are paid to the exporters. These loans are guaranteed by governments and are available only through the banks-participants of the Consortium.

The amount of the loan that is provided by AKA depends on the value of the export credit which is covered by the insurance company «Hermes».

KfW finances the export of German products of long-term investments (buildings, equipment, etc.), telecommunications, aircraft production and shipbuilding, and related engineering services, financial consultations. Credit is given in the amount of 85% of contract to supply customers or to customer's bank. Prerequisite for obtaining the loan is a government guarantee.

KfW provides loans to the contractor, which are financed from its own funds. Loans to suppliers are provided by the bank-exporter. Interest rates on KfW loans are fixed in the agreement and are irreplaceable.

In **Italy**, state financial support of export agreements is done by the state credit institution Mediocredito Centrale, which receives funds from the state export fund, government subsidies to cover losses and by loans on the loan market under the guarantee of the government. Form of Mediocredito support depends on the type of export credit, the availability of funds in the bank. Interest rates on loans are low. When there is not enough funding to finance export agreement, the state subvention is granted. The period of the production of export goods more than 1 year is financed at low interest rates.

The services concerning the state export credit insurance are carried out in all countries where there are special institutions, which funds are managed by the state (second group of institutions of state export support). Typically, such types of risks are being insured: foreign policy risk; the risk of a ban on the transfer of funds, including the risk of a moratorium; currency risk; credit risk if a customer or debtor is a public institution.

This provides the acceptable level of funds profitability to banks-creditors with the standards and requirements of the OECD. This group of institutions includes Export Credit Agencies, ECA.

Thus, ECA is accepted in international practice common name of institutions (some insurance companies, banks, or departments of ministries) that implement state export support policy through the insurance of export, political and commercial risks and provision of guarantees.

At the present time the ECA operates in more than 70 countries, including Germany (Hermes), Spain (CESCE), Czech Republic (EGAP), Poland (KUKE), France (COFACE), Hungary (MEHIB), the USA (US Ex-Im), Italy (SACE) and others. Sometimes these functions are performed by the National Development Banks.

As a result of export credit insurance by ECA, bank, that serves producers, gets reduction of risks. Accordingly credit terms are mitigated: credit period increases, the interest rate decreases.

Financing against the guarantees of ECA has two schemes. According to the first scheme, credit is given to domestic bank for financing the target contract of domestic importer. Domestic bank concludes an individual credit agreement with a foreign bank, by which the credit is granted to domestic bank under the guarantee of the ECA. This loan has special-purpose character and the bank does not receive this money, because money are received directly by an exporter, manufacturer. The foreign bank pays for supply contract and domestic bank must repay the credit debt. Domestic bank, in turn, conducts a credit agreement with the enterprise. According to the second scheme, a foreign bank-creditor provides a direct credit to the domestic importer under the guarantees of domestic banks. Thus, in the first case the borrower is a national bank, and in the second - a domestic enterprise. The particular choice of scheme depends on who (bank or enterprise-importer) deserves more trust of the bank, which finances, and by Export Credit Agency. The main condition for obtaining ECA guarantees for banks is the availability of a client with a large import contract of equipment. For banks with which the ECA has a positive experience, the formalities are minimized. In order to obtain approval of ECA, the national bank must meet the standard requirements;

- the availability of financial statements according to international standards and international audit for the last three years;
- the adherence to the standards that are set by the Central Bank;
- relevant structure of the share capital and ownership structure;
- relevant economic mission of guarantor bank in the country, the availability of development strategy;
- the ratings of international rating agencies that bank has.

In addition to the standard requirements the ECA has additional rules. Thus, according to the "rules" ECA should serve export of manufacturing equipment. However, sometimes they provide guarantees for loans to enterprises for the purchase of semi-finished products (such as chemical raw materials, which are not produced in the country); according to the other rule, the amount of ECA guarantees must not exceed 50 % of the equity of domestic bank.

Terms of financing under ECA insurance coverage are standard and meet the requirements of the OECD:

- *period*: from 1 to 5 years, in exceptional cases up to 8.5 years (depending on the subject of the delivery and creditor-bank agreement);
- *currency*: U.S. dollar, euro and other currencies, depending on the currency of the contract and on creditor-bank agreement;
- *credit covers*: up to 85% of the value of foreign trade contract and creditor-bank agreement;
- *advance payment*: up to 15% of the value of foreign trade contract is paid by the importer to the exporter under the terms of the contract;
- *interest rate*: has to be agreed with the lender for each project separately (the rate will depend on the borrower's credit rating and credit project);
- *additional costs*: the commitment fee (about 0.5% per annum), the fee for the organization / management (one-time fee, approximately 0.5% of the credit amount), legal costs (possible, but not mandatory);
- *insurance premium*: its size is set by ECA of the creditor country and depends on the importing country, credit amount, credit term, the subject of the contract and so on. Payment of insurance premiums can be made using the credit (fully or partially), by the importer or, if it is agreed, together with the exporter

16.6. What is dividend policy of the corporation?

Dividend policy of the corporation is directly related, on the one hand, with the policy of financing its activities, on the other - with the assessment of activity of firm activity by shareholders in order to define how dividend payments affect the welfare of shareholders and the value of the firm.

One of the sources of corporation financing is refinanced profit. Since a percentage of profit paid to shareholders in cash dividends (index of dividend yield) reduces the amount of refinanced profit, the decision to pay dividends is funding decisions at the same time. Refinancing profit determines the possibility of the distribution of profit (both in magnitude and maturity) between shareholders in the form of dividends.

How can investment decisions be agreed with the decisions to pay dividends in the interest of shareholders and strengthening the position of firm in the financial markets?

There are two views on corporate dividend policy: 1) the passive role of dividend policy in ensuring of the welfare of shareholders and the impact on firm value and 2) the active role of dividend policy.

16.6.1. How passive and active dividend policies are carried out?

In event of the passive role of dividends, index of dividend yield does not affect the welfare of shareholders and firm value. If the dividend policy is considered only as a funding decision, the payment of dividends is given the place of passive balance. The value of dividend yield will change from period to period according to the fluctuations of the number of investment projects acceptable from the point of view of the firm. If the company has many opportunities for investment, the dividend yield will probably be equal to 0. On the contrary, if the firm does not have opportunities for profitable investment, the dividend yield can be equal to 100%. Thus, the value of dividend output depends on favorable opportunities to invest and can vary from 0 to 100%.

According to the first view, investors themselves by their actions decide on their own about dividends. These solutions are thoroughly substitutes of corporate dividends that mean dividend payments may be compensated by other means of financing. If dividends are paid lower than expected, shareholders may sell part of their equities in order to obtain the desired amount of money. If dividends exceeded the expectations, investors can spend them to buy new equities of the company. Thus, investors can regulate their income regardless of corporate dividend policy.

According to the second view, dividends play an active role. Investors may care whether they receive their income in the form of dividends or in the form of sale of equities. For them dividends is the main criterion for evaluating equities. Since dividends are related to diversity of current income and the prospect of receiving other capital gains is driven to the future, because payment of dividends by company gives investors a sense of certainty. All other things being equal, they are willing to pay a higher price for the equities, which are entitled to receive current dividend. The practice gives sufficient number of examples that investors prefer not to decide about dividends on their own, and to get a real income directly from the company.

The active role of dividends is manifested in the fact that in terms of market imperfection of financial information the firms use dividends increase in order to inform about the expected changes in the tendencies of growth of profitability and also about the value of the equities that does not reflect adequately the situation and prospects of the firm development. Accordingly, the value of equities may react to this change of dividends and may increase.

In order for payment of higher dividends, than that is dictated by amount of money remaining after the financing of profitable investment projects, was justified, it is necessary that investors prefer dividends.

16.6.2. How payment of dividends is carried out?

Developing a dividend policy, corporation takes into account many different criteria and analyzes a number of factors that affect the success of dividend policy. First, the financial manager must assess the financial needs of the company and the source of funds to analyze the factors that affect the state of the company's cash balances: possibility of long-term investments, an increase in inventory and the amount of debtor indebtedness etc. He has to include in the analysis the forecast of risks and prospects of company development on a reasonable number of years and, therefore, to determine the ability of the company to maintain a stable level of dividends and the possibility of regular payments.

The decision on the payment of dividends depends on the company's liquidity and its use. The higher liquidity of the firm is, the higher is its ability to pay dividends. If the reserve of liquidity is insufficient for the payment of dividends on the expected level, the firm must find a way to get the borrowed funds: obtain credit or to enter the capital market with a package of its bonds. The larger opportunities the firm has to attract borrowed funds, the greater its abilities to pay out dividends are and the smaller the concern is about the impact, which payment of dividends in cash make on the liquidity of the company.

Carrying out the dividend policy, the company uses the information effect of dividend payments, solving the question of what kind of information on current dividends and their changes it would like to spread.

Decisions on dividends may not always be well-founded, but many corporate executives believe that dividend payments affect the value of equities and create their own activity by attaching great importance to issues related to the payment of dividends. The company may pay dividends by coordinating the interests of accumulation of dividend payment with limited funds and for purposes of accumulation it may issue new equities. This option of dividend policy is applied frequently. However, financial manager must ensure that the issue of new equities as a source of dividend payments would not lead to the dilution of a controlling block. It is on one hand. On the other hand, it has to keep in mind the possibility of dragging the shareholders by competing firms if the dividend yield is reduced.

Besides the percentage index of dividend yield, investors are interested in the stability of dividends not only because they receive a steady income, but also because, other things being equal, the equity price will be higher if it gives a stable current dividend during some period. Maintaining the stability of the dividend payment, the company may affect the positive attitude of the stock market to its equities.

One alternative of dividend policy may be payment of dividends with new equities, i.e. by transferring equities of additional issue to shareholders. The company may resort to the use of this option if it wants to save money, which is in its possession.

The company may increase the actual level of dividend payments to shareholders and attract new investors by fragmentation of equities. For example, company may carry out the fragmentation of equities in relation 2 to 1 and set the interest rate at 1.20 dollars per share. Before fragmentation the shareholder that owns 100 equities of the company, at dividend rate of 2 dollars per equity, got 200 dollars per year. After fragmentation the same shareholder has become the owner of 200 equities and his dividends amounted to 240 dollars per year.

The announcement of dividend payment in equities or fragmentation of equities has information effect, which consists in the fact that the idea is formed on favorable forecasts of firm management regarding situation in the future and often it results in increasing the value of equities of companies that have announced the dividend payment in equities or equities fragmentation. However, duration of such effect in the end depends on the actual increase in the firm's profits.

Another element of dividend policy of the company is the equities repurchase in the secondary market in order to remove them from circulation. Of course equities repurchase is a signal to the market about the low valuation of equities of the company that prompts the market to a reassessment of their value. The repurchase of equities as part of dividend policy is especially useful in situation when the firm has a significant amount of money that should be placed.

Chapter 17. Risks in international activity of a company

17.1. Foreign exchange risk

17.1.1. What is the essence of foreign exchange risks?

Foreign exchange risk is the possibility of financial losses in the implementation of various international economic transactions due to changes in market conditions and, accordingly, to the market fluctuations in market exchange rates.

The objective basis of foreign exchange risk is that in the long-term period exchange rates depend on the economic situation of different countries, and in short-term period - on decisions of state bodies on economic issues, speculative operations, rumors and expectations, political events, and finally on wrong decisions of dealers.

Operations of international financial management on financing international trade, long-term investments, current capital policy, forming the block of securities, purchase and sale of foreign currency are linked with foreign exchange risk caused by the need of currencies conversion and exchange rate fluctuations. Thus, exporters incur losses with a decrease in the exchange rate of currency of price in relation to the currency of payment because they receive lower real value compared with the contract. For importer risks arise if the exchange rate of price increases in relation to the currency of payment.

Fluctuations in exchange rates for companies engaged in international activities, is one of the most significant types of risks. Although exchange rates are an external factor, on which the financial manager has no power, but effective financial management requires manager to analyze the risks associated with exchange rate fluctuations and, if it is possible to control them.

The main elements of the evaluation of foreign exchange risk is the determination of the kind of foreign currency, according to which calculations are carried out; sum of currencies; duration of the period of the foreign exchange risk; kinds of currency settlements.

Foreign exchange risk management assumes its detailed analysis, evaluation of possible consequences and the choice of insurance methods. The financial manager must use all available means to avoid risk and control it; to carry out a number of measures to minimize the amounts of probable losses, if there is not any possibility to avoid it completely; to insure foreign exchange risk if it's not possible to avoid it.

There are three types of foreign exchange risk:

- recalculated (accounting);
- operational;
- economic.

17.1.2. What is recalculated foreign exchange risk?

Recalculated foreign exchange risk refers to the operation of conversion of the financial statements of the company from one currency to another. Change in value of currencies affects the financial statements of the company, which reflect its financial position. This risk arises from the fact that international and transnational firms should periodically (at least once a year) combine the financial statements of its subsidiaries located in different countries in a single group of reports in the national currency. The term “recalculation” is used for conversion of ordered costs in one currency into another currency.

For example, an American firm that has a branch in England should converse the income statements and balance sheets of the branch compiled in pounds sterling - in dollars, and combine them with the financial activity statements in the United States. To illustrate transferred insecurity let's assume that a firm that has a hotel chain of U.S. origin in different countries, decided to expand its foreign operations by buying a London hotel. Purchase took place in the beginning of the year at a price of 3.0 million pounds. According to the current exchange rate of 1.5 dollars for 1 pound, investments of the firms were 4.5 million dollars. At the end of the year firm must integrate all financial reports in national currency (dollars). However, at this time, the dollar rose to 1.3 per 1 pound. Consequently, the general balance sheet shows the price of hotel at 3.9 million dollars (3 pounds x 1.3). Decline in value of the pound against the dollar expressed in transferred loss of 600 000 dollars.

However, this loss exists only on paper, the actual outflow of cash will not happen. The hotel can even go up in price at market value. However, the financial statements will show a loss as a result of the appreciation of the dollar exchange rate. The data of financial statement are interesting to shareholders, creditors and investment bankers. They play an important role in the relationship of the company with these entities of financial relationships. In addition, management evaluation and remuneration of employees is often based on financial statement data. Therefore, financial managers pay much attention to the destabilizing impact of changes in the value of currencies on the financial statements and take measures to control transferred insecurity. One of such measures is insurance of balance sheet, i.e., using the method of counter currency flows, the essence of which lies in the fact that currency liabilities or claims of the company are covered. For any cash flow counter-flow should exist in the same currency, which will close the open position of the company. For example, a firm that bought a London hotel in the same time borrows from British bank 3 million pounds. This operation creates a pound liability equal to the cost of the asset in pounds. As a result of balance sheet insurance in the end of reporting period net transferred losses reach zero.

During the transfer of financial statements in the national currency firm should follow any universally applicable principles. In the U.S. by accounting rules, established by the Committee of Financial Accounting Standards Board (FASB), the U.S. company must determine functional currency for each of its subsidiary, i.e. the currency in which the majority of operations of the firm are done. This can be a local currency or dollars. If inflation exceeds 100% per year, the functional currency can only be dollar.

If local currency is used, all assets and liabilities are transferred at the current exchange rate. In this case, the gain or loss from transfer is reflected not in the income and losses statement, but in item of owner's equity as a correction of transfer. The fact that this correction does not affect the value of balance profit is attractive to many countries.

If the functional currency is dollar, gains or losses are displayed in the income and losses statement of the parent company for the so-called time method. In this case, there are large fluctuations in the balance sheet profit and lower fluctuation of value of the balance sheet items than in the account in local currency.

When transferring of financial statements in national currency the items of balance sheet (assets and liabilities) must be transferred at the exchange rate dominating at the end of the reporting period. Revenue items in the statement (annual income and expenses) should be transferred at exchange rate active on the date of receipt of income or expenditure, or at the average exchange rate during the reporting period.

17.1.3. What is operational foreign exchange risk?

Operational foreign exchange risk is the risk, which affects firms and individuals in international economic transactions when future payments or receiving funds must be made in the currency, the future value of which is not defined. Foreign exchange risks caused by changes in exchange rates may be related to the cash flow and assets. They can occur in the short-term perspective and in the long-term period run. Changes in exchange rates may lead to changes in the factors of production necessary to the company for the production, as well as changes in income derived from production of goods. The risk in the long-term period (current) affects the entire volume of investments. Thus, the operational insecurity occurs as a result of the fact that the exchange rate may change during the time from conclusion of the agreement till payments implementation. In contrast to the recalculated risk, operational risk leads to the actual inflow or outflow of cash.

To illustrate, let's consider the following example. American firm ordered the good in France. The parties agreed that payment will be made in the amount of 12,000 euro if the good will be shipped within 90 days. According to the current exchange rate of 0.8 euro for 1 dollar it will make a payment of 1 500 dollars. However, if within 90 days of the euro increases, the payment will be larger in dollars, and if it falls, the payment will be lower. Thus, the operational insecurity reflects the uncertainty associated with the final volume of liability in national currency.

For the company, there are several ways to control operational insecurity. The easiest way to change the operational foreign exchange risk is to transfer it to another company. The exporter of a product can establish sales prices in the currency of his country. In this case, the importer faces operational foreign exchange risk associated with the conversion of foreign currency into the national currency. The method of requirement for immediate payment is also possible. Then export value will be determined by the current spot rate. However, these methods are often end with disrupted contracts or hidden costs.

The company can be insured on the forward or option market. For example, the French company plans to hedge. With forward transactions it expects the payments in the amount of 2 000 dollars and decides to conclude the three-month forward contracts for the sale of two thousand dollars. At the time of conclusion of the contract the spot exchange rate was 0.8 euro per 1 dollar, and three-month forward rate for a contract was 0.9 euro per 1 dollar. Consequently, the cost of buying two thousand dollars by the spot rate makes 1 600 euro (2,000 x 0.8) and under contract – 1 800 euro (2,000 x 0.9). If after 3 months on the day of contract execution the spot exchange rate will rise to 1 euro per 1 dollar, then the costs of the companion the purchase of foreign currency amount to 2,000 euro. If the company does not concluded the terminable contract, the costs on purchase of foreign currency amount to 2 000 euro (2,000 x 1). Economy of money resources or potential income will be 200 euro. If after three months the spot exchange rate fall to 0.7 euro per 1 dollar, then at the cost of 1800 euro by terminable contract the lost benefits (potential losses) amount to 400 euro [1800 - (2000 × 0,7)].

Another example is a hedge on futures market. U.S. company sells equipment to French firm for 1 million euro through its branch in Paris with delivery in 90 days. After payment the company intends to convert euro to dollars. At the moment of the agreement exchange rates of the euro in dollars were: the spot exchange rate - 1.20 dollars; 90 days futures rate - 1.15 dollars.

Since the forward price of euro is lower than the spot price, it means that the euro is sold with forward discount.

If an American company wants to avoid the risk of international exchange, it should sell 1 million euro in 90 days. When it supplies euro after 90 days, then it gets 1150000 dollars (1 million euro for the price of 90-day futures - 1.15). If the spot rate remains at 1.2 dollars, the company probably will not sell euro by forward agreement.

The company would sell 1 million euro in the spot market for dollars 1,200,000. In this regard, it pays 0.05 dollars per euro (1,20-1,15), or in the amount of 50,000 dollars in order to provide itself the opportunity to convert euros into dollars. In terms of the year the cost of this protection will be (0.05 / 1.2) x (360/90) = 16.7%.

For stable couples of currencies the loss or gain from the difference between the forward exchange rate and the spot exchange rate ranges from 0 to 3% per year. For less stable currencies it is higher. For unstable currencies loss can reach up to 20%. With a significant exceeding of this level of instability the forward market stops to exist for such currency.

The advantage of forward transaction is expressed in the absence of previous expenses and protection from unfavorable changes in exchange rate. The drawback is the potential losses that are connected with the risk of lost benefits.

It is possible to minimize the foreign exchange risk or to avoid it by using currency options. For example, the firm provides to make payments in 3 months in amount of 2 thousand dollars and to fix the minimum exchange rate of the dollar. It buys the option for buying dollars according to the following parameters:

sum	2 thousand dollars
term	3 months
rate of option	0,7 euro per 1 dollar
Premium	0,025 euro per 1dollar
Type	European

This option gives the company the right to buy two thousand dollars for three months at the rate of 0.7 euro per 1 dollar. The company pays the seller of the currency the option premium in amount of 50 euro (2,000 x 0,025), i.e. the price of this option is 50 euro. If in three months on day of execution of option dollar spot exchange rate falls to 0.5 euro per 1 dollar, the company will give up option and buy the currency on the cash market and will pay for the purchase of currency 1050 euro (1000 + 50).

If within three months dollar spot exchange rate rises to 0.8 euro per 1 dollar, the future costs for purchase of foreign currency are already insured. The company sells an option and will spend 1400 euro on buying the currency. If it bought the currency on the cash market at spot exchange rate of 0.8 euro per 1 dollar, the costs would amount to 1600 euro (2,000 x 0.8). While using option the economy of money resources or potential benefit is 150 euro [1600-(1400+50)].

The advantage of currency option is protection against unfavorable change in exchange rate. The drawback is the costs on payment of option premium.

Managing long-term operational risks is a more complicated process. Long-term forward contracts with the term up to 7 years the large transnational banks conclude only with the most known and creditworthy corporations. Thus TNCs for mutual reduction of long-term operational risks often conclude an agreement among themselves that is parallel or compensatory loan. The essence of this method is as follows. For example, if an American company that wants to invest a certain amount in France is able to find a French company that is prepared to invest the same amount in the USA, it allows arranging mutually compensating loans. The French company provides U.S. company credit in euros and U.S. to French - in dollars. After the expiration of investment U.S. company pays euro, earned in France, for obtained credit and French company pays dollars, received in U.S. Thus, companies do not have to exchange currencies in the foreign exchange market. However, both companies are at risk of non-payment of loans. To avoid the risk of non-payment of loans (credit risk) associated with the back-to-back loan, companies can use the currency "swap" (the agreement between two companies on the exchange of concrete amount of currencies at the moment and about reverse exchange of it at a certain time in the future). Exchange rates may change, but significant credit risk is eliminated. Non-use of currency "swap" means that in the future there will be no predicted currency exchange, while the failure of back-to-back loan means that the loan will not be returned. The only consequence of not using currency "swap" is that companies need to exchange their currency in foreign exchange markets under the new exchange rate. Non-use of back-to-back loan by one company leads to the loss of another company and the nominal value of investments and the income from it.

Apart from the use of forward contracts, currency futures, options and swaps a method of "*Leads and Lags*", method of allocating risk, reinvoicing centers are used in order to hedge and to minimize the operational foreign exchange risk.

The method of "Leads and Lags" implies free choice of the date of payment. Two firms that are closely connected with each others, find the best option for mutual settlements. This method makes it possible to calculate the volumes of financial flows between firms at a specified date and thus indirectly affect the solvency of each of the firms. The most effective method of "Leads and Lags" is used when the parent company has full control over its branches and subsidiaries.

The method of risks sharing implies concluding an agreement between the companies in the form of a contract, in which exporter and importer agree to assume a certain part of the costs related to foreign exchange rate fluctuations, regardless of the losses which the company actually suffered. Such strategy of risk allocation increases the trade turnover between companies, predicting of cash flows under the terms that between companies long-term and mutually beneficial relationships are established and that currency fluctuations will not significantly affect their financial situation. Such agreements are very economical and efficient.

TNCs sometimes create reinvoicing centers, which are their branches and are centrally dealing with all foreign exchange risks that arise in international trade. For example, the branch X in the country X sells goods that it produces to the branch Y in the country Y, which is engaged in distribution. However, the sale takes place through an intermediary - reinvoicing center in the country Z. Goods are sold firstly to the center and then the center resells goods to branch Y. Meanwhile, the movement of goods is carried out directly between the branches of X and Y, and reinvoicing center is actually involved only in the document circulation. Branch X directs the account in the foreign currency X to reinvoicing center and receives the national currency X according to its accounts. Branch Y buys goods through the center in currency Y, i.e., in the currency of its country. Therefore, all questions, connected with transfer of currencies are settled in the center.

The advantages of using reinvoicing centers are as follows:

- In case of internal corporate trade the foreign exchange risk management is carried out in one place. Center managers choose the best strategy for hedging of currencies risks and a large volume of transactions in different currencies allows to select best foreign exchange rate by covering one agreements by others;
- managers of the center on the basis of forward exchange rates determine the price of goods on a specified date, which allows branches to calculate their future costs. Due to this branches-distributors have the opportunity to set fixed prices for the products and not worry about the problems that are related to changes in exchange rates;

- branches of TNCs are able to perform settlements only in the national currency as the center is involved in the management of financial resources between them.

The main disadvantage of reinvoicing centers is high costs for their maintenance [20, p. 243].

Operational insecurity is a difficult problem for small firm involved in random export and import. Large TNCs that are engaged in many operations simultaneously in different currencies are less affected by operating insecurity. Since the degree of currency fluctuations is intersecting, losses and gains tend to balance each other every time. Furthermore, TNCs are able to have assets and liabilities denominated in various currencies, which also reduces operational insecurity.

For both large and small companies insurance costs must be balanced with benefits.

17.1.4. What is economic foreign exchange risk?

Economic foreign exchange risk unlike the recalculated and operational risks is long-term phenomenon. This type of risk influences TNCs and firms engaged in export-import operations. Economic risk results from the possibility of a significant impact of changes in the value of currencies on earnings or competitiveness of the firm in the long-term period. Economic foreign exchange risk is connected with changes in the value of company that depend on changes in exchange rates. Changes in exchange rate affect the market value of the company, when their action spread on the expected cash inflows.

Japanese export of industrial products in mid 90s can be the example of economic insecurity. During this time the large and long growth of the yen against the dollar happened. It made Japanese exports uncompetitive. Japanese firms that export goods to the United States have a choice between two undesirable alternatives. If they keep dollar prices at the same level to maintain the competitiveness with U.S. companies, the amount of their income in yen will decrease. If they raise prices in dollars to offset the yen rise, then competitiveness will decrease. Otherwise, the decline in revenues is difficult to avoid. In addition, for companies that were producing goods in Japan, operating costs in yen were not reduced in proportion to the reduction of income.

What are the possibilities for control over the economic foreign exchange risk? Quick response and adaptation to changes in the economic environment. There are such possibilities: change of the export market to market, where the yen is not quoted too high, giving the priority to national market, an increase of direct investments, merger with other firms and so on.

Economic foreign exchange risk includes operational and recalculated foreign exchange risk so far as the changes in the accounting value of the firm affect its market value.

Accounting and market value of firms often differ from one another. The market value of assets may decrease quickly due to their removal, and accounting cost remains unchanged at the same time. Market conditions can increase the market value of certain assets, such as real estate. Recalculation of the company's value from one currency to another currency may either increase the differences between market and accounting values, or decrease it. It depends on economic factors associated with changes in foreign exchange rates.

In order to reduce the economic foreign exchange risk such methods are used: equalization of company's currencies of payments with currency cash inflows; diversification of financing activities abroad etc.

17.1.5. What methods of foreign exchange risk estimation exist?

International financial management differs from national financial management by the fact that comparative cost indicators of production effectiveness depend on the exchange rate, the most important decisions about the strategy of international corporation, primarily on the directions and sizes of investments, are made by a careful study of forecasts of exchange rates. Constant adjustment of plans takes place on the basis of conjuncture variable conditions, including currency ones. Therefore, the analysis and control of foreign exchange risk are in the spotlight of international financial management.

Economic foreign exchange risk can be determined numerically by the using regression analysis of previous prices of the company's shares and the relevant foreign exchange rates that affect these prices. The coefficients at a single change in the value of any particular currency give linear estimations of economic foreign exchange risk of the company for each currency.

Approach to measuring economic foreign exchange risk is as following. Assuming that the market value of the company (V) is linearly related to the value of currency $/X:

$$V = b_0 + b_1 (\$ / x) \qquad (17.1)$$

where b_0– a part of the company's value, which does not depend on changes in the value of currency;

b_1– change of company's value per unit of change in the value of currency X

If the value of the company linearly related to the value of several currencies ($\$/X_1$, $\$/X_2$, $\$/X_3$, and so on), the previous formula can be as follows:

$$V = b_0 = b_1 (\$/X_1) + b_2 (\$/X_2) + b_3 (\$/X_3) + ... + b_n(\$/X_n), \qquad (17.2)$$

where b_n– change of the company's value per unit of change in the value of currency X_n.

Economic foreign exchange risk for a particular type of business is represented by corresponding coefficient (b_1, b_2, b_3, and so on).

If the company is not related linearly with the value of currencies, then other, more complex methods of nonlinear regression and analysis of temporal lines are used.

Recently, the most widely used statistical method for estimating the degree of foreign exchange risk on the basis of ***VaR index*** (value at risk), i.e. "cost of risk". VaR is the estimation value, expressed in monetary units and which is not exceeded by the losses with a given probability expected during this time [1, p.135; 8; 31].

Method of VaR analysis is used by such international institutions as the Bank for International Settlements, Banking Federation of the European Community. Also it is a standard instrument of financial managers of large corporations, especially those whose work is related to the world markets of raw materials and capitals, export and import operations. Using this technique, the financial manager establishes the maximum loss that the company risks to incur for a certain period of time with a given probability. In other words, the determination of the VaR allows formulating a statement: "We are sure on the X% (with a probability of X%) that our losses will not exceed the value of Y for the next n days". Unknown value Y is VaR.

The key parameters of VaR are as follows:

- time-level – the period of time for which risk is calculated. Often the calculation is done with a time-level of 1 day (for calculation of capital value (which covers possible losses, the time-level is 10 days);

- the level of acceptable risk (confidence level) - the probability that losses will not exceed a certain value (confidence level can be 95 - 99%).

Without these parameters, no calculation or interpretation of VaR values is possible. Consider the example of how VaR reflects the expected losses with a given degree of reliance. The meaning of the risk value of $10 millions for a time-level of one day and the confidence level of 99% means that: the probability that in the next 24 hours the firm will lose less than 10 millions dollars is 99%; the probability that losses will exceed 10 millions dollars in the nearest twenty-four hours equals to 1%; losses that exceed 10 millions dollars are expected averagely once every 100 days of tenders.

For the evaluation of the "cost of risk", several methods are used to calculate this indicator, the main methods are:

1. Parametric (analytical) method that is based on two components:

- the models of dependence of portfolio income on factors of risk changes;
- the models of volatility and correlation of factors of risks.

Because of its relative simplicity, this method has become the most common of all the methods for calculating VaR, but it does not allow using other distributions, despite of normal, and proper assessment of risks of nonlinear tools.

2. *Historical simulation method.* This method estimates cost of risk beyond normal distribution of probabilities of risk factors and provides availability of significant statistical base by each factor. Method comes of assumption about stationary fluctuations of financial market conjuncture and factors of risk that are generated by them. In other words, the calculation of VaR is based on assumption about stationary behavior of market prices in near future.

The method allows us to estimate not only the standard, but also unusual fluctuations of financial market conjuncture, i.e. better reflect the real risk factors.

The calculation of VaR by historical simulation method is very labor-intensive in terms of the amount of necessary calculations, as it requires the revaluation of each tool for each single day of the chosen historical period. Limitations are connected with the fact that historical data cannot serve as the basis for a reliable prediction of future results.

- *Monte Carlo method (imitation simulation method).*In the process of implementation of this method, a special computer program generates large volumes of variants that imitate real possible results of price changes of separate security (on the basis of defined by user set of scenarios) and then statistically classifies them according to their probability. Then program assigns the value to of VaR, linked to given confidence interval. For example, for fixation of risk in 95% confidence interval the whole portfolios can be re-evaluated to million times in order to determine the entire range of possible values of the gains/losses and then to set a value of VaR as the value of 95% of the observations were less than this figure, and those 5% remaining – more than that figure. Artificial simulation of risk factors allows you to select any kinds of distribution of their probability and get the highest accuracy of the VaR calculations [1, p.140].

Thus, the basis of foreign exchange risk management is a clear determination of the tasks facing the financial manager at the initial stage of insurance and minimization of foreign exchange risks. They include:

- assessment of the need to manage foreign exchange risk. It depends on the position of the company's management. All “for” and “against concerning «the insurance of foreign exchange risks are taken into account;
- determining the range of problems that are related to the prediction of the dynamics of exchange rates. Finance manager should be able to use methods of exchange rates forecasting;
- the determining of the hedging purpose, that depends on the overall strategy and objectives of the company. Thus, exchange rate management can be carried out by the company with the purpose of long-term planning of its financial resources or to maximize profits from the expected price change of currency;
- choice of insurance means(comparison of alternatives);
- working out of optimal insurance strategies.

17.2. Risk management in making decisions on foreign direct investment

International investment projects hide the number of special risks, the major of which are:

- the risks arising from international investment issues;
- the risks connected with the alternative choice of the ratio of different types of financing investments.

17.2.1. What is the nature of risks arising from international investment issues?

The risks, arising from international investment issues are connected with to two circumstances. First circumstance is the structure of TNC: the parent company is in the home country and subsidiaries (branches) are in other (host) countries. In evaluating investment projects, conclusions may be different depending on the position from which it is drawn: from the position of FDI efficiency or from the position of possibility of receipt of cash growth (income) in the parent company. These differences may be caused by several factors. Firstly, the host country may impose restrictions on the repatriation of funds of the parent company. Therefore, FDI can be highly profitable, but money will not flow to the parent company. Secondly, the home country may establish collecting taxes on foreign operations with specific goods or services, which lead to a rise in prices of foreign operations. Thirdly, changes in exchange rates may adversely affect the value of the profits that are transferred. For example, from the country with high inflation, the amount of profits, which are transferred to the parent company, will decrease as exchange rate depreciation of the host country. So there is always question: what to put as a base when determining the NPV: cash flow caused by foreign investment or cash flow received by the parent company. Typically, when making decisions about investments international firms are focused on the results of analysis conducted from the position of the parent company as cash flow to the parent company can serve as a source of dividend payments to shareholders, possible investments elsewhere, payment of interest on the debt of the corporation, etc.

An important aspect is the ability of immediate obtaining of cash by parent company, because any delay will lead to its devaluation. And the second important aspect is accounting of the additional risks arising from the international character of the totality of relations that mediate investment activity of international firms.

These risks include:

- unfavorable exchange rate movements;
- unexpected changes in inflation rates;
- freezing (blocking) funds or exchange controls;
- expropriation;
- measures for the foreign exchange control;
- the changes in tax legislation.

Implementation of FDI is impossible without taking into account the risks. Effective management of risks, connected with FDI, is not risks aversion, but their analysis, comparison of profitability of investments and risks, finding ways to eliminate or reduce risk.

Consider this example of decision-making by “General Motors” company concerning the investments in Egypt. At the end of the twentieth century, Europe had a tendency of increase of currencies value. It became an obstacle to plans of “General Motors” to expand production of cars in Europe. “General Motors” developed a plan for assembling cars in Egypt with the details received in Europe, which helped “General Motors «to overcome “Peugeot”, “Fiat” and “Nissan” in the competition for becoming a major adjustor of cars in Egypt together with Egyptian state-owned company “EL Nasr”. However, the fear of long-term growth of value of European currencies stopped the implementation of this investment plan. Representative of the “General Motors” explained that obstacle in the implementation of the project “turned out exchange rates, which caused a number of risks and problems that are intractable at the moment”. Financial management of “General Motors” did not want the presence of foreign exchange risk in the project. That was the solution. But there is another possible alternative decision – to adapt to risk. The most common way to adapt to the foreign exchange risk is considered the increase of the requirements to the rate of investments negotiability. For example, the company raises the requirements to the negotiability rate, determining the expected rate of negotiability of the investments for international process in 20% versus 10% for relatively safe domestic investments. In this case, the manager can get more bound on the error.

17.2.2. What is nature of risks connected with alternative choice of the ratio of different types of financing investments?

The financing of foreign investments has a number of alternatives. First of all, the financial manager must choose an appropriate mix of financing through obtaining loans and financing through the issuance of new equities. This combination is known as the capital structure. Analysis and choice of capital structure, as other solutions in financial management, is based on the ratio of turnovers and risks.

Using mainly financing through loans with respect to financing through the issuance of new equities is determined by the strategy of “high risk, quick turnover”. The firm, which mainly uses financing through loans, is greater at risk than a firm that uses mainly financing through the issuance of new equities. Unlike shareholders, lenders may lead the firm into bankruptcy if the company does not fulfill the obligations on the loan (interest and debt payments). However, the manager goes to the risk if he hopes that acceleration of turnover is greater than the compensation of increased risk. He also takes into account two circumstances. Firstly, the use of financing through loans reduces shareholders’ investments and thereby increases the rate of turnover of these investments. Secondly, the tax systems of many countries prefer financing through loans rather than by issuing new equities. For example, in the United States all interest costs, that are connected with the business, are not the subject to taxation, while dividends are paid from the income after exclusion of taxes. Tax legislation such as this, significantly reduces the cost of financing through loans.

After the research was carried out and the choice of capital structure was made, financial manager must choose the type of investment through loans and by issuing new equities. Recently, there are many new forms of financing international investments on the financial market. The main ones are:

- long-term investment by issuing new equities of the home country and the host country;

- bond issue by home country, i.e., the parent company;
- issue of Eurobonds and foreign bonds.

Bond issue of home country will dominate when the firm wants its bonds were exchanged for its national currency. In addition, in many countries (e.g. the USA), the legislation allows firms to issue bonds faster and easier than they could do this on foreign markets.

Large and creditworthy international firms have access to the funds on the Eurobond market. Issue of Eurobond has several advantages (see paragraph 11.4.2). Firstly, the company may issue bonds in any major currency and simultaneously in several countries. Secondly, the cost of a bonds issue on the Eurobond market is usually lower than the costs in the same currency on the domestic market. This is due to intense competition between subscribers of Eurobonds and savings associated with large-scale of bonds issues and low credit risk of Eurobonds borrowers.

For financing of international cooperation, firms often use foreign bonds issue. Foreign bonds are issued by foreign borrower on the domestic markets in the currency of that country where they will be sold (see paragraph 11.4.1). Of course, this is the country (and the currency of this country) in which the company plans to expand its production. For example, the Swedish company that produces cars “Volvo”, for some reason, decided to revise production of vehicles creation for the American market in the United States and published the estimates of possible direct investments to the United States. To finance these investments, it could issue bonds on the U.S. market in dollar face value. Issue of foreign bonds provides funds in that currency, which is required to make debt service on these bonds and reduces the foreign exchange risk to minimum.

Factor determining the use of bonds to finance investments of host country is also support from the government of this country who is interested in attracting direct investments.

FDI are partly financed by the issuance of new equities. The equities may be issued in the home country by the parent company, if the company wants to receive funds in the currency of the home country or they can be issued to the market of the host country if the company wants to make the financing of investment in the currency of the country where it conducts its operations.

The investment of international projects is more risky than the similar investment of domestic projects. It has an additional risk – regional risk, i.e. the unfavorable effect of factors that are beyond the control of the foreign subsidiary company and its branch. Of course this risk is associated with changes in policy and the impact of this policy on the operating environment of branch or subsidiary of TNC at the microeconomic level (inflation, imports control, changes in foreign policy, tax legislation, etc.).

Theoretically, the most appropriate way of consideration the elements of risk in the investment budgets and their recoupment is the inclusion of all known indicators of the value and impact of risk through adjustments in cash flows (Ci), i.e. obtaining a deterministic equivalent of cash flows.

The method of inclusion of risk indicators in calculation is illustrated by the following formula:

$$NPV_{de} = -I_0 + \sum_{i=1}^{n} \frac{P_i \times C_i}{(1+K)^i} + \frac{q_n \times T_n}{(1+K)^n}, where\ 0 \leq P_i \leq 1\ \ and\ \ 0 \leq q_n \leq 1$$

(17.3)

where NPV_{de} – deterministic equivalent of net present value;

P_i –factors of deterministic equivalent in year t, applied to the cash flows in the respective years;

q_n– factor of deterministic equivalent, used as a residual or liquid value of investments in year n;

K – the value used for the implementation of capital increase;

Tn – residual or liquid value of investments in year n.

Uncertainty factor (P_i) very often increases as the inclusion in the equation of more and more number of future periods, therefore, $P_t > P_{t-1}$.

The method of deterministic equivalent of net present value is used successfully in situations connected with commercial or credit risks when the result of some forecasted events on the activity of company can be predicted with reasonable certainty.

Changes in exchange rates and inflation rates, which are called “monetary changes” relate to economic risk of potential losses. Evaluation of the economic effects of monetary changes can be carried out because of difficulties of technical and economic expertise only by managers of parent enterprise of TNCs. At the level of subsidiaries in the risk management some financial managers use the analysis of PPI as the final indicator before a final decision on the investment project.

To reduce the risk of unpredictable fluctuations in the value of currencies in which foreign bonds are issued, currency cocktails are used, that is the denomination of any combination of any number of currencies. It may be denominated bonds in units of the average value of currency basket, in SDR and in euro. The major amount of currency cocktails is denominated in euro. So-called indexed bonds also can be used, i.e. the bonds that provide the payment of interests and face value according to the value of goods or any established index. Most of indexed bonds are tied to the value of gold. Also Eurobonds are issued, i.e. the bonds of foreign or domestic companies denominated in foreign currencies, which provide the payments from any indicator of the company’s activity, such as indicator of income or profits.

17.3. How managing political risk is carried out?

Political risk is integrated, the combined interaction of political, economic, social and psychological factors that radically change the economic situation in the country. Companies that do business in foreign countries are more exposed to political risk than domestic companies. Political risk refers to the consequences that arise as a result of future changes in the policy of this or that country, the uncertainty and instability of government policy in relation to the business or investors. Changes in laws and business rules can affect business management that is why the function of international financial management includes evaluation of the degree of influence of political risk on the financial position of the company and the development of methods for its reduction.

Possible changes in policy towards international business and investors may be:

- the implementation of control on accounting of currencies, limiting or blocking the ability of the branch to transfer the profit to its base company;
- the implementation of control over prices;
- changes in currency legislation that prevents the execution of international contracts or repatriation of currency earnings;
- changes in the legal framework that prevents to engage the entrepreneurial activity;
- the amendments to arbitration law;
- expropriation or nationalization;
- government intervention in business or management of the assets in the open form (official regulation, licensing, control over prices) and in hidden form (official circumlocution, soliciting bribes, the difference in payments for infrastructure services, converting currency by discriminatory exchange rates, etc.);
- changes in taxation as corporate profits or income, as well as personal income. Changes in tax laws can have a greater impact on firm value than nationalization and expropriation. And as the probability of tax changes is much higher, they represent the main source of political risk.

Political risk is the most important component of country risk. The magazine «Euromoney» gives the summarized assessment of country risk. It publishes an annual "rating of countries' risk". Overall rating (100%) includes three groups of indicators:

1. ***analytic (50%)***: economic growth (25%) and political risk (25%);
2. ***credit (30%)***: indicators of debt – servicing of debt/export, current accounts/GNP, external debt/GNP (10%); defaults and restructuring of debt (10%); credit rating (10%);
3. ***market (20%)***: access to bank financing (5%); access to short-term financing (5%); access to market of bonds and syndicated loans (5%); forfeiting discount (5%).

Since political risk refers to events that may occur in the future, the exact methods of its measurement do not exist. Subjective and quantitative methods are used.

Subjective methods: 1) visit the country by leaders of company, which is examined ("grand tour" method) and 2) appeal to the advisory firms ("Delphi" method).

Quantitative methods: 1) statistical, based on historical correlations between some measurable variables and subsequent losses due to political risk and 2) conclusions based on socio – political –behavioral theory that takes into account the factors that lead to actions, the results of which are losses because of political risk.

It is impossible to remove or completely control the political risk, but companies can take certain measures, which can reduce the unfavorable influence of political actions on the company. First of all, the company must gain an understanding of the mutual benefit from the investments by the host party (government, citizens). Formal procedure of such understanding is the concession agreement, where the rights and obligations of foreign company are determined. However, it should be borne in mind that the fulfillment of the terms of such agreement is not obligatory for the host country. The strategy of political risk management may be the receipt of insurance policy in any government agency concerning political risk insurance. For example, the U.S. government Overseas Private Investment Corporation (OPIC) on political risks insurance of U.S. companies that deals with foreign direct investments, offers four types of insurance:

1) against the implementation of restrictions on the transfer of monetary assets in dollars from profits of foreign branches and subsidiaries;

2) against expropriation and nationalization;

3) against losses in profits caused by political conflicts and unrests;

4) against loss of property caused as a result of hostilities, social unrests, etc.

The parent company can reduce the impact of political risk, if it is oriented on the market of local creditors in foreign investment activity or through the distribution of its equities among local investors. The agreement on joint activity also reduces political risk. There is possible transmission of solution of disputable issues to the International Centre for Settlement of Investment Disputes that provides the mediation in arbitration, whose decisions become compulsory for members of disputes.

In any case when companies are doing business with sovereign governments, their guiding principles should be the achievement of mutual interest.

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