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**World financial crisis:  
causes, consequences,  
ways of overcoming**

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# World financial crisis: causes, consequences, ways of overcoming

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Goal of the monograph's publication: generalization of ideas of prominent researchers from different countries of the world regarding the causes and consequences of the world financial crisis, determination of specific features of its development in different countries, generalization of experience regarding the ways of overcoming the crisis.

General outline:

- ◆ Author's vision of the causes of the world financial crisis.
- ◆ Peculiarities and general features of the financial crisis in the country represented by the author.
- ◆ Methods used by the government of the author's country to fight the crisis and the author's comments regarding their efficiency.
- ◆ Author's vision of ways to overcome the world financial crisis.
- ◆ Author's vision of global consequences from the world financial crisis.
- ◆ General conclusions.
- ◆ References.

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## **World financial crisis and Ukraine**

### Introduction

1. The main causes of the global financial crisis
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  - 1.3. Fannie Mae and Freddie Mac cases
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## Introduction

The main causes of the world financial crisis, the peculiarities and trends of its world-wide distribution are widely discussed by experts and researchers. Moreover, the alternative forms of its consequences forecasting are considered, namely the evolution of the crisis according to the Great Depression of the 1930s, transforming the crisis into the enduring recession of the world economy, considering the crisis as the incentive to the global reconstruction of world financial system. Mortgage lending crisis, troubles in the activities of state-governed mortgage companies and investment banks, over-expansive monetary policy along with the dominant position of the USA, as well as its currency, on the international financial market, and the huge disbalance in the world economy etc. are supposed to be the main reasons of the world financial crisis.

The paper defines the reasons of the world financial crisis and its impact on the Ukrainian economy. It also examines the development of systemic crisis in the economy of Ukraine compared to other countries as well as with regard to export-import activities, external borrowing, currency, monetary and anti-inflationary policies, banking system functioning, political situation, etc. The suggestions are made concerning the duration and deepness of the financial crisis in Ukraine. Not only the negative effects of the world financial crisis on the economy of Ukraine are separated but also the new opportunities with regard especially to attracting foreign investments into the real economy are emphasized. The countermeasures used by the Government and their efficiency are analyzed. Moreover, a number of measures with regard to overcoming the world financial crisis' consequences and preventing a similar crisis from occurring in the future are proposed.

### 1. The main causes of the global financial crisis

Examining the world financial crisis that has originated in 2007 from the crisis of subprime mortgage lending in the USA, its following causes can be determined:

- ◆ the crisis in the U.S. mortgage market;
- ◆ the problems in the operations of the companies such as Freddie Mac (Federal National Mortgage Association, FNMA) and Fannie Mae (Federal Home Loan Mortgage Corporation), as well as in the investments banks of the USA;
- ◆ over-expansive monetary policy of the USA along with the dominating position of this country and its currency in the international financial market;
- ◆ the great disbalance in the world economy, particularly, extremely high surplus in the foreign trading of China, Japan etc. and a very big trade deficit in the USA;

Let's consider these causes gradually.

**1.1. Subprime mortgage lending crisis in the USA.** The crisis of subprime mortgage lending in the USA, the background for which were interest rate increase in the USA (from the middle of 2004), the decline in housing building and real estate price fall, is connected with disarrangement of the new crediting model.

Firstly, the majority of advisers associate the emergence of the mortgage crisis with the problems in the banking system of the USA. It was related to the following factors:

- ◆ USA FRS interest rate decrease to 1% per annum that allowed banks who had a lot of free money to accommodate all the people interested at small interests that expanded the number of people who could obtain a credit. Besides, the interest rate is the main regulator of equilibrium of the financial market and reflects the supply and demand for the financial capital. The level of the interest rate must reflect real opposition of borrowed and real capital in the conditions of free competition. Moreover, the interest rate is formulated on the basis of contemporary advantages of individuals. If the advantages change, the advantages of the current time fall down in comparison with the future, individuals' savings increase, the interest rate falls and stimulates the investments in capital goods that have long-term character, and the economic growth is ensured. If the interest rate falls because of the national policy of "easy money", then the distortion of price signals happens, investors invest money in the very expensive and long-term projects that looked ineffective earlier. Furthermore, the prices on the capital goods change, the increase in the real estate market and equity market takes place. In the meantime, the contemporary advantages of the individuals don't change, and they lose more than save. There appears crisis in manufacturing of capital goods. Thus, the government policy, if it doesn't include real changes of the investors' advantages, distorts price signals, disorients an investor, and leads to the false investments. Price increases in the equity market, as well as in the real estate market lead to the speculation.
- ◆ Weakening of demands to borrowers – such approach allowed unrestricted number of people to take out a loan, including the citizens with humble income. As is clear from the experience of the western countries, the liberalization of market and the rise in competition in it, as a rule, promote the appearance of the wide spectrum of mortgage products, the increase of demand on the part of the new group of clients. According to the data from American non-government organization United for a Fair Economy (UFE), banks themselves created the background for mortgage crisis, crediting the

*subprime* segment (nonprime loans) without proper estimation of borrower's solvency and according to the scheme "no income, no job, no assets".

- ◆ The extension of the new forms of mortgage credits that opened the access to mortgage for people who couldn't obtain the credit to purchase the real estate in another way, for example for those, who receive not a fixed salary, but periodic bonuses or expect the growing of their incomes in future, among which there are the following ones:
  - credits, according to which first 5-7 years interests are monthly paid only, and then a loan is either refunded or cancelled;
  - credits with a variable rate that allows borrowers to decrease an interest rate risk in the long term;
  - credits without a payment of initial fee or with its considerable decline;
  - credits with negative amortization, when the increase of the sum of main debt on the sum of interests takes place. Negative Amortization Limit is the maximum upper limit, to which the sum of the main credit debt may increase, including negative amortization, earlier than the ratio of credit size to the cost of the article of mortgage exceeds the given limit. In a case, when the borrower reaches the limit of negative amortization, amortization schedule is viewed with the aim to assure the payment of the whole amount of debt as of the date of amortization as a result of which the increase in arrears happens;
  - credits without confirmation of profits and with the minimum package of documents.
- ◆ Existence of mechanism of recrediting, when the real estate during a few years had been pawned again for several times, every time under the smaller rate but bigger value because there happened the increase in market value of the mortgage object in the growing market, as a consequence of which, credit procedures lost their initial connection with borrower, the tested methods of evaluating the quality of borrowers were withdrawn from them.

All of this led to the catastrophic increase in high-risk credits, thus, according to Inside Mortgage Finance, in 2006 in the USA high-risk mortgage credits were issued in the amount of \$600 billion, or 21% of all mortgage credits (in 2001 – \$160 billion, or 7%). In general in the USA, the portion of mortgage crediting reaches about 70-80% retail credit portfolios, and it means that using this kind of services leads to the serious market destabilization. From 2001 to 2006, the share of credits to borrowers in the subprime segment has grown from 5% to 20%. At the beginning of 2008 as a whole, the segment of poor mortgage was assessed at 20%, of which

14% – are the credits of the risk group and 6% – the borrowers of the “the best of the worst” group (Alternative-A) that almost suits the traditional mortgage.

One of the waves of crisis was caused by the problems of mortgage company Countrywide Financial<sup>1</sup>: in summer 2007 its stocks, because of the increase in mortgage credits non-payment and deficit of liquid assets, went down in value by more than 50%. At that time, mass media started speaking about possible bankruptcy. The situation was saved only because Countrywide managed to obtain the extra credit on \$11,5 billion on the 17<sup>th</sup> of August, and on the 23<sup>rd</sup> of August Bank of America announced about investing \$2 billion in the company. Anxieties of Countrywide continued in 2008: from the beginning of January there appeared the information in the market that because of current problems with liquidity and non-payment on mortgage Countrywide could go into bankruptcy. Though the company quashed these rumors, they broke down its stocks: from January 2 to January 10 their quoting decreased to 14% – from \$9 to \$7,75 a piece.

Secondly, the evolution of the crisis is connected with a bank activity in the stock market, because during the period of boom of mortgage crediting banks gave up on direct credit arrangement for borrowers, using the scheme of lending assets from the market and providing a credit out of them, securitization of their debts in terms of derivative securities on debt portfolios CDO and their selling. For several years banks have increased their incomes playing the mediator role between investors who got CDO (among which there were a lot of hedge funds and other institutional investors), and mortgage credit receivers<sup>2</sup>.

A lot of investment funds and banks in different countries of the world bought mentioned derivative securities that were considered to be reliable and were in favor in world financial markets by the following reasons:

- ◆ the hope for the reliability of estimates carried out by a bank concerning the solvency of borrowers;
- ◆ debt stocks with mortgage combined different in quality mortgage credits in one portfolio, and the integrating of great amount of mortgage in one mortgage pool assured the diversification of risks;
- ◆ the share of problem loans was assessed as relatively humble;

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<sup>1</sup> Хвостик Е. Bank of America взял ипотеку со скидкой. – Коммерсант. – 2008. – 14 January.

<sup>2</sup> Кокшаров А. Худшее, конечно, впереди // Эксперт. – 2007. – №43.



- ◆ the usage of credit default swaps as the underlying asset – obligation to pay the par bond in the case of the emitter default instead of premium that is periodically paid, which, from the economic point of view, hedged the risks of the emitter default;
- ◆ assessment of CDO by credit rating agencies as very reliable instruments of financial market.

But banks gave up on mediation in the market of lending capital in favor of direct issue of stocks and with the help of mechanisms of mortgage bonds CDO and securitizations they shuffled off the responsibility on the third party. Banks almost stopped playing the role of mediators interested in the solvency of their customers that considerably decreased the quality of mortgage credit pools and the reliability of derivative securities. But according to many experts, in general, equity market can not completely replace banking system from the point of view of accumulation and distribution of assets<sup>1</sup> that is connected with: access to finance (in the stock market only the biggest corporations with high credit rating and big volume of operations have the access to finance); problem of information skewness between the lender and the borrower (because of this, the part of lenders can not get depersonalized credit from the stock market and they must agree on monitoring on the part of the bank)<sup>2</sup>.

According to Moody's, bond output assured by high-risk credits in 2006 accounted for 475 billion. In general, in 2006 mortgage credits totaling to \$2,5 tln were issued, among them securitization credits amounted to \$1,9 tln.

The new scheme of finance in fact destroyed the traditional relation between a lender and a borrower, in this connection:

- ◆ the buyers of mortgage bonds (final creditors) began to get a few information about risks, and they had to rely only on reports of rating agencies, because the existing from 2007 system of disclosing the information in the USA has the following characteristics:
  - it amplifies and allows to carry out the financial analysis of mortgage pool, that is, how the credits behave which were allowed to lenders under the real estate mortgage;
  - it practically does not describe the movement of risks from the mortgage pool to the instruments of the secondary market, as a result of which it becomes difficult for

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<sup>1</sup> Матовников М. Функционирование банковской системы России в условиях макроэкономической нестабильности. – М: ГОПП, 2000. – С. 8.

<sup>2</sup> Fama E. What is Different about Banks? // Journal of Monetary Economics. – 1985. – 15 January.

investor to assess the final risk instruments of the secondary market in the case of change in the mortgage credit portfolio behavior and he cannot analyze to what extent the deterioration of situation with defaults in the primary market will be reflected on their positions in the secondary market<sup>1</sup>;

- it gives enough information by the primary proposition of securities to investors (about an issuer, a service agent and about the mortgage credits portfolio characteristics);

- information is not given or irregularly and poorly given for the instrument assessment (mortgage credit pool) after a time after the placement of the securities in the secondary market;

- ◆ risk assessment inadequately included the sector of risky borrowers, where repayment risks are approximately 5 times higher and undergo strong oscillatory movements<sup>2</sup>, rating agencies did not list the market risk, or the liquidity risk, in their reports and analyses, and this risk was the reason of the sharp decrease of instrument prices in the secondary market;
- ◆ the mentioned model stopped working in the conditions of real estate market, in which the price decrease is observed that sharply depressed demand for stocks and damaged intermediary banks.

The trust, on which in fact the market relied, was lost by investors in the conditions of absence of necessary information. Under such conditions it is no wonder that investors decide to stop the trade of risky, to their opinion, instruments of secondary market.

**1.2. Negative role of rating agencies in the crisis transmission.** The leading rating agencies played their negative role in the crisis spread. They approved the investments in the so called structured products, which in fact were high-risk ones. Agencies are also likely to share the certain part of responsibility for what is happening as they didn't notice risks in time or didn't want to notice them. In any case, in current conditions it is not necessary to contract out the system of risk management to rating agencies as it doesn't insure the economy from the appearance of certain problems. Another important moment consists in the fact that the USA, the main source and spreader of crisis developments, till now,

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<sup>1</sup> Милютин А. О кризисе ликвидности и важности адекватного раскрытия информации // Рынок ценных бумаг. – 2008. - № 3. – С. 26-27.

<sup>2</sup> The Rise and Fall of Subprime Mortgages. Federal Reserve Bank of Dallas. – 2007. – December 7.

according to agencies, has the highest rating – “AAA”. And here are double standards (still all three leading agencies are American ones).

But namely the fact of taking the decision on July 10, 2007 by rating agencies S&P and Moody's about decreasing the ratings of more than 1000 stock issues, assured by subprime mortgage credits, totaling \$ 17 billion became the culmination of the crisis.

Besides, it is necessary to mention one more problem of using the derivative instruments for risk hedging that keeps serious dangers because, according to many experts, the problems connected with derivatives can turn into system, as big financial risks hedged by derivative instruments, are concentrated in the relatively small amount of market participants. And in fact, the derivative financial instruments reduce risks of a specific market participant, and within financial system they lead to the accumulation and concentration of risks. Thus, during the last five years there appeared hedge funds that acted with very high financial whip hand, and thereby, avoided the supervision of respective authorities. Other financial institutes concentrated considerable amount of risks in the given hedge funds, and the financial system was locked on them in many things. Besides, European and Japanese financial institutes did in the same way, concentrating the excessive liquidity in the American market through the agent structures.

As a consequence, hedge funds had serious problems, which led to first serious dismissals of the whole teams of traders over the last five years and to the office shutdown. According to Hedge Fund Research, 700 hedge funds were closed down for the last year. That is, two per day. Thus, at the beginning of 2008, the American hedge fund Deephaven Management with \$4 billion in assets announced about the shutdown of the subfund amounting to \$780 mln, which took part in contracts of buying-out the companies by funds of private investments. Another big fund, Tisbury Capital, settled down to the shutdown of its office in Boston<sup>1</sup>.

Thirdly, low rate on credit and flexible conditions of crediting in the USA caused the increase in consumer demand up to **negative saving rate**. In fact, the average household savings rate in 2002-2006 was considerably lower than in the period of “new economics” of 1996-2000. In certain quarters even the negative savings rate had been fixed.

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<sup>1</sup> Кокшаров А. На этот раз не подвели // Эксперт. – 2008. – № 7.

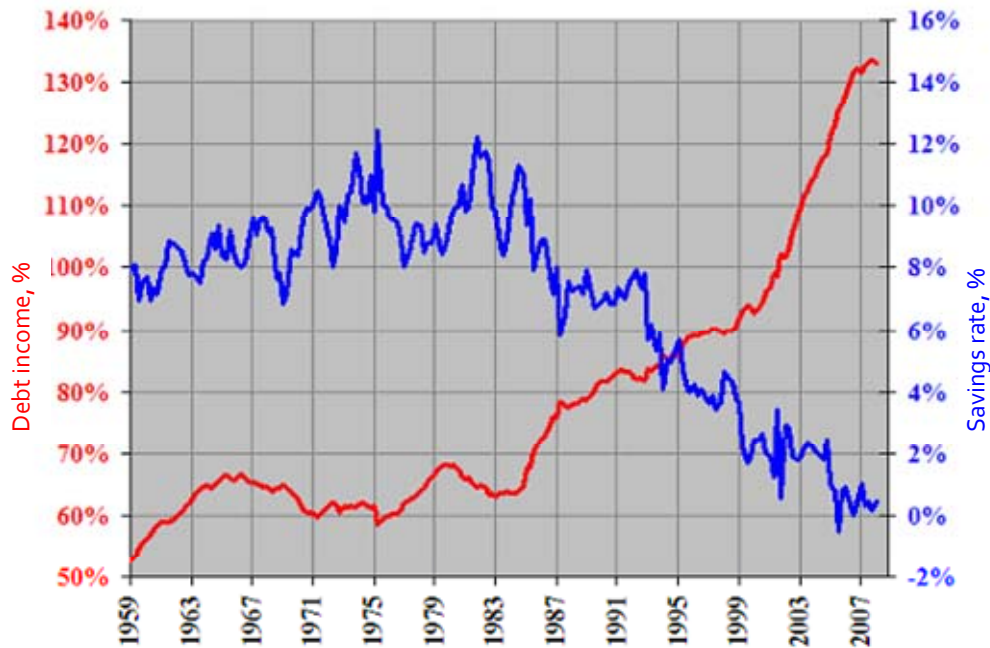


Fig. 1. Dynamics of correlation of American private debts with their real present gains and savings rates<sup>1</sup>

The fourth is the high exposure of other segments of financial market, such as the segment of credit-default swaps (CDS), which are considered to be one more new financial instrument that insures bond holders against the default. CDS market volume is estimated constructively in \$45 tln that three times exceeds USA GDP, but the following should be taken into consideration:

- ◆ actually this market is not regulated, as from the economic point of view CDS is the insurance, but legally these derivatives are not regulated, there are no guarantees that CDS salesmen's responsibilities are assured by liquidity assets, just due to this CDS market can cause full-scale crisis;
- ◆ the firmness of CDS market in general and the USA and Europe as its biggest segments, in particular, is determined by the default amount that in turn depends on the general economic situation. Under the conditions of economic increase the number of bankruptcies is not big, that's why CDS is considered to be relatively risk free source of

<sup>1</sup> М. Хазин. Теория кризиса. Доклад на конференции в г. Модена, Италия, 9 июля 2008 года.

constant income, but the increase in total default will lead to increase in CDS payments. As a result, when the number of defaults reaches a certain level, it can be expected that a part of CDS salespeople will have to announce the default by their obligations.

According to rough estimates of Bill Gross, the head of the PIMCO Company that runs the world biggest bond fund, the possible losses from the increase of bankruptcy amount can be estimated in \$250 billion. This number is based on the assumption that the level of corporate defaults will come back to historical average level of 1,25% that under the CDS market volume in \$45 billion will lead to such a situation that salesmen of the insurance from default will have to pay \$500 billion. It is possible to recover approximately the half of this sum – 250 billion losses remain. This estimate is based on the assumption that the hypothetic recession in the USA will not turn into the long-run decline, because in this case the amount of corporative defaults may not only return to the historical average level but even exceed it. If we take the \$250 billion losses as a starting point, it is not difficult to see that two year economic slack can easily increase this number in many times.

All above mentioned put at risk the insurance companies that work with municipal and mortgage securities, the biggest of which are MBIA (Municipal Bond Insurance Agency), FGIC (Financial Guaranty Insurance Co), FSA and Ambac Financial Group (smaller are ACA Capital Holdings, Assured Guarantee, SCA/XLCA). Now these companies are, in fact, on the verge of bankruptcy. Thus, at the end of December 2007 they announced about the possible losses totaling to several billion dollars; under such conditions MBIA stock price in the market had dropped over the year by 90%, the dividends were cut almost to null, and in the fight for liquidity the company had to lend money under stunning 14% per annum (MBIA stocks were traded with the income on the level of "junk" bonds of companies with default ratings – 20% per annum). The situation of Ambac<sup>1</sup>, which is the second largest insurer, is even worse.

In August 2008, the largest world insurance company American Insurance Group (AIG) announced about the third consecutive quarterly loss that exceeded \$5 billion. Pure loss of AIG in the second quarter reached \$5,36 billion in contrary to \$4,3 billion income a year ago. These losses became the second largest in the 89-year history of the insurance company; moreover, the absolute record was set in the first quarter of this year. Over the last three quarters, during which AIG did not escape from minus, the general volume of losses exceeded \$18 billion. As earlier, company's losses are connected with charge-off on \$5,6 billion of swap value from default on credits. But along with \$6,1 billion of other

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<sup>1</sup> Зотин А. ФРС спешит на помощь // Финанс. – 2008. – № 5.

investment, losses of AIG from the crisis exceeded \$11 billion within the quarter. General charge-off of the company for the last three quarters exceeded \$40 billion<sup>1</sup>.

Fifth, because of the decrease in demand and crisis of overproduce in the construction sector, overstocking of the market with houses exposed for sale on irrevocable credits, as well as houses bought in the hope of resale the fall of real estate value occurred, that is security for credits. Thus, in 2001-2006, according to the National Association of Realtors, house prices increased by 50% that allowed mortgage banks to increase credit arrangements without risks because there was a possibility to refund a credit due to increase mortgage object price. But in 2007 due to the repayment risk increase, real estate market began to decrease – national house price index by S&P/Case-Shiller reduced from the peak value in the II quarter of 2006 to the III quarter in 2007 – by 8,9% in comparison with quarter IV 2006. The system that successfully worked in conditions of demand increase and growing house prices, appeared to be ineffective when the dynamics of market changed its direction – the demand for mortgage papers sharply reduced that caused substantial losses for banks that played the mediator role. Overestimating the risk banks began to close limits on each other, mortgage bonds sank in price, and new issues didn't find buyers. There appeared liquidity shortage in the market, caused by losses of lenders and banks and also by risk overestimation by market participants.

**1.3. Fannie Mae and Freddie Mac cases.** Viewing the functioning of the biggest mortgage agencies belonging to the type of so called “organizations supported by country”, and regulated by the country, we mean Fannie Mae (Federal National Mortgage Association, FNMA, established in 1938) and Freddie Mac (Federal Home Loan Mortgage Corporation, established in 1970), which regulate mortgage and perform both crediting and the control over crediting. It should be mentioned that it is they who “unwound” the crisis, but not only banks. Just these organizations are the biggest creditors of American families, thus, in 2001 respectively 38% and 34,1% of American families' debts<sup>2</sup> belonged to them. In fact, these establishments determined the standards of mortgage crediting in the USA market, and just with them the commercial banks conquered. Besides, they are regulated by the country: Fannie and Freddie are under the undiverted control of the Office of federal supervision over the enterprises of housing market. But all of this didn't change the existing situation.

**2.4. Overe-expansive monetary policy of the USA.** The global character of the mortgage and liquidity crises is caused by the dominating position of the USA in the world financial

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<sup>1</sup> Котов А. AIG понесла убытки, а Allianz понизила прибыль // РБК daily. – 2008. – August 8.

<sup>2</sup> Старостина Н., Верлин Е. Кредитный апокалипсис // Профиль. – 2006. – №15.

market and also by the fact that the foreign debt of this superpower (the most part of which is presented by bond loans) at the beginning of 2008 was \$12,9 tln, it is equivalent to 93% of its GDP and 20% of the world GDP, besides by surplus savings in the whole world. In the USA, Ben Bernanke, the head of FRS, suggested even the term for explaining the formed disproportions in the world economy that prompted the current financial crisis – the global surplus of savings.

Demand for the U.S. securities is provided by surplus savings in the whole world, chiefly in the countries where the central banks synthetically decline national currency: China, Japan and Russia. It emerges from this theory that the demand for U.S. assets is not only caused by financial aspects but also by political and economical thoughts, because China, Japan and Russia synthetically committed formulated savings in the American assets, due to the decline in national rates that encouraged keeping of long-term treasury obligations return of the USA on the low level and the forming of “bubbles” in the real estate market and commodities.

Viewing the impact of the world financial crisis on the economy of Ukraine, it should be noted that:

- ◆ starting from 2000 to the third quarter of 2008 the nation’s economy increased on the average by 7,5% per year;
- ◆ fiscal policy remains rather moderate – budget deficit didn’t surpass 1,5% GDP (except for 2004, when the presidential election was hold), and the amount of national debt decreased;
- ◆ export volume increased at a record pace, even for the first three quarters of 2008 – by 50% on an annualized basis that was caused by powerful foreign demand and swift growth in the emerging countries, but because of considerable import increase current balance remains negative since 2006;
- ◆ considerable inflow of direct foreign investments was observed; thus, in 2005-2008 net direct foreign investments in Ukraine averaged \$8 billion a year that allowed to completely finance current account deficit and also to accumulate currency holdings for the National Bank of Ukraine that reached \$37 billion at the end of 2008.

## **2. The impact of the world financial crisis on Ukraine.**

International liquidity crisis, which spread fast in the world, in autumn 2008 broke the period of Ukrainian development up. The most essential problems Ukraine was faced were shrinkage of exports and change of directions of foreign capital flow, and, as a consequence, the load of service and refunding of external debts rose. Besides, it should be mentioned that a great number of problems are similar to those ones, which are peculiar for the economy of the USA

and are the main factors of the world crisis developments. Given mentioned problems, Ukraine has been damaged by one of the deepest economic slacks and one of the strongest currency devaluations during the hardest crisis periods. Thus, in autumn 2008:

- ◆ national currency depreciated by more than 50% against the USA dollar;
- ◆ FSTS stock index reduced by more than 70%;
- ◆ real GDP decreased by 8% and 19% on an annualized basis in the last quarter of 2008 and the first half of 2009, respectively;
- ◆ export of goods during the last two months of 2008 reduced by 16% on an annualized basis, and in January-July of 2009 – by 49%.

Noted indicators characterize the situation in Ukraine as the most difficult compared to other emerging countries.

Table 1. The impact of the international financial crisis on separate countries<sup>1</sup>

Country	GDP, % to the previous year, 1 quarter of 2009	Devaluation of the local currency against to dollar, %
Ukraine	-20,3	58, 4 quarter of 2008
Latvia	-18,0	7,5, 1 quarter of 2009
Estonia	-15,1	3,4, 1 quarter of 2009
Lithuania	-13,6	6,8, 1 quarter of 2009
Taiwan	-10,2	3,2, 1 quarter of 2009
Singapore	-10,1	5,6, 1 quarter of 2009
Russia	-9,5	35,0 October 2008-March 2009
Mexico	-8,2	26,0 4 quarter of 2008
Hungary	-6,7	23,0 October 2008-March 2009
Romania	-6,2	38,0 October 2008-March 2009

There are the following reasons of such a difficult situation of Ukraine:

- 1) The economy of Ukraine is very open and at the same time not diversified enough, which is confirmed by the following facts:
  - ◆ share of export in 2007 accounted for 50% GDP;
  - ◆ national export has a narrow trade diversification, and it is mostly limited by the humble amount of goods with a low value added, in particular by the products of metallurgical and chemical industry, part of which is more than 50% in the general volume

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<sup>1</sup> Official site of The Bleyzer Foundation – <http://www.bleyzerfoundation.org>



of export of goods, and the goods with high value added, such as cars, equipment and transport vehicles, amount to only 15% of the whole Ukrainian export (see Fig. 2);

- ◆ world demand for the main goods of Ukraine's export has a tendency to considerable movements during global business cycles that leads to unexpectedness and instability of returns from export;
- ◆ export of Ukrainian goods has narrow geographic diversification. Thus, only several CIS and EU countries belong to the key trade partners of Ukraine, and total share of Russia, Turkey, Italy, Poland, Belorussia and Germany together amounts to about the half of the whole export of Ukrainian goods (see Fig. 2);

All of this means that the dependency of Ukraine on the narrow range of goods exported to a limited number of countries against the slump of demand and considerable lowering of world prices on Ukrainian goods notably enhanced negative phenomena in the real sector, which were strained because of apparent demand decline. Export volumes decreased by 47% on an annualized basis H1 2009. Because of its dependence on export manufacturing output reduced by 31%.

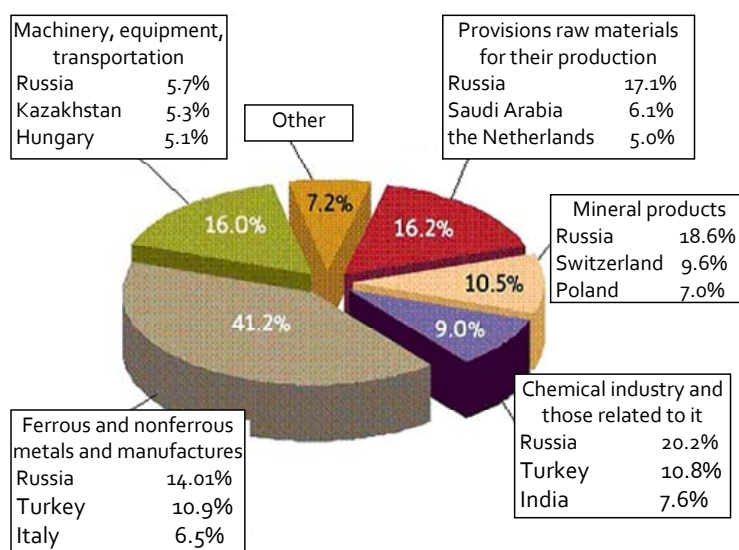


Fig. 2. The structure of Ukrainian export by goods and main partner countries<sup>1</sup>

<sup>1</sup> Official site of The Bleyzer Foundation – <http://www.bleyzerfoundation.org> and official site of United Nations Commodity Trade Statistics Database <http://comtrade.un.org/>

- 2) Current account deficit (CAD). Thus, in 2008 in Ukraine it was \$13 billion or 7% of GDP that is attributed to
- ◆ satisfaction of consumer and investment demand mostly owing to imported but not domestic goods and services;
  - ◆ increase in domestic production was happening with considerably lower paces than demand for final goods and services due to unfavorable business climate in the country and redistribution of economic resources in favor of export-oriented producers of manufactured goods;
  - ◆ price increase for raw materials and energy resources that are considered to be the substantial constituent of import of Ukraine, enhanced the level of the country's debt, and weakened the competitiveness of the Ukrainian industrial producers (first of all, in chemical and metallurgical industries) that could not quickly adjust to external shocks connected with price increase in the world markets of power resources;
  - ◆ poor diversification of energy resources suppliers; thus, the dependence on import of gas and oil from a limited number of countries-suppliers (particularly, Russia and Turkmenistan) is typical for Ukraine, due to the limitation of her own power resources.

During 2006-2007, import growth amounted on the average to 30% a year, and for the first nine months of 2008 the volumes of import increased by 60% on an annualized basis. Such acceleration of import growth rates led to the formation of negative balance of current account, from 2006 on despite the record fast pace of export growth. Thus, in 2003-2007 due to the strong world economy, the growth of Ukrainian export on the average was 25% a year, but during the world goods-rare boom in 2008 it reached 50% on an annualized basis. Moreover, in 2008 many analysts predicted that in 2009 the negative balance of current account will grow to \$24 billion or 13% of GDP (see Fig. 3). All of this put substantial dilutive pressure on the rate of exchange.

- 3) Involvement by Ukraine the considerable volume of foreign debts for financing of internal consumption and investments, thus, from the beginning of 2006 the private sector of Ukraine actively involved foreign debts that were due in the short term. The total volume of private foreign debt increased from \$28 billion at the beginning of 2006 to \$85 billion at the end of June in 2008. Moreover, the volume of external debt that was due throughout the year was assessed in about \$40 billion, with only \$35 billion of monetary reserves. Furthermore, under conditions of the world financial crisis that has led to the capital flows regress, exhausted liquidity of the banking sector, shortage of lending investment and consumption, refunding and restructuring became

very difficult tasks for all the sectors of the economy of Ukraine (see Fig. 4). All of this increased devaluation pressure on the exchange rate.

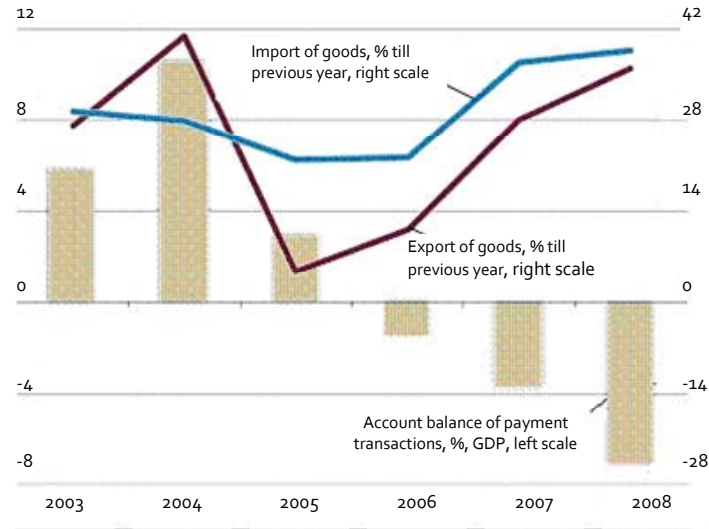


Fig. 3. The dynamics of foreign trade by goods and current account balance<sup>1</sup>

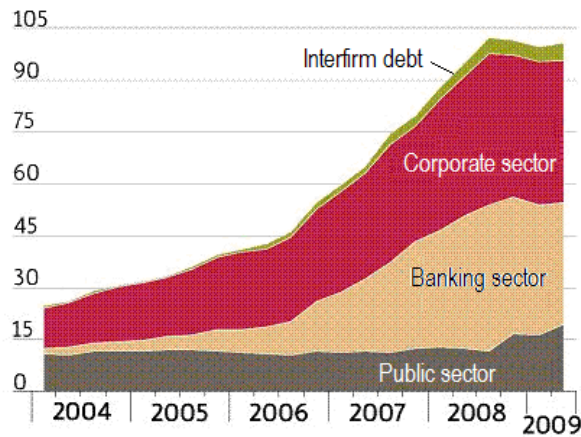


Fig. 4. Gross foreign debt by economy sectors, \$ billion<sup>1</sup>

<sup>1</sup> Official site of the National Bank of Ukraine [www.bank.gov.ua](http://www.bank.gov.ua) and official site of State Committee of statistics of Ukraine <http://www.ukrstat.gov.ua>

Besides, during the last several years banks extensively developed consumer loan (mortgage, auto, consumer credits) using the funds from abroad (see Fig. 5). As the Figure shows, since 2006, the share of credits to individuals in the general credit portfolio to banks began to increase at a considerable pace. In July, 2008 mortgage credits constituted a considerable part in individual clients crediting (at the end of the year they accounted for 36,1%). Prior to the beginning of the financial crisis the Ukrainian banks could easily attract capital from abroad at 4-5% per annum, and sell them in Ukraine for 10-11% per annum. The problem was that credits were committed for the periods of 3-5 years, and were accommodated for 10-20 years. Ukrainian banks solved such problems due to refinancing of received credits by new ones with the same and sometimes lower rates.

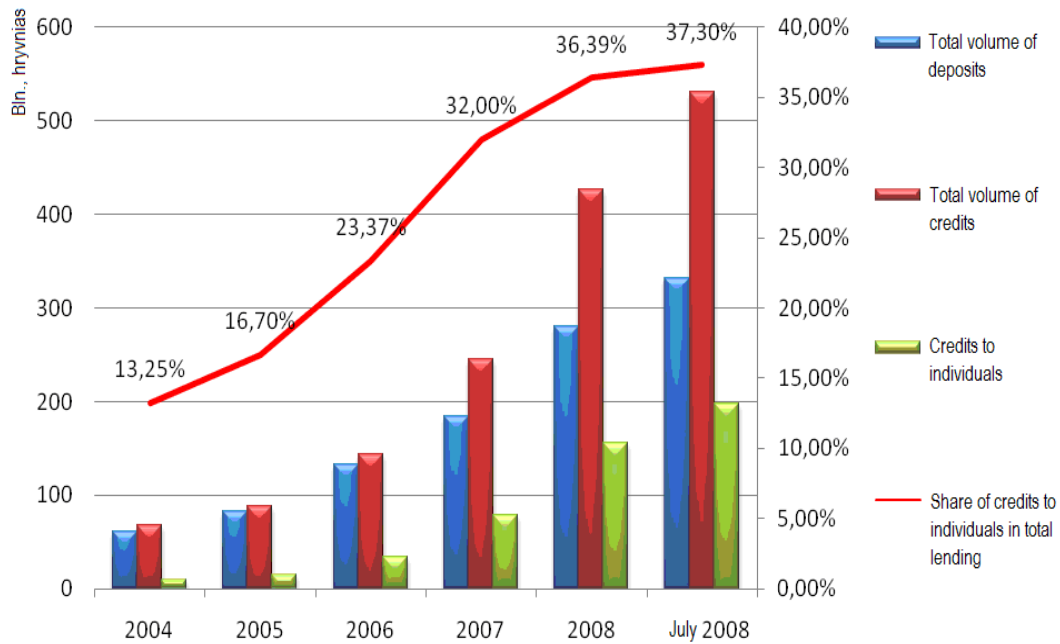


Fig. 5. Correlation of deposits and credits in the Ukrainian banking sector<sup>2</sup>

Under the conditions of liquidity crisis, to reimburse foreign credits banks had to, first, loan up with considerably higher rates, and second, new facilities committed from abroad also

<sup>1</sup> Official site of the National Bank of Ukraine [www.bank.gov.ua](http://www.bank.gov.ua)

<sup>2</sup> Official site of the National Bank of Ukraine [www.bank.gov.ua](http://www.bank.gov.ua)

became much more expensive. As a result, mortgage credits rates increased by 5-7%. In addition, the demands to the lenders' financial status were greatly intensified.

- 4) Increase of the credit risk and liquidity risk of the Ukrainian banking system that are related to the demand for foreign debt refunding, along with the growth of negatively classified credits (NCC). Thus, according to the NBU data, the share of problem and non-performing loans increased from 2,5% at the beginning of 2008 to almost 9% at the end of June 2009. Including the volumes of subprime credits, the portion of NCC in 2008 was 14,5%, that is considerably higher than in other similar countries (see Fig. 6). Besides, currency risk increased, connected with the fact that more than a half of all credits allowed to the economy of Ukraine are expressed in foreign currency.

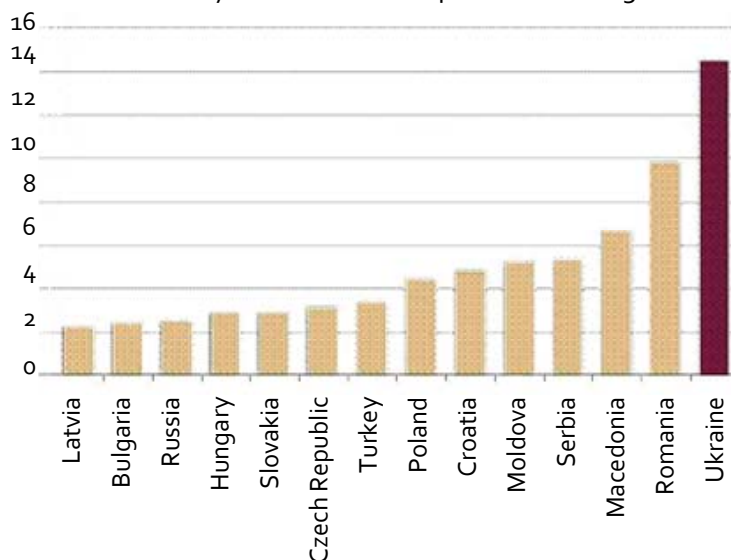


Fig. 6. Negatively classified credits in particular countries, in % from the total volume of credits<sup>1</sup>

Increase of risks in the banking sector against the decline in economic activity caused the disturbance in relation to possible insolvency of banks, and undermined people's confidence in the banking system that generated large-scale outflow of deposits; thus, since October 2008 to April 2009 the banking sector lost almost 25% of its deposits that complicated the refunding of foreign short-term debt and sharply stopped credit activity of banks (see Fig. 7).

<sup>1</sup> IMF's report "International financial stability". Available at: <http://www.imf.org>

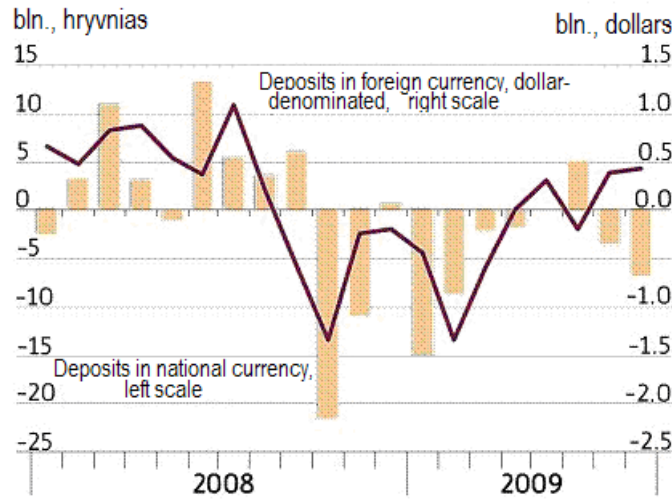


Fig. 7. Monthly dynamics of deposit volumes of commercial banks<sup>1</sup>

According to Standard & Poor's estimates, the level of hypothetical gross troubled assets that can appear in the financial system of Ukraine in the case of realization of well-grounded (but not catastrophic) scenario of economic recession is assessed on the level of 35-50% (Table 2).

Table 2. The assessment of the allowed level of gross troubled assets (GTA) for different countries of the world<sup>2</sup>

5-15%	10-20%	15-30%	25-40%	35-50%	50-75%
Australia	Austria	Bahrain	Croatia	Argentina	Dominican Republic
Belgium	Chile	Brazil	Bulgaria	Belorussia	Ecuador
Canada	Greece	Columbia	Cyprus	Bolivia	Egypt
Denmark	Italy	Czech Republic	Salvador	Cambodia	
Finland	Japan	Estonia	India	China	
France	South Korea	Hungary	Jordan	Costa Rica	
Germany	New Zealand	Iceland	Latvia	Guatemala	
Hong-Kong	Portugal	Israel	Lebanon	Indonesia	
Ireland	Singapore	Kuwait	Morocco	Jamaica	

<sup>1</sup> Official site of the National Bank of Ukraine [www.bank.gov.ua](http://www.bank.gov.ua)

<sup>2</sup> Ukraine: the assessment of gross troubled assets is improved, banking system newly belongs to group 10 according to the level of country and industry risks. <http://vwww.standardandpoors.ru/>

Table 2 (cont.). The assessment of the allowed level of gross troubled assets (GTA) for different countries of the world

5-15%	10-20%	15-30%	25-40%	35-50%	50-75%
Luxembourg	RSA	Lithuania	Philippines	Kazakhstan	
Netherlands		Malaysia	Poland	Nigeria	
Norway		Malta	Romania	Pakistan	
Spain		Mexico	Trinidad and Tobago	Russia	
Sweden		Oman	Turkey	Surinam	
Switzerland		Panama	Uruguay	Thailand	
Great Britain		Peru		Tunisia	
USA		Qatar		Ukraine	
		Saudi Arabia		Venezuela	
		Slovakia		Vietnam	
		Slovenia			
		Taiwan			
		UAE			
As of August 6, 2008					

Besides, proceeding from assessment of country and industry risks (the so called BICRA assessment), banking system of Ukraine belongs to group 10.

Table 3. Distribution of countries according to the banking industry country risk assessment (BICRA)<sup>1</sup>

Group 1	Group 2	Group 3	Group 4	Group 5
Australia	Germany	Austria	Czech Republic	Bahrain
Belgium	Hong-Kong	Chile	Greece	Brazil
Canada	Italy	Japan	Israel	Estonia
Denmark	New Zealand	Portugal	South Korea	Island
Finland	Norway	Saudi Arabia	Kuwait	Malta
France	Singapore		Malaysia	Oman
Ireland			Mexico	Slovakia
Luxembourg			Qatar	Slovenia
Netherlands			Taiwan	RSA
Spain			UAE	

<sup>1</sup> Ukraine: the assessment of gross troubled assets is improved, banking system newly belongs to group 10 according to the level of country and industry risks. <http://www.standardandpoors.ru/>

Table 3 (cont.). Distribution of countries according to the banking industry country risk assessment (BICRA)

Group 1	Group 2	Group 3	Group 4	Group 5
Sweden				
Switzerland				
Great Britain				
USA				
Group 6	Group 7	Group 8	Group 9	Group 10
Bulgaria	Salvador	Argentina	Belorussia	Bolivia
China	Latvia	Columbia	Costa Rica	Cambodia
Croatia	Turkey	Egypt	Guatemala	Dominican Republic
Cyprus	Romania	Indonesia	Lebanon	Ecuador
Hungary	Russia	Jordan	Nigeria	Jamaica
India		Kazakhstan	Vietnam	Surinam
Lithuania		Morocco		Ukraine
Panama		Pakistan		Venezuela
Peru		Philippines		
Poland		Tunisia		
Thailand		Uruguay		
Trinidad and Tobago				
As of August 6, 2008				

BICRA assessment reflects strengths and weaknesses of the banking system of Ukraine as compared to banking systems of other countries, the strongest ones belong to group 1, and the weakest – to group 10. Thus, Ukraine is referred to the group of countries with weak banking system, vulnerable to the country’s risks.

- 5) Inadequate monetary policy that is connected with lacking transparency and succession in the carrying out of currency auctions and banks refinancing operations, and also with weak control over the usage of given facilities, namely:
  - ◆ NBU didn’t prevent the changes of exchange rate but tried to lessen devaluation process by selling its international reserves, taking the apparent macroeconomic disbalances into consideration;
  - ◆ NBU couldn’t clearly explain the main reasons of its exchange market intervention and the process of choosing banks for currency sale; this impeded the stop of speculations both in international and spot markets;



- ◆ NBU pursued non-transparent policy of refinancing that undermined confidence in the ability of central bank to guarantee stability;
  - ◆ NBU carried out the poor control over the facilities usage, given in line with refinancing, the considerable part of which was likely output from the country enhancing the pressure on the exchange rate.
- 6) Unstable political situation and contradictory authority's statements about the future exchange rate didn't promote the renewal of people's confidence in the national currency.
- 7) High level of inflation in Ukraine against the unchanged exchange rate that had been observed for many years. Sooner or later the lost competitiveness had to be renewed with the help of corresponding exchange rate changes. It is confirmed by a great number of economic researches on the efficacy of purchasing power parity (ppp) in the middle-term perspective (see Table 4).

Table 4. Estimate of the exchange rate of hryvnia to USA dollar based on PPP<sup>1</sup>

Index	Years								
	2002	2003	2004	2005	2006	2007	2008	2009	2010
Inflation index in Ukraine	-0,6	8,2	12,2	10,3	11,6	16,6	22,3	15,0	13,0
Inflation index in the USA	2,6	1,9	3,2	3,7	2,2	4,1	0,8	-0,1	0,1
Inflation index in counties – main trading partners (MTP)	9,7	7,4	7,2	6,4	5,9	8,0	7,6	5,5	4,4
Inflation index in the countries, the currency of which is fundamental in foreign trading operations (FTA)	5,0	3,8	4,7	4,7	3,1	5,0	2,6	1,4	1,3
Working exchange rate of hryvnia to USA \$	5,33	5,33	5,31	5,05	5,05	5,05	7,70		
Δ of inflation indexes in Ukraine and the USA	-3,1	6,2	8,7	6,3	9,2	12,0	21,4	15,1	12,9
Δ of inflation indexes in Ukraine and countries – MTP	-9,4	0,8	4,7	3,7	5,4	7,9	13,6	8,9	8,2
Δ of inflation indexes in Ukraine and FTA countries	-5,3	4,3	7,2	5,4	8,3	11,1	19,2	13,4	11,6
PPP, 2002 =100									
Correlative price level in Ukraine and in the USA	100	106,2	115,5	122,7	134,1	160,1	182,2	209,8	236,9
Working exchange rate – USA		5,7	6,2	6,5	7,1	8,0	9,7	11,2	12,6
Correlative price level in Ukraine and MTP countries	100	100,8	105,5	109,3	115,2	124,4	141,3	154,0	166,6
Working "effective" exchange rate – MTP countries		5,4	5,6	5,8	6,1	6,6	7,5	8,2	8,9
Correlative price level in Ukraine and FTA countries	100	104,3	111,8	117,8	127,5	141,6	168,8	191,4	213,6
Working "effective" exchange rate – FTA countries		5,6	6,0	6,3	6,8	7,6	9,0	10,2	11,4

<sup>1</sup> Official site of the National Bank of Ukraine [www.bank.gov.ua](http://www.bank.gov.ua), IMF database "International economic projection" (April 2009). Available at <http://www.imf.org>, The Bleyzer Foundation <http://www.bleyzerfoundation.org>

Ukrainian authorities took some measures to overcome crisis, some of which appeared to be effective and some not.

Among measures, taken by the Ukrainian government, the following ones are considered to be expedient and effective to overcome the crisis:

- ◆ They managed to make arrangements with IMF ("stand-by" program in the amount of \$16.4 billion), World bank and other financial institutions about urgent financial assistance. These credits were of great importance for fortifying confidence of foreign investors that released the refinancing of short-term foreign debt.
- ◆ They managed to preserve rather high level of fiscal discipline: budget deficit was 1,5 of GDP in 2008 and about 3% of GDP in January-July 2009. It succeeded to be attained due to the charge-off of the uncritical spending. It is planned that in 2009 budget deficit won't exceed 6% GDP that corresponds to the level of fiscal deficit of other countries, which were influenced by global recession.
- ◆ Agreement on deficit shortage in 2010 to 4% of GDP (including allocations to Naftogaz).
- ◆ They managed to preserve payment in social services thereby avoiding considerable increase of arrears.
- ◆ Necessary measures were taken to overcome insolvency in a banking sector and provide financial help to institutional banks.
- ◆ Corresponding normative acts were updated with the aim to forward passing to more flexible monetary policy.
- ◆ Measures were taken to effectively solve problems with insolvency in non-systemic banks.
- ◆ They managed to satisfy quantitative criteria of IMF as to monetary base. Potential for development of domestic sources of financing was strengthened, particularly by means of acceptance of market rates during conducting auctions on floating of internal governmental bonds.
- ◆ They managed to daunt inflation and reach the gradual decrease of current account deficit.

Among measures taken by the Ukrainian government, the following ones are considered to be insufficient or ineffective for crisis overcoming:

- ◆ They did not manage to reach the effective level of coordination at all the levels of governmental authorities concerning the strategy development of crisis overcoming.
- ◆ There were not enough funds allocated to support domestic economy (especially trade and building) under the conditions of slash of external debt financing and domestic market of bank crediting. Loan growth was stopped suddenly.

- ◆ There was incapacity to control in a proper way the draft on funds provided in an infant state of the crisis in line with measures of liquidity support. This money was not spent on the rehabilitation of domestic credit market, as was supposed, but on the foreign exchange purchase, with the aim to funnel assets outside the country. That enhanced the devaluation pressure on hryvnia.
- ◆ They didn't manage to reach agreements with labor unions and other organizations concerning the price increase for gas and community facilities.
- ◆ They didn't manage to realize complex strategy aimed at the renewal of solvency of Naftogaz and pension fund.
- ◆ The initial privatization plans were not fulfilled that had a negative influence on state budget financing. Besides, extra efforts are needed to develop the transparent and open privatization strategy.

Though the rates of economic slack have slowed down recently in Ukraine, in general, the economic conditions remain difficult. As from April-May 2009, there appear more signs that economic correction has reached the bottom in key sectors such as industry, trade and building. And really, the slack period has slowed down from 34% on an annualized basis in January 2009 to 23% in August 2009. In the second half of 2009, the further improvement of economic situation is foreseen owing to the low statistic basis and due to the recovery of inventory holdings and introduction of fiscal incentives. Strengthening of world economy also will favor the more rapid recovery of Ukraine. In the second quarter of 2009, the processes of recovery began in several big developed (Germany, France, and Japan) and emerging (China, India, and Brazil) countries. Nevertheless, in 2009 GDP of Ukraine can be cut down by 14%. This fall is likely to be stronger than in many other developing countries.

It is necessary to remember that in January 2010 there will be held next presidential elections that will be followed by absence of political stability and may negatively influence the process of economic recovery and enhance economic slack. Taking into consideration the high risks of unstable character of the world economy rehabilitation, government should take measures aimed at renewing the investors' trust to macroeconomic policy of the country in the whole. The main components of stabilization policy are considered to be the following:

- 1) Cautious fiscal policy that means the following:
  - ◆ raise in pension and minimum wages should not exceed the inflation level;
  - ◆ supposed tax amnesty and moral and tax audit should not be established;

- ◆ avoidance of surplus support of Naftogaz and pension fund due to the state budget funds, for what their financial position must be improved;
  - ◆ foreseeing of deficit in the state budget for 2010 that does not exceed 4%.
- 2) Well-balanced monetary policy that should not lead to padding of money stock that will allow to avoid the crash of hryvnia's exchange rate. It means that NBU must:
- ◆ avoid the printing of surplus amount of money;
  - ◆ give up suggestions to finance projects, connected with the conduction of Euro-2012, due to the income of NBU;
  - ◆ avoid the monetization of state budget deficit;
  - ◆ improve transparency of bank refinancing policy;
  - ◆ carry out more severe supervision of the application of funds allocated for banks.
- 3) Effective supervision in the banking sector that means the following:
- ◆ severe supervision of the financial system of the country with the purpose of preventing insolvency of system important banks;
  - ◆ continuation of carrying-out a program of recapitalization and restructuring of banks.
- 4) Cooperation with IMF, which is necessary to:
- ◆ raise a loan through tranches of IMF;
  - ◆ support necessary level of trust of foreign creditors for restructuring of foreign debt of Ukraine;
  - ◆ get financing from other international establishments.
- 5) Middle-term reforms which must lead to essential and stable transformations, but, to experts' mind, moderate reforms won't change current unsatisfactory assessment by international society of Ukrainian business environment. Reforms must include the following:
- ◆ measures aimed at providing stability and transparency in legal and juridical spheres;
  - ◆ measures aimed at corruption overcoming at all the levels of power, both in the bodies of state administration and out of them;
  - ◆ reform of public administration for enhancing the responsibility of state institutes, avoidance of duplication and crossing their responsibilities, enhancement of efficiency of reaction processes and decision making by state bodies;
  - ◆ measures concerning deregulation and liberalization of business activity by means of substantial decrease of bureaucracy and arrangement and simplification of regulatory environment because, according to World bank, Ukraine takes 142 place

out of 183 countries according to the level of ease of business dealing that is considered to be unsatisfactory index;

- former sources of economic growth (namely, powerful internal consumption and export) are not able to provide further GDP growth at a recent pace;
- traditional sources of export (metallurgy and chemical industry), according to experts', won't demonstrate such high paces of growth as in the past;
- world prices for export products don't remain on the same high level as before.

Positive moment in stimulation of export of Ukraine is membership in World Trade Organization. Key tasks in this direction are: execution of an agreements about free trade with other states, signing of extended agreement concerning the free trade with European Union that will help Ukraine to enter the supply chain of Europe and will foster export development.

- ◆ Measures concerning the stimulation of investment inflow to the country's economy. The importance of these measures is connected with the following factors:
  - bank crediting that stimulated consuming in the past will increase much slower;
  - international credit resources that provided high rates of economic growth in Ukraine within the last years will play less important role;
  - investments, from experts' point of view, should become new sources of growth.

Positive moments in this direction are: the potential of Ukrainian market for foreign investors (46-million population is the attractive market); level of wages in the country accounts for only the third part of the mid-point in the eastern Europe; availability of skilled labor force in Ukraine; unique growth potential for AIC; relatively well-developed infrastructure and research-engineering capability. Key tasks in this direction are: signing of an agreement about free trade between Ukraine and EU that will foster the increase of direct foreign investments; the search of new ways of increasing of direct domestic and foreign investments that will foster the growth of production and productivity and job creation; the turn of investment climate in Ukraine for better.

- ◆ Providing of stable rates of effectiveness and productivity growth in the private sector, which must solve the following problems:
  - complex reconsideration of the national policy in the power industry. This policy should foster the improvement of energetic infrastructure and efficiency of energy consumption, diversification of sources of energy supply (including the large-scale passing to the use of alternative energy sources) and increased competition in a power sector;

- the development of program of improving effectiveness, security and quality of civil infrastructure, particularly accommodation, objects of communal sphere and transport;
- the development of plan of investment in the research activity of private sector, including the creation of industrial and technological parks for the support of adoption, in the scales of the whole economy, of modern technologies that foster the increase of manufacturing productivity;
- large-scale review of state agricultural policy with the aim to increase agricultural productivity and foster stable and ecologically safe usage of land and water resources;
- far-reaching reform of the national system of education with the aim to foster qualifications that are necessary for growth insurance of private sector and job creation;
- measures aimed at the development of entrepreneurship and small business, as well as at the support of competitiveness and private sector growth.

It is necessary to remember that every crisis has dualistic character – except negative, it causes a positive effect too. The positive consequences of world financial-economic crisis are as follows: strengthening and optimization of real and financial sectors, which passed through crisis; liberation of market from establishments with weak positions: activation of utilization of resources of domestic background and cooperation with internal investors; increase of orientation on domestic market and search for new niches on the international one; decrease of efficiency of tax avoidance scheme usage through the outputting of assets abroad; the change of structure and orientation of separate industries etc. In the case of taking of all necessary steps on the part of every participant of the economic system of Ukraine, the latter will level the significant amount of unfavorable influences, and will gain additional benefits both in the internal and in the world markets.