#### Chapter 1

### GLOBALIZATION OF THE ECONOMY AND MANAGEMENT OF INTERNATIONAL BUSINESS

## 1.1. INTERNATIONALIZATION AND GLOBALIZATION OF THE ECONOMY

Increasing integrity and unification of the modern world, growing interconnection and interdependence between nations and people is a distinct trend that is clearly seen in politics, economy, and in culture, as well as in social sphere. Globalization of the economy is a key part in this process. Increasing globalization of the economy became obvious in late  $20^{\rm th}$  century and in the  $21^{\rm st}$  century it is expected to grow even more. The global market that presently unites remote and historically independent national markets is now saturated with goods and services offered by competing countries and international companies. Many production processes are becoming internationalized and globalized to the point of utter dependence on international cooperation.

It has been repeatedly mentioned in numerous discussions that, in addition to all its positives, the globalization process has negative repercussions, and that there exists extreme disparity in distribution of its costs and benefits between the players, but there is no alternative. As globalization advances, the standards of living and welfare indicators in nearly all those countries improve considerably. No country can afford to stay isolated from the global economy. However, globalization of markets and globalization of production are different aspects of globalization on the whole.

**Globalization of markets** means unification of previously remote and historically independent national markets into a single global market. Theodore Levitt who first introduced this concept described new commercial reality as "the emergence of global markets for standardized consumer products on a previously unimagined scale". This process is encouraged by the fact that consumers' tastes and preferences are gradually growing more similar and the international companies worldwide are offering standardized products. This trend can be clearly illustrated by the world acclaim of *Visa* credit cards, *Coca-Cola* drinks and *McDonald*'s hamburgers.

It would hardly be correct to say that national markets are losing to the global market though. National markets still differ from each other in many important ways: consumers' tastes and preferences, distribution channels, systems of values, business practice and legal framework, etc. This is why it is quite important to make marketing

strategies, product qualities and business procedures correspond to the specific features of the particular country. For instance, *Ford, Nissan, Renault, KIA*, and other car makers are launching their assembly lines and developing and delivering car models geared toward the Russian market with the due consideration for existing local conditions: available petrol types, levels of income, climate, roads, mentality, and cultural values.

In fact, it is not the consumer goods and services markets where tastes and preferences differ significantly enough from country to country to hinder globalization, but the industrial goods and materials markets (B2B) which supply standard and homogenous industrial demands worldwide that are most globalized. Such are the markets for aluminum, oil, wheat, industrial product like microprocessors and *DRAM* (dynamic random-access memory), software markets, and financial assets ranging from U.S. Treasury Bonds to Eurobonds and futures for stock indices or particular currencies.

It is not unusual to see the same companies compete in both global and national markets. Coca-Cola and PepsiCo are global competitors; these two companies go together all over the world, and if one of them enters the national market in a particular country, it is immediately followed by the other. Among other examples are *Ford* and *Toyota*, *Boeing* and *Airbus*. Following each other, these companies bring to newly developed markets a lot of their assets that had served them well in other national markets, including their products and brands, as well as their manufacturing and marketing strategies, thus creating certain continuity in geographically remote markets. Thus, the globalization process unites national markets into single international market. In this sense, in many industries we no longer separate German, American, Brazilian, or Japanese markets; many companies operate in global market only.

**Globalization of production** means that some companies are spreading their manufacturing operations all over the world and are seeking to acquire production factors (labor force, energy, land, or capital) in different regions and to move their production facilities closer to the consumer in attempt to reduce production costs and increase quality and functionality of their product while getting certain competitive advantages.

Modern technologies which are too science-intensive even for larger countries to implement make it necessary to apply international production cooperation globally. For instance, manufacturing of single Boeing-777 jet is based on the cooperation between 13 countries. What's more, a company placing production orders for assemblies, accessories, spare parts and materials abroad, has considerably better chances to get the purchase orders for planes from local airlines, which is also proved by the Russian experience.

Russia and the CIS countries are key players in exercising *Boeing* globalization strategy. Since 1992 *Boeing* has been in close cooperation with Russian aerospace companies and Russian and CIS airlines. At the moment Russian and CIS airlines are operating about 140 airplanes produced by *Boeing* that makes up 80% of all park of West-produced aircrafts in these countries.

Boeing cooperates with the leading aerospace companies of Russia and Ukraine within two large-scale projects—"International Space Station" (ISS) and "Sea Start". In 1993 Boeing opened a Research and Development Center (RDC) in Moscow. Over 600 Russian specialists in civil aviation, IT and space exploration participate in the projects carried out by Boeing RDC. Boeing conducts its research and engineering activities in 6 Russian cities.

In 1998 Boeing launched a design centre (DC) in Moscow. Today it employs about 1000 Russian engineers. The Center has completed 400 aircraft and spacecraft construction elements design projects including the ones for ISS. At the moment about 200 Russian engineers are working in the DC on the new passenger Boeing-787 plane. Another large group of Russian specialists is working on designing the Boeing-747LCF cargo plane that will carry parts of fuselage and wings for the Boeing-787 to Everett, Washington, where the plane will be assembled.

*Boeing* is also taking part in cooperation programs with top Russian research institutions which research new materials for aircraft and spacecraft industries.

VSMPO, Russian titanium producer, has been a partner and titanium products supplier for *Boeing* for 8 years now. At present, more than 25% of all the titanium used in *Boeing* passenger planes production is provided by VSMPO. In 2006 *Boeing* and VSMPO-Avisma announced the formation of a joint venture for machining of titanium forgings for *Boeing* passenger planes. The 50-50-owned venture will be producing titanium parts for Boeing-787 Dreamliner. Also VSMPO-Avisma the will perform rough machining of titanium forgings in Verkhnaya Salda of Sverdlovsk region. Final machining and processing of the forgings will be completed by Boeing's Portland, Ore., fabrication facility and other machining subcontractors..

As a result of this agreement, VSMPO will further develop its capacity for titanium parts production and *Boeing*, in turn, will increase cost-efficiency and reduce the amount of waste related to titanium machining.<sup>3</sup>

Just like in global market, *Boeing* is vying for Russian market with *Airbus*. In 2005, the European Airspace corporation *EADS* that controls *Airbus* acquired a 10% share in the Russian *Irkut* company. The negotiations over foreigners' participation in the capital of this strategically important enterprise took more than a year and the deal had to be approved by Russian president Vladimir Putin. According to the expert, the deal was obviously beneficial for Russian aerospace industry: the sale of shares brought *Irkut* \$65.3 mln in additional investments and secured a participation right in *EADS* new planes production programs.

The cooperation between the two companies started in 2002 when a strategic partnership agreement was signed. At that time *Irkut*, which mainly specialized in producing Su-30 and Su-27 fighters and Be-200 amphibious aircraft, received orders for simple components for A-320 planes. The program of promoting Be-200 into international markets also got a marketing support from *EADS*: joint venture *EADS Irkut Seaplane* was created for this purpose in 2005.

Having acquired *Irkut* shares *EADS* is trying to prepare its joining the United Aircraft Corporation (UAC) which is being created in Russia. The Russian side maintains the integration should be mutual, either through buying large amount of shares (possibly blocking stake) <sup>4</sup> or via share exchange between *EADS* and UAC.

Deeper involvement of Russian companies in *EADS* new *Airbus* planes production programs is also possible. There's a dedicated engineering center in Moscow, and its Russian personnel took part in designing world's biggest airliner A-380. The experience of Russian specialists is applied in designing A-350 assemblies: it is expected that 6 assemblies and components for this plane will be produced in Russia.

On the other hand, *Irkut* and other Russian enterprises will be involved in the new *EADS* projects significantly less than Chinese plane makers. China orders from the Europeans many more planes than Russia which makes it more eligible for production orders. It is a kind of a deal: we buy your planes and you build your plants in our country in return.<sup>5</sup>

Such strategies are not used only by giants like *Boeing* or *Airbus*. Many smaller companies act in a similar fashion by placing production orders for assemblies, parts, etc., abroad to lower production costs.

Traditionally outsourcing (defined as delegating some production or managerial functions to external agents) was limited to the industrial production. Nowadays many companies are utilizing modern informational and communication technologies, especially the Internet, to move their services to countries where labor force is cheaper, thus lowering production costs. For example, in December 2003 *IBM* announced its intent to relocate 4300 software engineers jobs from the U.S. to India and China where software development is categorized as a service. *Microsoft* is also moving some of its branches and jobs into these countries. Overall, many American software companies are relocating their jobs now outside of the U.S. In 2003 about 5% of all informational services for American companies were provided by foreign specialists and it is estimated that in the near future this number will reach 23%. Experts at *Forrester Research* predict that by 2015 3.3M qualified jobs will be relocated outside of the U.S., specifically in the back-office and the IT departments.

In all these examples we can not describe the resulting product as purely American, German or Japanese. Outsourcing leads to what we might call global products. However, as it was with market globalization, we should not overestimate the trend to globalize the production process.

Globalization of markets and goods accompanied by the increased international trade and capital migration implies the presence of foreign competitors in the national markets. This can be observed in the Japanese market where American companies like *Kodak, Procter&Gamble, Merrill Lynch*, etc., are active players. On the other hand, Japanese car makers are pressing on the American giants in the USA. Similar processes are taking place worldwide.

# 1.2. FACTORS PROMOTING GLOBALIZATION OF INTERNATIONAL BUSINESS

Lowering trade barriers made the globalization of the markets and products theoretically possible, but the technological advance made it a reality. Such advances include, first of all, telecommunications breakthrough that created a global audience, and technological advances in the transport sphere that created a global space.

In the late 20<sup>th</sup>—early 21<sup>st</sup> century there are two key factors of globalization: 1) lowering barriers for international trade and foreign investment and 2) technological advances, mainly unprecedented development of IT and communications, computer technologies and transport.

## 1.2.1. LOWERING THE BARRIERS FOR INTERNATIONAL TRADE AND FOREIGN INVESTMENT

The present national economies' integration process is characterized by extraordinary increases in international trade and foreign direct investment (FDI). Liberalization of global trade resulted in considerable reduction in custom duties, lifting of many restric-

tions and quotas, etc. More and more countries are opening the borders to welcome trade and foreign investment.

In 2000 Brazil reduced most of its import fees by 3%. In order to attract FDI into the automobile industry the government also offered significant benefits including those for land rent, using infrastructure, tax privileges, and cheap loans.

In 1994 Mexico joined NAFTA which meant that within 10 years all the duties for industrial products sold by Canada, Mexico and the USA should be abolished. By 1999 65% of all the goods imported from the USA were duty-free in Mexico.

In the 10 years' period since early 1990s China has reduced the average weighted rate of its import duty nearly threefold, from 44% to 15%. After joining the WTO in 2001, the requirement that foreign car makers should localize 40% of their production in China was lifted. The government funded various infrastructure projects in order to attract FDI.

India abolished imported cars licensing in 1991. The average weighted rate of the import duty dropped from 87% in 1991 to 20.3% in 1997. In 2001 the government cancelled car import quotas and allowed foreign companies to make 100% investments in the industry.

To measure the degree of country's integration in the global economy the World Bank uses various statistic tools, like foreign trade volume/GDP ratio which illustrates the economy exposure and the aggregate FDI/GDP ratio (table. 1.1). As we can see, involvement in global economic activities has been increasing significantly: between 1990 and 2000 foreign trade volume/GDP ratio grew from 32 to 40% while aggregate FDI/GDP ratio changed from 2.7% to 8.8%. Increasing exposure of the economy is most obvious in the low-income and middle income countries. High-income countries, on the other hand, have leading positions in foreign direct investment movement.

Cross-countries investment is closely watched by the international community. The United Nations Confederation on Trade and Development (UNCTAD) annually releases its *World Investment Report* dealing with general issues and focusing on one particular investment issue a year in greater detail. Thus, in 2006 the Report concentrated on FDI flows from the developing countries and countries in transition, while in 2005 the main focus of the Report was the transnational corporations and internationalization of the R&D.

Global inflow of foreign direct investment peaked in 2000, reaching \$1.4 trillion. Then it went down, followed by another peak in 2004–2005: in 2005 the FDI inflow reached \$916 bn. This peak reflects an increase in international cross-border mergers and acquisitions, especially between the developed countries. Increased growth rates in a number of developed countries and high economic growth indicators in many developing countries and countries in transition also contributed to this change.

FDI into developed countries in 2005 was \$542 bn which was 37% higher than in 2004, whereas the flow volume into developing countries reached a record level of \$334 bn. The percentage share of developed countries increased somewhat, amounting to 59% of the world volume of the imported FDI. The share of developing countries was 36%, and South European and CIS countries held about 4%.

Table 1.1. Indicators of the economies integration in the global economy

	Trade in goods				Gross private capital flow		Gross foreign direct investment	
	% of GDP		% of goods GDP		% of GDP		% of GDP	
	1990	2000	1990	2000	1990	2000	1990	2000
World total	32.4	40.0	96.2	118.9	10.3	29.1	2.7	8.8
Low income countries	26.7	41.3			3.0	4.8	0.5	1.6
Middle income countries	36.6	53.5	77.3	114.0	7.6	12.0	1.0	3.8
Lower middle income	38.8	52.5	67.1	90.9	5.4	12.8	1.1	3.5
Upper middle income	35.3	54.3	84.5	142.4	8.7	11.4	0.9	4.0
Low & middle income	34.6	51.6	76.3	113.1	6.7	10.9	0.9	3.5
East Asia and Pacific countries	48.8	65.6	84.9	112.6	5.3	13.3	1.5	3.9
Europe and Central Asia	28.7	65.6	53.1	110.3		13.6		3.8
Latin America and the Caribbean	23.2	37.7	68.8	115.2	7.9	10.5	0.9	4.5
Middle East and North Africa	45.4	51.6	80.9	89.7	11.5	7.5	0.9	1.0
South Asia	16.5	24.3			1.4	3.1	0.1	0.6
Sub-Saharan Africa	41.2	56.8	76.1	96.4	5.1	11.0	1.0	1.8
High-income countries	32.0	37.1	100.6	124.4	11.0	33.6	3.0	10.1
Europe EMU	44.9	56.3	112.6	141.9	14.1	49.3	2.9	14,8

Source: World Development Indicators 2002. World Bank. P. 332-334.

As for the global FDI outflow, the developed countries continue to be the main source of such FDI flows. Many of the recipient countries compete for FDI and use different tools to attract the MNC. Some such measures are regulatory and are introduced by legislative acts or international treaties. Others are attached to particular projects and are to be settled by the parties themselves. One of the attraction tools routinely used by the CIS countries in the 1990s was selling national assets to foreign companies at a very low price. At the same time, investment export by the developing countries has risen considerably, with Hong Kong (China) at the lead with \$33 bn. So, the role of developing countries and countries in transition as a FDI source is also increasing.

Cross-border (foreign) mergers and acquisitions, especially those where participating companies came from developed countries have also contributed to the recent FDI growth. The amount of cross-border mergers and acquisitions in terms of value rose 88% as compared to 2004 and reached \$716 bn. A new feature of the recent mergers and

acquisitions boom is an increase of investments placed by the joint investment funds, specifically, by direct investment funds.

#### 1.2.2. THE ROLE OF TECHNOLOGICAL ADVANCE

Lowering of trade barriers made the globalization of markets and production theoretically possible. Technological advance transformed it into a reality.

Information and communication technologies. The key innovation was, perhaps, the invention of a microprocessor which caused an explosion in the production of inexpensive high-performance computing equipment, considerably increasing the amount of information that could be processed by people and companies. A microprocessor is also a key element in many communication technologies. Satellite communications, optical fiber, wireless technologies and now the Internet caused a literal revolution in global communications in the past 30 years. These technologies use microprocessors to code, transmit and decode huge amounts of information being passed through electronic channels.

The cost of microprocessors is lowering further whereas their performance is increasing. This phenomenon is known as the Moore's law. In 1964 (6 years after the integrating circuit was invented) Gordon Moore, one of the *Intel* founders, supposed that the number of transistors per integrated circuit would double every 2 years. He drew a chart showing memory chips performance increase and noticed that new microchips were developed in approximately equal periods of 18–24 months after the previous model appeared, and their capacity nearly doubled each time. If this trends continues, Moore concluded, computing capacity will grow exponentially in a relatively short period of time.

This caused a sharp drop in international communications cost, leading to a decrease in coordination and managerial expense in global structures.

Another clear sign of globalization is rapid spread of the Internet. Number of Internet users, Internet hubs and protected servers is of great importance for estimating countries' involvement in the world processes and for calculating globalization indexes like those jointly published annually by *A. T. Kearney* and Foreign Policy magazine.<sup>7</sup>

In 1990 there were less than 1M Internet users in the world. In 1995 this number was 50M, in 2004—about 945M. The number of Internet users in 2008 is expected to be more than 1.47 bn, i.e. nearly 25% of the world population.

The Internet and the information and communication technologies on the whole (ICTs) provide huge potential for economic development. ICTs also promote innovations and increase labor efficiency. They help reduce transaction costs and provide access to the whole range of the global knowledge in mere seconds. The use of ICTs in the developing countries can have a striking effect in terms of increasing the employment and improving the standard of living.

An increasing number of companies get connected to the Internet. They use the ICTs to automate their internal operations (i. e. office and manufacturing processes), to work with their customers, to improve their maintenance supply or to manage their distribution and logistic networks. Internet usage may range from creating

a simple website to full integration of all business processes. The ICTs completely change such traditional commercial activities as marketing, selling and purchasing goods, controlling the production and inventories, funding, and human resource management.

Booming ICT-employing trade development provided new possibilities to small and medium-sized companies that are getting increasingly involved in international business. Today a well-designed website may help any company regardless of its size expand its business to cover the market sector completely, reaching consumers all over the world without the necessity of being physically presented in every particular country. ICTs and particularly the Internet, offer small companies a number of ways to reduce their costs and compete with bigger companies.

*Transport technologies*. Transportation technologies have also experienced major changes, namely employing jets and supercargo ships, as well as container services.

Container services reduced transportation costs. Between 1920 and 1990 ocean ship charter costs and harbor fees decreased on average from \$95 to \$29 per ton (in 1990 prices). Railway transportation costs in the U.S. dropped from 3.04 cents per ton in 1985 to 2.3 cents in 2000 largely due to containerization. An increasing share of cargo is delivered by air. Between 1955 and 1999 the transportation costs of 1 ton of cargo per 1 kilometer reduced by 80%.

Similarly, communication costs dropped sharply. Between 1930 and 1990 the cost of a 3-minute phone call from London to New York fell from \$244.65 to \$3.32. By the late 1990s the consumer rates dropped to 36 cents, and lower rates are available for companies and organizations (figure 1.1).

Reduction in transportation and communication costs (so-called "death of distances") rationalizes the integration of operations scattered all over the globe, together with worldwide delivery of goods and components intended to increase efficiency.

The results of the revolutionary ICT changes account for the fact that the globalization process in the financial sphere occurs most rapidly, because effects of these changes here are more pronounced than in trade. Computer technologies, electronic accounts and credit cards systems, satellite and optical communications make it possible to move financial data, make deals, and transfer money between bank accounts regardless of the distance and state borders. This led to a sharp fall in transaction costs and became an important factor in the establishment of global financial markets.

The number of international financial operations with daily turnover of tens of trillions of dollars keeps on increasing. The currency markets are developing rapidly. A daily volume of currency operations in the world exceeds \$1 trillion, with less than 10% of these operations being directly associated with international trade of goods and services.

As of 2006, financial assets of the entire world amounted to \$140 trillion: \$44 trillion in shares value, \$38 trillion in bank deposits, \$35 trillion in private debt and \$23 trillion in government debt. Global financial assets exceeded world GDP by a factor of 3.16. In 1995, this indicator known as global financial depth amounted to 2 while in 1980 world's financial assets and GDP were equal. In the USA, the country with the most developed financial markets, the assets/GDP ratio is 4.05, in Europe it's 3.03. It is estimated that by 2010 world financial assets will reach \$214 trillion, which is 3.4 times the world GDP.