

***Financial and Banking Services Market***

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**GLOBAL FINANCIAL IMBALANCES
AND THEIR MACROECONOMIC
CONSEQUENCES****Abstract**

In this paper authors explicated the essence of global financial imbalances, assessed their level and implications for global financial stability and disclosed the causes that led them to reach the hypertrophied level under current conditions. Researchers focused on investigating the nature of the first global economic crisis of 2007–2009, as well as the causes of the chain reaction in its spread to the sectoral and territorial dimensions of the world economy. It was proved that financial globalism creates structural conditions for accumulation of financial imbalances in the world economy, due to the fact that macroeconomic policy of nations is unable to resist against them, but only adapt to fluctuations in global financial conditions set by the world financial centers.

Key words:

Economic globalization, financial globalism, global capital, global financial imbalances, global financial market, foreign exchange reserves, external de-

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mand, external commitments, balance of payments, global financial interdependence, derivatives.

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At the beginning of the XXI century, as evidenced by the reality of the economic well-being, transformational processes in the world economy have accelerated substantially and have become systemic, the result being the formation of the global pattern of economic development. Integrating the structural elements of the international economic system this pattern contributes to its being a single whole based on deeper internationalization of production and exchange, an increase in the number of levels reached in transnationalisation and integration of national economies, modernization of the technological basis of the present-day market economy, the emergence of universal standards of economic activities and the formation of global management institutions.

However economic globalism has a contradictory and asymmetric nature, and its benefits and threats are distributed extremely unevenly both among different countries and among sectors of economy, which shows its inability to ensure a long-term economic equilibrium on a world scale. Thus, financial globalism, as a key element of economic globalization connected with the processes of internationalization of various countries' national financial systems and the development of economic relations arising from accumulating, using and appropriating financial resources beyond the national borders, has acquired a larger scale and much more varied forms compared to globalization processes in the real economy. This is explained in the first place by multinational corporations and banks expanding their investment and lending activities and in fact this leads to the formation of a single global financial market, with different countries' national financial systems ever deeper integrating into it, it also leads to the liberalization of foreign exchange, investment and credit markets, easier access of different states to global financial resources, the diversification of mechanisms underlying the concentration of investment resources and synchronization of financial crises.

The dynamism of financial globalization and the rapid growth in the degree of financial interdependence experienced by national economies of various countries is evidenced, in particular, by such an indicator as the ratio of the total amount of accumulated foreign capital to the world GDP: though in the period between 1870 and 1914, according to M. Obsfeld and A. Taylor, it increased from 7 to 20%, and between 1945 to 1980 – from 5 to 18%, the beginning of the XXI century saw the level of 62% [10]. A considerable growth is also observed in the volume of the countries' total cross border financial flow – foreign direct investment, investment into shares and debt instruments, cross border loans and deposits. In the last two decades their value has increased at the rate which is at

least 2.5 times as high as the total GDP growth rate. As a result in 2007 the volume of the world cross border financial flow, according to «McKinsey Global Institute,» reached \$11.2 trn (or 20.5% of the global GDP), whereas in 2006 it amounted to \$ 9.4 trn (18.5%), in 2005 –to \$ 8.4 trn (17.7%), in 2000 – to \$5.8 trn (16.1%), in 1995 –to \$ 1.6 trn (6%) and in 1990 – only to \$ 1.1 trn (5.2%) [9]. Only in 2004 – 2007 the value of foreign investment in the world almost tripled, the value of portfolio investment grew 5.5 times in the last decade, the capitalization of the world stock market in relation to the global GDP has grown almost 10 times in the last twenty years and now exceeds 100%, and the annual value of international bank lending, according to the forecasts of respected experts, will reach \$ 21trn in 2015 [1; 26].

At the same time unbiased analysis gives us reasons to believe that financial globalism is not a homogeneous and all-embracing process. Thus, on the one hand due to it the world economy functions as a single entity, on the other hand it increases the asymmetry in the regional and structural and functional distribution of the global capital. This happens because the latter, seeking the spheres of its most profitable investment, leads to high turbulence of international financial flow, creates the preconditions for an undulating inflow of capital to certain countries and its unexpected outflow, causing in such a way dramatic crises in the economy of certain countries and regions of the world. Moreover, financial globalization stimulates the processes of excessive concentration of the global capital in a small group of post- industrial countries and creates a kind of «financial colonialism» of less developed countries which, through the mechanism of external financing of their national economies and liberalization of their domestic financial markets face quite a real threat of losing their economic and political sovereignty because of heavy indebtedness or other types of financial dependence, financial subordination to developed countries and reducing their humanitarian values to mercantile ones.

What is more, the sphere of finance, as the most dynamic link of social reproduction, at the globalization stage of the world economic development shows its ever growing self-sufficiency and independence of the macroeconomic policies of various countries of the world as a regulatory mechanism of influence. Determining the parameters of the global financial aggregates by itself it ensures its own extra profits and stimulates the accumulation of financial imbalances in the world economy, which no national, regional or global institutional systems can cope with.

The proof of this are recurring local financial crises (the European currency crisis of 1992-1993, the Mexican financial crisis of 1994, the aggravation of financial problems in South- East Asia in 1997, in Russia and Brazil in 1998, in Argentina and Turkey in 2001, the American mortgage crisis of 2007) which, despite the efforts of the financial management institutions at different levels do not only «catch fire» at one or another place in the world but also spread over whole regions and sometimes even turn into world financial turmoil.

To some extent all this transforms the conventional theoretical ideas concerning the parameters of macroeconomic equilibrium of countries, economic efficiency and competition and poses a threat of deforming national reproduction processes and increases the vulnerability of national financial systems to exogenous factors of the global competitive environment, the reasons being a considerable reduction of different countries' possibilities connected with pursuing their independent monetary policy and regulating their national financial markets.

In this connection it should be mentioned that both foreign and our national experts in economic globalization consider the essence of economic imbalances in both their broad and narrow meaning. In their narrow meaning they are usually understood as temporary disequilibrium of certain countries' balance of payments caused by the cyclical nature characterizing the development of their national economies and explaining the gap in the value of the capital raised and capital invested. On the basis of such understanding of the essence of financial imbalances the object of our analysis is the balance of payments on countries' current account, i.e. the value of the net foreign investment in the country (in the situation of the balance of payments deficit) or the net investment of the country abroad (in the situation of the balance of payments surplus).

In accordance with such methodological approach of B. Algieri and T. Bracke, G. Debelle and G. Galati, S. Edwards, C. Freund and A. Warnock, L. Komarek, Z. Komarkova and M. Melecky¹ and some others, the key reason for the global financial imbalances is the difference in the volume of the capital raised and capital invested by different countries, which is directly related to the rates of their macroeconomic growth. The point is that different dynamics characterizing different countries' economic development brings about the asymmetry in the volumes of the financial assets which their financial systems are able to accumulate for servicing real investment processes. According to this theoretical view, the accumulation of the balance of payments deficit of different countries and financial imbalances connected with it are not regarded as a serious structural problem of the global economy because, as the world experience shows us, in the last few decades they have been adjusted with the help of the public

¹ In details see: Algieri B., Bracke T. Patterns of Current Account Adjustment. Insights From Past Experience // Working Paper Series No 762, June 2007. – European Central Bank. – 54 p.; Debelle G., Galati G. Current Account Adjustment and Capital Flows // BIS Working Papers № 169, 2005. – P. 3-28; Edwards S. On Current Account Surpluses and the Correction of Global Imbalances, presented at Tenth Annual Conference of the Central Bank of Chile on Current Account and External Financing, Central Bank of Chile, September 2006; Freund C. Current Account Adjustment in Industrialized Countries // Journal of International Money and Finance, 2005. – Vol. 24. – №8. – P. 1278–1298; Freund C., Warnock A. Current Account Deficit in Industrial Countries: The Bigger They Are, The Harder They Fall, 2006 – The University of Chicago Press, Chicago; Komarek L., Komarkova Z., Melecky M. Current Account Reversal and Growth: The Direct Effect Eastern Europe 1923-2000 // Warwick Economic Research Paper 2005. – No 736; Komarek L., Melecky M. Currency Crises, Current Account Reversals and Growth: The Compounded Effect for Emerging Markets // Warwick Economic Research Paper, 2005. – No 735.

anti-cyclical regulation, in particular: the monetary policy, the budgetary, taxation and investment and structural policies.

Thus, a summary of foreign experience in the public regulation of certain countries' temporary balance of payments disequilibrium can be found, in particular, in the paper of the European Central Bank experts B Algieri and T. Bracke «Patterns of Current Account Adjustment»[7]. The system of mechanisms for adjusting the balance of payments was aggregated into three groups of levers: the first group included internal adjustment tools (internal adjustment is the reduction in the domestic demand without any change of the interest rate); the second group included external adjustment tools (external adjustment is the reduction of the interest rate without any changes in the dynamics of the GDP growth and the growth of the domestic demand); the third group included mixed adjustment tools (mixed adjustment is a combination of restrictions on economic growth and a reduction of the interest rate) (table1). On the basis of studying 71 situations when some measures for adjusting the balance of payments were taken the authors have come to the conclusion that the highest efficiency from the viewpoint of their influence on the macroeconomic behaviour (the current account; the domestic demand; the level of consumer prices and prices of assets; the level of public spending and the external position of countries) was demonstrated by the internal adjustment tools which were most often resorted to in the course of the period considered both by advanced countries and countries with emerging markets.

Table 1

The number of situations of adjusting the balance of payments in countries belonging to different groups in 1970–2006

A group of countries	1970-ti	1980-ti	1990-ti	2000-ti	The total number of situations			
					In total	including		
						internal adjustment	external adjustment	Mixed adjustment
The «Great Seven» countries»	3	7	3	1	14	6	3	5
Other developed countries	6	13	9	0	28	17	6	5
Countries with emerging markets	1	6	16	6	29	13	8	8
In total	10	26	28	7	71	36	17	18

Source: Algieri B., Bracke T. Patterns of Current Account Adjustment. Insights From Past Experience // Working Paper Series No 762, June 2007. – European Central Bank. – P. 17.

Such a narrow approach to understanding the essence of financial imbalances nowadays has essential methodological weaknesses. It is well known that in the epoch of globalization the cyclical character of the national economic development is becoming synchronic as a result of increased transnationalization of different countries' national economies, their growing interdependence, the internationalization of countries' financial systems, cyclical changes in technological ways, etc. Under these conditions, seeking the most profitable spheres of investment, the global capital to some extent loses its ability to be moved quickly between different sectors and territories of the world economy. That is why the concept of global imbalances itself requires reconsidering in modern terms, from the viewpoint of their essence, the analysis of reasons leading to the corresponding malfunction of the world financial system, as well as assessing their importance and consequences for the global financial stability.

As regards understanding the essence of financial imbalances they must be considered in their broad meaning, as the result of deep transformations of the world economy connected with the rapid increase of the gap between the physical contents of the gross global product and the form of expressing its value by separating the process of companies' capitalization from the real basis of social and economic progress – the growth in the productivity of social labour, increasing asymmetry between the volume of financial services and real production, deepening disproportions between production and speculative accumulation of capital, lack of effective tools for regulating national financial markets and increasing asymmetry in allocating international financial flow between branches and territories, in the world allocation of savings and investment, debt and credit.

It is these factors that in the conditions of liberalization of processes connected with movement of capital between countries and regions create the structural prerequisites for the reproduction and accumulation of global financial imbalances in the world economy. It happens so because whereas in the conditions of a closed economy the only source of accumulating capital in the country are its domestic savings, an open economic system increases considerably the range of available financial resources by including foreign investment which is the result of savings made by foreign individuals and entities. At the same time in the conditions of an open economy domestic savings of a certain country may not serve as a real source of financing national accumulation but may be used for financing other countries' economies in the form of the flight of capital, the formation of gold reserves, repaying external debt, transforming savings into foreign currency in the form of cash, etc.

As a result the mechanism of transforming savings into investment undergoes important modifications when the total amount of domestic savings can exceed greatly or, the other way round, be much smaller than the total amount of investment within the national economy. In this connection we can fully support the idea of the respected American economist, Governor of the Federal Reserve System of the USA B. Bernanke who asserts that an important catalyst of processes leading to the disequilibrium of the world financial system and the current financial crisis was rapid accumulation of savings in Asian and oil extracting

countries starting from the end of the 1990-ies, which became the cause of creating a surplus of savings in these countries in the situation when the exchange rate of the national currency (as a key instrument of implementing the pattern of export-oriented economic growth) was artificially reduced. These savings were directed to the USA and used mainly for financing this country's huge current account deficit gradually exacerbating the structural weaknesses in its national economy and creating the conditions for the permanent growth of consumption on the part of numerous representatives of the American society, which later turned into a kind of «consumer fetishism». This, in particular, is proved by the fact that in the current decade consumer spending has accounted for about 2/3 of the US GDP, and the continuous growth of its value in the last thirty years has been the source of the increment of the GDP, the income of the population and the country's budget.

This was the way of forming a self-supporting regime of the global capital circulation in the world economy which is quite opposite to the pattern of its redistribution in the late XIX-th – early XX-th centuries: whereas a hundred years ago the problem of surplus capital in developed countries was solved chiefly through moving it to less developed countries, nowadays developing countries have become the main centres of its accumulation while the leading countries are its main consumers.

A similar situation caused by «the global savings glut» is aptly described by B. Bernanke as «the savings paradox» and characterized as destructive and the one which does not contribute to achieving an optimal level of liquidity in the world savings market and leads to unreasonably low interest rates for the international borrowed capital². However, by saying this the scholar to some extent attempts to disguise the decisive role the USA played in bringing about the disequilibrium of the world financial system, the weaknesses in the US economic policies and its unprecedented monetary expansionism, blaming other countries for generating global financial imbalances.

Moreover, a number of foreign scholars even argue that global financial imbalances are directly provoked by peripheral countries. The generalization of such assumptions and conclusions can be found, in particular, in the work of G. Soros «The Crisis of the World Capitalism» (1999), who asserts that capitalism as a huge system of circulating financial resources, which are «absorbed « in the centre and «pushed out» in the periphery, can suffer from considerable imbalances in the situation when less developed countries attempt to restrict the movement of money to the centre turning off «the valves» and preventing it from moving out [5]. As a means for adjusting imbalances the famous financier suggests creating a mechanism of guaranteed loans for peripheral countries with the aim of using available financial resources for granting them at acceptable

² In details see: Bernanke B. The Global Saving Glut and the U.S. Current Account Deficit / Remarks at the Sandridge Lecture, Virginia Association of Economics. – Richmond, Virginia, 2005. – <http://www.federalreserve.gov/boarddocs/speeches/2005/200503102/default.htm>.

prices in sufficient volumes, which in its essence will mean «fair» repayment of their national savings. Institutionally such a system is to be supported by the global central bank which is supposed to perform the functions of reallocation on a world scale. Such a bank, according to the idea of G. Soros, is to become the foundation for transforming savings into investment both in the world economy as a whole and within national economies, which will ensure the stability of the world monetary and financial system and prevent it from experiencing chronic imbalances.

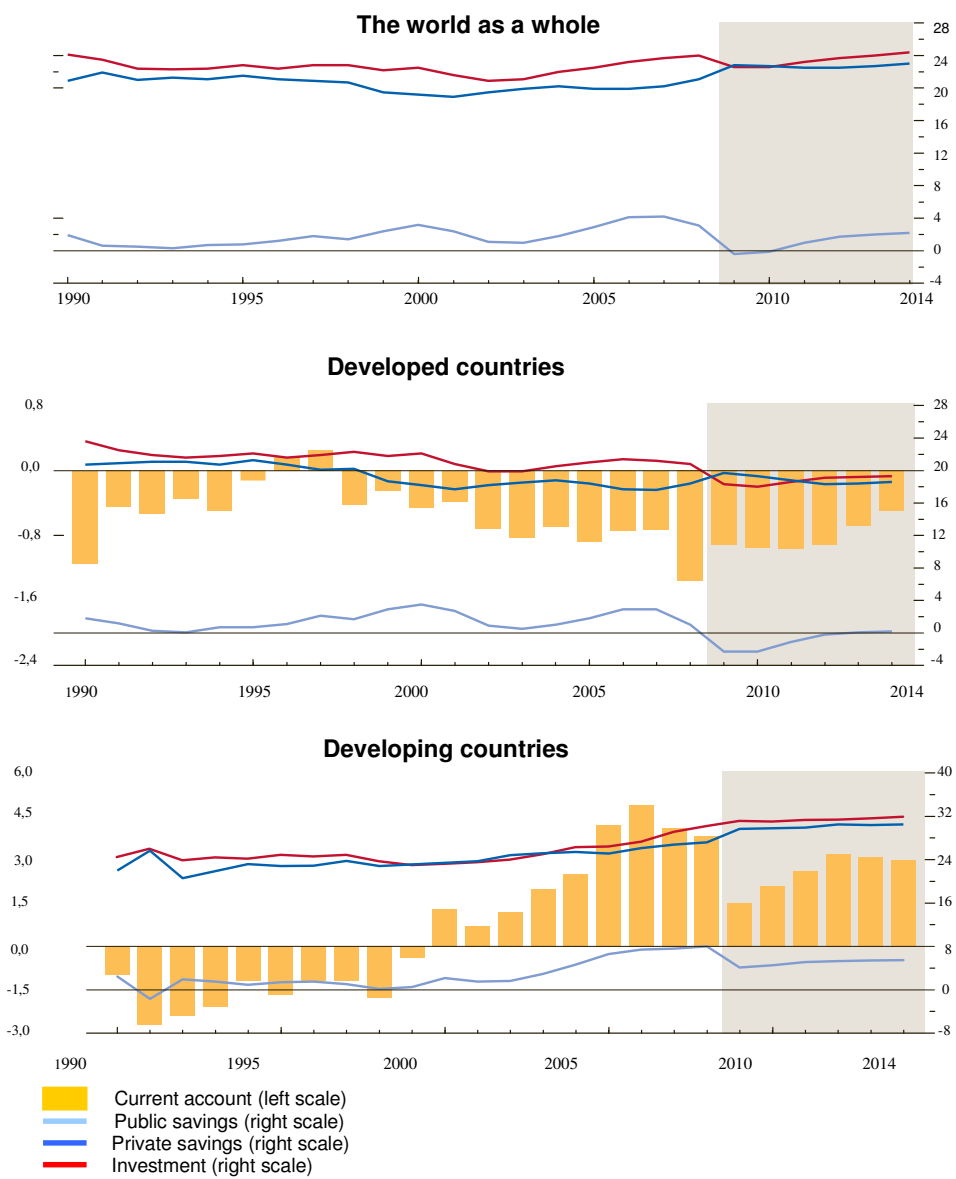
Nevertheless, the concept of the location of international financial flow for explaining global financial imbalances cannot be restricted to one or a few countries, e.g. the USA, China or other states or their groups because, as the world financial statistics show, the general falling trend describing the behaviour of savings characterizes all developed countries of the world, and the tendency of their growth is only characteristic of developing countries, and has been since the 1970-ies (fig. 1).

Given all this, starting from the year 2000 the global financial imbalances, as the excess of investment over savings and lack of the latter in industrially developed countries and, correspondingly, the accumulation of savings and their falling short of investment in developing countries, present a steady tendency for becoming more prominent. This situation, at the same time, causes instability of countries' current account balance: in developed countries these indicators are negative and in developing countries they are positive.

All this makes it quite evident that adjusting global financial imbalances is a complex and systemic task which cannot be solved within only one country (e.g. the USA) or a limited group of countries, as it is concerned with multinational financial imbalances. This is once more evidenced by different directions characterizing the tendencies concerning the dynamics of investment and savings in the countries that rapidly develop their national markets – on the one hand, Asian states (the Republic of Korea, Hong Kong, Singapore, Taiwan, Indonesia, Malaysia, Thailand, the Philippines), as it was mentioned above, maintain a surplus of their current account, on the other hand, – in such post-socialist countries as Hungary, Poland, Slovakia, the Czech Republic, Albania, Bulgaria, Macedonia, Rumania, Croatia, Latvia, Lithuania, Estonia one has been able to observe the current account deficit for rather a long time due to the intensive growth of investment in the region, mainly in the low-income countries.

Figure 1.

Global savings, investment and the current account
 (in % of the world GDP)



Source: World Economic Outlook. Crisis and Recovery. April 2009. – IMF, 2009. – P. 31.

A number of experts³ believe that this situation is connected with financial liberalization in these countries, the fact that a lot of them have joined the EU, as a result the access to foreign investment has been facilitated and the conditions of attracting it and investing it efficiently have become more favourable, some barriers for foreign banks' presence have been removed, and the process of integration into the EU has improved the prospects of maintaining and strengthening economic and political stability, which was another incentive for the inflow of foreign capital. At the same time in Asian countries, which are developing rapidly, the current account surplus is ensured chiefly by a lower degree of liberalization of financial markets and capital transactions, a considerable share of public ownership in the economic system of the society, a low national currency exchange rate and a large share of young people in their population.

This approach to analyzing the reasons for global financial imbalances corresponds to the conclusions made by E. Mendoza, V. Quadrini and J.-V. Rios-Rull who prove in their paper «Financial Integration, Financial Deepness and Global Imbalances»⁴ that the more developed and deeper the country's financial market is, provided there are no restrictions on the movement of capital, the larger is the scale of its long-term foreign commitments, the more its intermediaries are inclined to expose themselves to high risk investing their cash into assets that carry a high degree of risk and attracting foreign capital investment into debt instruments of national issuers. As a result the target function of the financial sector of such a country is reduced mainly to redistributing financial assets and risks, which leads to the reduction of the level of savings in the country. Therefore the country is characterized by a low level of savings and high current consumption, which, with high return on capital employed, becomes the reason for the growth of its payment deficit and net external commitments.

An example of such a country is the USA where in the last few years there has been a sharp reduction of national savings caused by the deterioration of the public finance balance and the accumulation of wealth in the form of housing and real estate by American citizens. According to the data provided by the experts of the International Monetary Fund, savings in the USA have been falling dramatically since the late 1990-ies intensifying in such a way the long-term tendency of national recession – first caused by the fall in private savings and starting from 2000 – as a result of switching over from the budget surplus to a con-

³ In details see: Abiad Abdul G., Tressel Thierry, Detragiache Enrica. A New Database of Financial Reforms. IMF Working Papers, Vol. – Washington: International Monetary Fund, 2008. – P. 1–28; Herrmann Sabine, Winkler Adalbert. Real Convergence, Financial Markets, and the Current Account – Emerging Europe versus Emerging Asia. ECB Occasional Paper No. 88. – Frankfurt am Main: European Central Bank, 2008. – 38 p.; Dubravko M. The Role of Housing Markets and Foreign-Owned Banks in the Credit Expansion in Central and Eastern Europe / in Rapid Credit Growth in Central and Eastern Europe: Endless Boom or Early Warning? ed. by Inci Otker and Charles Enoch. – Washington: International Monetary Fund, 2007. – P. 56–98.

⁴ In details see: Mendoza E., Quadrini V., Rios-Rull J.-V. Financial Integration, Financial Deepness and Global Imbalances. – June 20, 2007. – 46 p.

siderable deficit. Thus, whereas in mid 1980-ies American households saved about 7-9% of their current income, by 2007 their savings rate had hit the lowest point in the history – 0.4% of the total income (in 2002 – 2.4%). The corporate sector savings only partially compensated for this dramatic fall, as a result the share of gross national savings in the GDP fell from 16.6% in 1992–2000 to 13.8% in 2002–2007 [3; 77].

It is apparent that a lack of their own financial resources led to the necessity of raising the needed amount abroad. For example, the annual amount of capital borrowed by the USA have recently been estimated by experts as almost \$1trn, which is the evidence of a much higher demand for American assets compared to the demand for assets in other countries and the modification of traditional ideas concerning the parameters of countries' macroeconomic stability and the processes of their adaptation to the global financial situation. As it is known, in the case of considerable accumulation of foreign assets and commitments of countries the exchange rate is no longer an instrument of exogenous adjustment of their national economies to the conditions of the global environment, since its fluctuations depend more and more on the stability of the international position of a certain country and the prospects of investment transactions in its national currency.

In contrast to such a country, states with a low level of the financial market development occupy the opposite position increasing the scale of capital saving and the volume of net external assets, reducing current consumption, which leads to the payment surplus and the accumulation of substantial currency reserves. Such countries are first of all Asian states which after the financial crisis of 1997-1998 began to accumulate foreign currency reserves rapidly to hedge themselves against an unexpected outflow of capital from their national economies as was the case in 1997. Thus, whereas in 1965 the value of the world currency reserves was only 0.1trn SDR, and in 1998-0.5 trn correspondingly, at the beginning of 2009, according to the IMF data, it reached \$ 6.9 trn [8]. It should be mentioned that nearly 60% of these reserves are now concentrated in China, Russia, Taiwan, India, the Republic of Korea, Singapore, Hong Kong and Malaysia.

Assessing the effect of such rapid accumulation of currency reserves in Asian economies on the world equilibrium one should mention that nowadays their value already greatly exceeds all permissible limits. In particular, if we use the standards established by the Bank of International Settlement (according to which the adequate value of a country's currency reserves must either equal the sum of its short-term debt, or fluctuate within 5–20% of money aggregate M 2, or equal the value of the country's import for 3–4 months) the value of currency reserves held by China exceeds the admissible standard by nearly 12 times, Taiwan exceeds this standard by 6 times, Russia and India-by 4 times, Korea and Malaysia-by 3 times [11]. It must be mentioned that among the negative aspects of such excessive accumulation of currency reserves in Asian countries there are some threats to their macroeconomic stability. They are: the reduction of the state budget receipts, the increase of interest rates, rapid growth of money ag-

gregates and domestic lending, excessive liquidity of the banking system and its loss of sensitivity to the instruments of monetary regulation and some others. Besides, the current tendencies characterising the development of a number of Asian economies show us that further accumulation of currency reserves is not only economically ineffective but already results in direct losses in the form of continuous reduction of the consumption fund, loss of both labour incentives for the population and the orientation of national reproduction processes of these countries to external markets.

A vivid example which proves the above-mentioned thesis is the Chinese economy where the processes of accumulating investment capital are subordinated to the purpose of achieving high rates of economic growth. And since the formation of investment resources requires ever larger accumulation of capital by means of reducing the consumption fund it leads to the deterioration of the people's attitude to labour, and the importance of export activities of the country grows out of proportion. To add to this, excessive dependence of China's national reproduction process on the situation in the world market does not only contribute to the difficulties of pursuing a balanced monetary policy in this country but is a threat to global financial stability taking into account the scale of China's national economic complex and its growing influence on the world economy.

In total this leads to reproduction and development of global financial imbalances which even countries' central banks and state bodies of monetary regulation cannot cope with. A good example of this is the USA Federal Reserve System which, after the Jamaica monetary system, when the dependence of the dollar on gold was cancelled, received the monopoly for issuing this monetary unit without any control. Thus, the supply of the dollar in the world has grown dozens of times, exceeding hugely the US GDP, which is supposed to regulate the interrelation between real production and its expression in terms of value. It is the dollar that has been and still remains the main currency of settlement in international trade, which enables the USA to obtain huge income from their «seigniorage». Due to issuing uncovered monetary units the American government, as well as physical and legal persons of this country, were given the opportunity of buying goods and services practically in any country of the world. However the dollar, in connection with the high degree of «dollarisation» observed in the world economy, besides performing traditional functions of money has become a usual commodity, which has «driven» the USA into a trap, and it is not an easy task to get out of it.

Moreover, in the situation when all restrictions on free movement of capital on a global scale are being removed and Asian countries are becoming new players on the world financial arena the FRS is gradually losing its effective instruments of combating unlimited expansion of money supply. It is evident that a huge money supply not connected with servicing the flow of goods, resources and real assets was immediately directed into the financial sector, which is evidenced, in particular, by the fact that in the last decade the share of investment in financial assets has grown to 80% of the total investment capital raised by advanced countries of the world. This deep structural shift was caused by the rap-

idly growing difference in the rates of cost efficiency of financial transactions and the performance of the real sector of economy: whereas the return on production assets accounts for 12–15%, the return on financial assets reaches 60–80% and with some transactions – even 100%.

In their turn low interest rates that accompanied money issue did not contribute to the increase in prices of goods and services, but in combination with the processes of securitisation of assets and enlargement of derivative markets accelerated the growth of the value of financial assets. In this situation the stimulation of the national financial market and solving problems of financing their payment deficit by means of increasing the supply of uncovered money is becoming a more and more challenging task for the FRS. Attempting to disguise the negative consequences of these processes the US Federal Reserve System even suspended the publication of money aggregate M3, which is a systemic indicator for assessing the number of dollars in circulation.

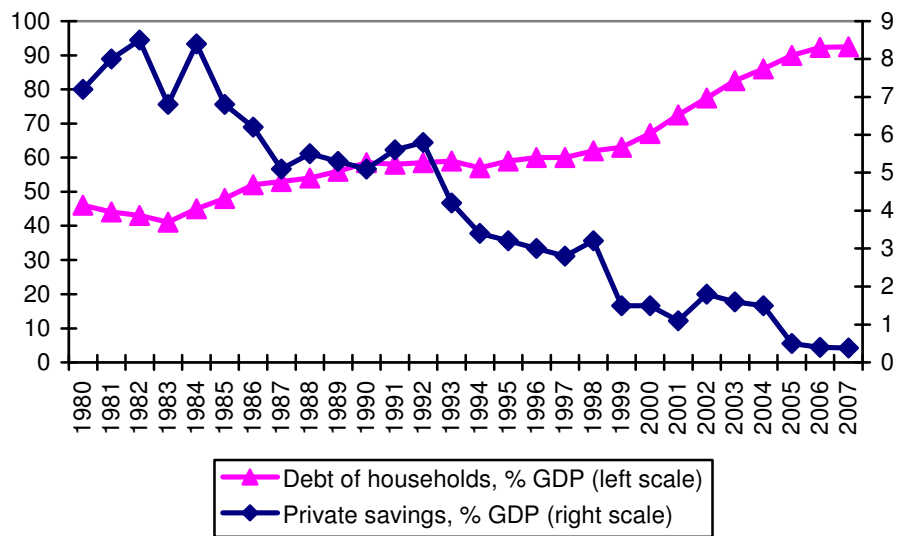
The quickest reaction to this situation came from the mortgage market which, together with the foreign exchange and the stock market, actively joined the process of «absorbing» surplus currency liquidity in the 1990-ies. The reduction of the interest rate to 1% in 2003 caused the outflow of capital from the sphere of production accumulation to the sphere of consumption, enabling American banks to «pump» money into the economy within a short term by willingly granting people mortgage loans for building housing. Given the lower quality of loans, it led to the fast growth of the US mortgage market capitalisation (75% of the GDP at the beginning of 2006) and unprecedented increase of public and private debts, their total value, according to «Independent Strategy», approximately 52 times exceeding the volume of the money base [4].

It is mortgage loans that have provided the basis of the US economic development in the last few years. This is, in particular, proved by the fact that by introducing home equity extraction into circulation American households received over \$ 51bn a year on average, whereas in 1993–2001 this indicator did not exceed \$ 5.8 bn [3; 78]. This enabled American households, in spite of extremely low rates of labour remuneration growth, to maintain steadily high rates of consumption, which finally led to a fast growth of their loan debts (fig. 2). What is more, Americans received the possibility of enlarging their loan commitments at higher rates compared to the rates of growth of the US GDP, and another impulse to a further increase in the scale of lending was produced by the appearance (in the period of 1998 – 2001) of the «bubble» connected with a sharp increase of the quantity and later bankruptcy of high technology Internet companies, so-called «dot coms».

As a result the share of direct expenses aimed at servicing mortgage and consumer loans in the total income of American households nowadays accounts for about 14.5%, and with account for real estate taxes and rent and insurance commitments these payments account for 20%. Besides, according to the analysis of the Centre of Housing Policy, in 1997–2005 the number of households spending over 50% of their income on housing increased from 2.4 m to 4.5 m, i.e. by 88% [2].

Figure 2.

Dynamics of savings and debts of American households in 1980–2007



Source: designed by the author on the basis of the data of US Bureau of Economic Analysis, US Department of Commerce // <http://www.bea.gov>.

In the situation of a sharp increase of the interest rate in 2006 the borrowers appeared unable to service their debts, consequently there followed a dramatic plunge of real estate prices, destabilization of the US banking system, a huge liquidity deficit and the default of lending and investment companies. Thus, in 2006 over 100 American companies wound up their lending and investment schemes in housing construction; in 2007 the total losses of banking and financial institutions reached \$300 bn [1; 27–28], and at the beginning of 2009 – \$1.2 trn. This dealt a blow to the US stock market, and through it caused a large-scale crisis of the world financial system and the collapse of stock markets in the whole world. Only in the course of 2007 the total value of securities in the world stock market fell by \$5 trn, as a result investors shifted their activities from the stock market to the commodity market gradually «unwinding» the spiral of global inflation and putting a brake on the world production growth rates.

The absence of reasonable restrictions on granting loans was the result of deregulation of the American financial market after the abolition of Glass-Steagal Act in 1999. The act had legalized the functional approach to regulating the financial market. According to this principle each financial institution (first of all banks) was to perform its traditional functions from the viewpoint of institutional provision of a certain segment of the financial capital circulating in the economy.

After this act had been abolished banks did not only start working actively in coordination with investment banks but themselves got involved into the stock market transactions and began performing the functions which were not inherent in them, gradually taking over a number of functions of other financial institutions.

The most respected banking institutions of the world, e. g. «Merrill Lynch», «Bank of America», «JPMorgan», «Citigroup», «BNP Paribas», «HSBC», «UBS», «Barclays» and others became especially active participants of the stock market, and for a good reason: they had been dealing with high risk loans for rather a long time and were holders of corporate shares.

Under such conditions the conventional instruments of regulating the banking activities lose their effectiveness to some extent. It is evident that it becomes impossible for the state to find out in what link of the economic mechanism, as a sub-system of the economic system, each financial institution creates its capitalized added value, in what way it is distributed and how it is personified. The transformation of functions performed by financial institutions and a high degree of their interdependence led to the situation in which the bankruptcy of companies whose shares were held by the banks required that the latter should write off huge debts. Their total sum amounted, for «Merrill Lynch», for example, to \$15 bn, for «Citigroup» – to \$18 bn and for «UBS» it reached «the record» point of \$37 bn [2].

A greatly destabilizing role was played by a high degree of trust of regulatory bodies in the conclusions of rating agencies, which, when giving their rating to financial and lending institutions, had an aim of minimizing possible risks facing them in their activities and maximizing their profitability. Moreover, the deregulation of financial markets was aggravated by a range of shortcomings inherent in the financial environment, first of all, the moral risk and the asymmetry of information, which increased the bias in assessing the risks connected with the activities of the corporate sector and enabled executives to manipulate consciously with the results of companies' financial and economic performance.

Intensive outflow of capital from the sphere of production accumulation was greatly contributed to by a wide use of new and extremely complicated financial derivatives, first of all, «square» collateralized debt obligations (CDO's – squared), for which other secured debt commitments serve as a collateral. It was due to them that the processes of securitization of assets became popular and brought about the expansion of the markets of derivatives accelerating in such a way the growth in the value of financial assets. Thus, by the start of 2008 the world value of securitized loans had amounted to \$28 trn [6]; while the annual value of the export of goods in the period of the 1990-ies – the first part of the 2000-s amounted on average to \$5 trn, the value of the export of services – to \$1.2 trn, and direct and portfolio investment equaled about \$900bn, correspondingly the scale of international trade in derivatives during 1995-2008 increased nearly ten times and at the end of the period amounted to almost \$60 trn (in 2007 –over\$ 80.5trn), which is twenty times as much as the value of the goods and services sold (table 2).

Table 2

**Dynamics of the size of the market of derivatives, instruments and regions.
1995–2009**

Indicator	1995		1998		2000		2002	
	value, bn of USD	annual turn-over, bn of contracts	value, bn of USD	annual turn-over, bn of contracts	value, bn of USD	annual turn-over, bn of contracts	value, bn of USD	annual turn-over, bn of contracts
Interest futures	5876,2	561,0	8031,4	760,0	7907,8	781,2	9955,6	1152,1
Interest options	2741,8	225,5	4623,5	129,7	4734,2	107,7	11759,5	240,3
Currency futures	33,8	99,6	31,7	54,5	74,4	43,5	47,0	42,6
Currency options	120,4	23,3	49,2	12,1	21,4	7,0	27,4	16,1
Stock exchange futures indexes	172,2	114,8	291,6	178,0	377,5	225,2	365,7	530,3
Stock exchange option indexes	337,7	187,3	947,4	195,0	1148,4	481,5	1701,2	2235,5
In total, including	9282,0	1211,5	13974,8	1329,3	14263,8	1646,0	23856,3	4216,8
South America	4852,3	455,0	7395,1	530,0	8168,0	461,3	13720,2	912,2
Europe	2241,2	354,8	4397,1	525,9	4197,9	718,6	8801,0	1074,8
Asia	1990,1	126,4	1882,5	170,9	1611,8	331,3	1206,0	2073,1
Other regions	198,4	275,5	300,1	102,5	286,2	134,9	129,1	156,7

Continuation of table 2.

Indicator	2004		2006		2008		2009*	
	value, bn of USD	annual turn-over, bn of contracts	value, bn of USD	annual turn-over, bn of contracts	value, bn of USD	annual turn-over, bn of contracts	value, bn of USD	annual turn-over, bn of contracts
Interest futures	18164,9	1902,6	24476,2	2621,2	18732,3	2582,9	17833,7	443
Interest options	24604,1	361,0	38116,5	566,7	33978,8	617,7	33005,8	131,7
Currency futures	103,5	83,7	161,4	231,1	95,2	433,8	86,1	71,1

Indicator	2004		2006		2008		2009*	
	value, bn of USD	annual turn-over, bn of contracts	value, bn of USD	annual turn-over, bn of contracts	value, bn of USD	annual turn-over, bn of contracts	value, bn of USD	annual turn-over, bn of contracts
Currency options	60,7	13,0	78,6	24,3	124,8	59,8	107,3	9,2
Stock exchange futures indexes	635,2	804,4	1045,3	1233,6	656,0	2467,9	592,5	600,6
Stock exchange option indexes	3024,9	2980,1	6565,3	3177,5	4272,8	4174,1	4132,4	959,0
In total, including	46593,3	6144,8	70443,4	7854,4	57859,9	10336,2	55757,9	2214,6
South America	27608,9	1633,6	42551,4	2541,8	29814,7	3079,6	26811,0	575,8
Europe	16308,2	1412,6	23216,8	1947,3	24622,5	2939,5	26067,6	620,5
Asia	2426,9	2847,6	4049,6	2957,1	2685,9	3753,6	2242,4	892,3
Other regions	249,3	251,0	625,6	408,2	736,8	563,5	636,9	126,1

*Data for the first quarter

Source: Global Financial Stability Report: Financial Stress and Deleveraging Macro-Financial Implications and Policy. October 2008. – IMF, 2008. – P. 184-185; Global Financial Stability Report: Navigating the Financial Challenges Ahead. October 2009. – P. 186-187.

Thus, long-term structural accumulation of financial imbalances in the world economy was an impulse for the start of the global economic crisis, which was quite apparent at the end of 2007 and in the course of 2008 spread to practically all countries of the world at an unprecedented speed. The crisis manifested itself in different ways, among them one should mention the following: first of all a dramatic fall in the capitalization of companies, a slowdown in the business activity, a reduction in consumer spending, growth of unemployment, a decrease in the development rates of the world economy, deepening of currency imbalances, a reduction in the scale of inter-bank lending, winding up the schemes of crediting the real sector of economy and households, increased price of borrowed capital, etc.

However, by its depth and the intensity of its influence on national economies this crisis cannot be classified as cyclical, it has a clearly expressed structural and innovative nature, i. e. it implies qualitative transformations of the world production and its technological base and the foundation of the sixth high tech

way. The point is that the global economic crisis, which is currently developing in the world economy, is only an expression of general laws defined by the concept of «technological ways» and including the ideas of long-term megatechnological dynamics.

And although such laws are non easy to discern under the veil of specific processes in the financial sphere (self-annihilation of the US pyramid of debt commitments and the collapse of the global market of derivatives, including financial «bubbles» and those caused by oil contracts), the dramatic fall of stock exchange indexes and energy prices, as well as the decline of production and the growth of structural unemployment are the signs of a long-wave depression caused by the cyclical nature determining the change of technological ways and the renovation of the technological social production basis with the aim of increasing labour productivity.

The world economy has witnessed the synchronization of a number of separate crises – the structural one connected with the fact that the resources of the fifth technological way have been exhausted, and the financial, banking, investment, currency, institutional ones, which together produced the most powerful and devastating effect in the modern economic history. Therefore the global economy is to undergo the process which can be described as «reloading» and dispose of surplus capital as a result of its massive depreciation in the process of inevitable deep depression. The depreciation of money capital will happen due to numerous collapses of stock markets and financial markets and the default of the dollar, as it already took place in the 1930-ies and in the 1970-ies.

All things considered, whereas in advanced countries the initial phase of the sixth way replacing the fifth one is accompanied by the financial crisis, unprecedented in its scale and depth, with its gradual transformation into the long-wave depression, developing countries are going to receive a powerful impulse for fast economic growth. Being free from the burden of surplus productive capacities in sectors of the outdated technological way, they are not so much affected by the structural crisis and therefore are not going to face the same extent of capital depreciation. At the same time their rapid progress in mastering basic technologies and types of production belonging to the new technological way will open for them wide prospects of overtaking advanced countries in structural reorganization of their national economies, of «joining» the current wave of economic growth and respond promptly to the global challenges of scientific, technological and social progress.

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