#### THE MINISTRY OF EDUCATION OF THE REPUBLIC OF AZERBAIJAN

#### AZERBAIJAN STATE UNIVERCITY OF ECONOMICS

#### INTERNATIONAL GRADUATE AND DOCTORATE CENTER

#### MASTER DISSERTATION

#### ON THE TOPIC

"The impact of the 2008-2009 financial crisis on Azerbaijan firm-level exports"

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# THE MINISTRY OF EDUCATION OF THE REPUBLIC OF AZERBAIJAN AZERBAIJAN STATE UNIVERCITY OF ECONOMICS INTERNATIONAL GRADUATE AND DOCTORATE CENTER

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| MASTER DI   | SSERTATION  |
| ON TH   | E TOPIC   |
| "The impact of the 2008-2009 financial                          | crisis on Azerbaijan firm-level exports"                  |
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| Code and name of Programme: 060403 Finance                      |   |
| Specialisation: Financial management                            |   |
| Group: 650  |   |
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### 2008-2009-cu illər maliyyə böhranının Azərbaycanın firma səviyyəsində ixracatına təsiri

#### Xülasə

Tədqiqatın aktuallığı: Dünya maliyyə bazarında 2008-2009 maliyyə böhranının tədqiqi elmi və praktiki baxımdan xüsusi bir aktuallıq əldə etmişdir. Dissertasiya tədqiqatının aktuallığı Azərbaycanda firma səviyyəsində ixracatda baş verən prosesləri nəzərə alaraq qlobal maliyyə böhranlarının nəzəri-metodoloji əsaslarının daha da inkişaf etdirilməsi zərurəti ilə şərtlənir.

Tədqiqatın məqsəd və vəzifələri: Tədqiqatın məqsədi 2008-2009 maliyyə böhranının Azərbaycanın firma səviyyəsində ixracına təsiri ilə bağlı problemini şərh etmək, qiymətləndirmək və təhlil etməkdir. Bu dissertasiyada maliyyə böhranı konsepsiyası, 2008-2009 maliyyə böhranının səbəbləri, Azərbaycanın firma səviyyəsində ixracına necə təsir göstərdiyi və gələcəkdə bunun qarşısını almaq üçün hansı tədbirlərin həyata keçirilməsi arasdırılır.

İstifadə olunmuş tədqiqat metodları: Dissertasiya tədqiqatının nəzəri-metodoloji əsaslarını böhranın təhlili və dünya iqtisadiyyatının çevik inkişafı, qlobal dünya iqtisadiyyatının formalaşmasının nəticələrinin təhlili, dünya dövlətlərinin iqtisadiyyatı üçün modernləşdirmə prosesləri və onların içərisində yeniliklərin rolu, innovasiyaların böhran dövründə iqtisadiyyata və dövlətə təsirləri, neo-texnoloji, neo-institusional və neo-Keynsiyan istiqamətli iqtisadi düşüncələrin müddəaları təşkil edir.

Tədqiqatın informasiya bazasını Azərbaycan Respublikası Maliyyə Nazirliyi, Dövlət Statistika Komitəsi, həmçinin elmi-tədqiqat institutlarının nəticələri, təklif və tövsiyələri təşkil edir.

Tədqiqatın nəticələri: Dünya maliyyə böhranı şəraitində Azərbaycanın iqtisadi tendensiyalarının təhlili göstərir ki, qlobal maliyyə böhranının ilk dalğaları Azərbaycan iqtisadiyyatına mənfi təsir göstərməyib. Neftin ucuz qiymətləri, beynəlxalq maliyyə bazarlarında əlverişsiz şərait, xarici sərmayə axınının azaldılması, ucuz kreditlərə çatma çətinliyi və s. iqtisadi inkişafın azalmasına gətirib çıxara bilər.

Nəticələrin elmi-praktiki əhəmiyyəti: Dissertasiya işinin elmi-praktiki əhəmiyyəti qlobal maliyyə böhranının Azərbaycan iqtisadiyyatına təsiri xüsusiyyətlərinin elmi tətqiqindən və bu tətqiqatın əsasında antiböhran tədbirlərinin təkmilləşdirilməsi üçün irəli sürülən təkliflərdən ibarətdir.

Açar sözlər: qlobal maliyyə böhranı, neft qiymətləri, Azərbaycan iqtisadiyyatı, Azərbaycanın ÜDM-i

#### Acronyms

**CBA** – Central Bank of Azerbaijan

**CIS -** Commonwealth of Independent States

**FRS** - Federal Reserve System

**GDI** – Gross Domestic Income

**GDP** - Gross Domestic Product

**IMF** – International Monetary Fund

**IPO** - Initial Public Offering

**NBER** - National Bureau of Economic Research

**SOFAZ** – State Oil Fund of Azerbaijan

**SRF** - Supplemental Reserve Facility

**TFP** - Total Factor Productivity

**ToT** - Terms of Trade

**UK** – United Kingdom

**US** – United States

WTO - World Trade Organization

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#### **Chapter 1: Introduction**

#### 1.1. Research Background

Problems related to global financial crisis and anti-crisis policy issues are the subject of discussions between academics working in the field of international scientific community as well as public and humanitarian sciences. The global financial crisis is still in progress in some countries. It is natural that in such a situation, it is crucial to investigate the causes and consequences of scientific research. On the other hand, Azerbaijan's economic development and its anti-crisis policy in the face of this global financial crisis caused some interest in the world scientific community.

Therefore, the analysis and evaluation of the global financial crisis and anti-crisis measures should be based on scientific evidence.

The world is in the throes of the Great Depression's worst financial crisis. The U.S. financial market crisis and its rapid spread through the domino effect to the financial systems of many other countries continue at breakneck speed. The world economy has returned to a quasi-"global transition period "following the current financial crisis. State participation in today's economy has dramatically increased and there is a growing trend towards a significant transformation of the global financial market corporate structure. An study of the history of the crisis demonstrates that the rather inadequate follow-up alternatives are primarily used to ensure a rapid withdrawal from a crisis situation: first, accelerated withdrawal from the crisis through deflation and collapse; second, rapid withdrawal and stabilization through hyperinflation; thirdly, a rapid withdrawal from the crisis through the introduction of partial default and devaluation of the currency. The third alternative is currently mainly being applied to recover as quickly as possible from the crisis. Nevertheless, emergency measures to overcome the effects of the crisis have only ensured temporary stabilization without eliminating the underlying causes. In this regard, questions about new sources of risk, the strategies of the major economic

players, as well as the economic policies of some countries, including Azerbaijan, are shifting to the forefront to ensure sustainable development under the circumstances of the global financial crisis. Given the scope and most likely prolonged nature of the global crisis, essentially new approaches and mechanisms need to be developed to stabilize the economic condition in the financial, real, and social sectors.

#### 1.2. The actuality of thesis

The study of the 2008-2009 financial crisis in the world financial market has acquired a particular actuality from the scientific and practical point of view. The relevance of the dissertation research is conditioned by the necessity further development of the theory of global financial crises, taking into account new processes taking place on Azerbaijan firm-level exports. Analysis of the features of the impact of the current global financial crisis on the economy of individual countries is an actual task, since in domestic and foreign science to date, not enough work, directly related to the impact of the global financial crisis on the economy individual countries, in particular on Azerbaijan. The disadvantage of modern economic research is the fact, that the global financial crisis is generally seen as a general financial frustration, without deepening in the very essence of the crisis, without a critical assessment of modern economic science, which also needs to work towards current, rapidly changing economic processes, without sphere of specific factors, the analysis of which is possible, if not warning, then at least warn about the approach of crisis processes.

#### 1.3. Application area of thesis topic

The scientific and practical significance of the dissertation is further studying the theory of the global financial crisis, its features, channels spread and consequences. The practical value of the study is that the obtained The results can be used by: public institutions and organizations that study and assess the impact of global economic processes on the national economies of countries, including Russia, for

developing systems of early warning of global financial shocks and anti-crisis measures taking into account the specifics of national economies. The main provisions and recommendations of the dissertation research can be applied by the legislative and executive power of the Republic of Azerbaijan in the process of improvement economic model of the country in order to increase its resistance to new crisis shocks. The provisions, conclusions and practical recommendations of the dissertation research can be used in higher education institutions when teaching such disciplines as "finance, money circulation and credit", "banking", "bank management", "money, loans, banks".

#### 1.4. Purpose of thesis

The purpose of this study is to interpret, evaluate, or analyze the problem related with the impact of the 2008-2009 financial crisis on Azerbaijan firm-level exports. In this thesis are investigated the concept of financial crisis, the reasons of the 2008-2009 financial crisis, how it affected on Azerbaijan firm-level exports and which events we can implement to prevent it in the future. To achieve the goals of this thesis the following tasks were determined:

- 1) At the theoretical level, expand the idea of a crisis in the world financial market and identify its fundamental causes;
- 2) Analyze the features of the crisis in the global financial market and its economic and social consequences on Azerbaijan firm-level exports;
- 3) identify opportunities to use international experience to overcome the crisis and develop early warning systems to ensure the stable development of the financial market of Azerbaijan;
- 4) to analyze the specifics of interactions between the subjects of the global economic system in order to identify the fundamental causes of the instability of its development;

#### 1.5. Methods of thesis

The theoretical and methodological base of the dissertation research was the provisions and fundamental concepts of Azerbaijan and foreign authors in the field of crisis analysis and cyclic development of the world economy, analysis of the consequences of the formation of the global world economy, the importance of modernization processes for the economies of the world's states and the role of innovation in them, the impact of innovations on the state of the economy in a crisis, implementing the provisions of the neo-technological, neoinstitutional and neo-Keynesian directions economic thoughts. Instrumental and methodological research apparatus is based on the use of general scientific methods (dialectical, historical and logical), as well as particular methods (cause and effect, statistical), methods of ascent from abstract to concrete, forecasting of economic processes of structural and logical modeling and other methods of scientific knowledge. These methods will be used at the appropriate stages of the research. To achieve the goal and solution of the tasks in this paper, the basis of the analysis methodology is comprehensive approach to addressing the problems of the global crisis and its impact on Azerbaijan firm-level exports. The theoretical basis of the study was the provisions of fundamental economic science, the theory of the world economy and world financial market, international monetary and financial relations, formulated in the works of domestic and foreign scientists, development and reports of international institutions.

#### 1.6. The results of thesis

An analysis of Azerbaijan's economic trends in the conditions of the world financial crisis shows that the economy of Azerbaijan will not be adversely affected by the first waves of the global financial crisis. Low oil prices, unfavorable conditions in international financial markets, reduced foreign investment flow, difficult access to cheap loans, and so on, could result in a slowdown in economic development. The severity of the economic and social issues will depend primarily on the duration of the global crisis and the price of oil.

#### **Chapter 2: Literature review**

#### 2.1. The theoretical concept of the global crisis.

This section delivers an overview of theory regarding financial crises and the effect of financial crises on society. First, I argue the theoretical background on the emergence of financial crises. After that, I give an explanation of possible consequences of financial crises. Furthermore, I provide an overview of theory regarding firm dynamics and firm performance through times of financial crises.

Economic histories of Nations cover several success stories of economic reforms undertaken by them, but what are remembered most are the years of hardship suffered by millions of populations at times of economic crisis.

The specialized literature has advanced several theories which challenge to explain the financial crises. As each financial crisis is unique in itself, its forms, causes and consequences have been termed 'conclusions', some of which are quite contradictory and therefore unconvincing. Therefore, the modern economic theories discard the idea of a general theory of the economic and financial crises, as per they can be combined into a universal model. Rendering to these theories, the crises cannot be predicted so as to bring their negative effects brought to a minimum. According to Kindleberger (53, 35-42) crises occur impulsively as a result of mass psychology or panic. However, history presents that they are closely related to the cyclic nature of the economic procedures. Economic cycles, whether short, medium or long-termed contain two phases - expansion and recession.

The economic literature separates between three kinds of financial crises: currency, banking and foreign debt crises. But in practice there are no clean forms of such crises; a unique concept in economic theory is that of twin crises – the crises of currency and of the banking sector. Thus, Kaminsky and Reinhart (50, 65-71) state the financial crises according to the forms they take: currency crises, banking crises and twin crises. Bordo (15, 142-147) state the banking crisis as a time of

financial suffering, which is severe enough to result in partial or complete erosion of capital in the banking system.

The banking crisis could be stated as a difficult enough period which runs to erosion in most or all of the capital from the banking system (5, 125-128). The emergence of banking crises is facilitated by the liberalization process in validation with an inefficient legal system and a high degree of corruption (33, 75-76).

In another approach, Mishkin (60, 105-110) outlined the financial crisis as a commotion of the financial markets in which the problems of adverse selection and moral danger become much worse. Therefore, a financial crisis denotes a sharp decline of a group of financial and economic indicators, an imbalance between the supply and demand of money, the fall of asset prices, accompanied by the letdowns of financial institutions such as banks.

There are 7 major financial crisis that the world observed in the last 100 years. The 7 crises that will be presented are the Great Depression 1932; the Suez Crisis 1956; the International Debt Crisis 1982; the East Asian Economic Crisis 1997-2001; the Russian Economic Crisis 1992-97, the Latin American Debt Crisis in Mexico, Brazil and Argentina 1994-2002, and the Global Economic Recession 2007-09.

The global economic crisis has affected almost all countries the world except the poorest countries comparable to a critical already quite long period.

The global economic crisis began as a local mortgage crisis in USA. The reasons for such a rapid spread of the crisis lie in the globalization of the American economy and the economies of the countries of the world, which is manifested in the gradual strengthening of the mutual influence and interdependence of national economies. Thus, any significant upheaval in the US markets consistently affects the entire global economy.

The first signs of a crisis appeared in the United States back in 2005, when there was a decline in the growth rates of real estate prices. Prior to that, for a long time, real estate prices grew due to factors such as natural appreciation due to inflation, investment attractiveness, which was generated by the belief in a constant increase

in prices and a very affordable mortgage (55, 202-206). This caused a boom in the housing market. In this regard, gradually in the United States there is a concentration of a larger share of real estate in the so-called subprime sector, i.e. owned by borrowers who do not have the financial ability to pay for the loans received. Moreover, mortgage banks made extremely low demands on the financial viability of potential borrowers either made a minimum of effort in order to check it.

The mortgage crisis in the United States is largely due to the desire of American banks to issue as many loans as possible, on which the number of received bonuses depended, not really thinking about the creditworthiness of borrowers.

In late 2006 - early 2007 problems in the mortgage lending sector became apparent. Property prices have stopped growing and began to decline. (40)

Perhaps the situation would not have been so catastrophic if it were not for the US mortgage bonds - one of the main stock instruments of the country that were considered to be the most reliable and secured asset before the crisis. About two Thirds of US Mortgages Converted into Mortgage Bonds and sold to the largest financial institutions, as a result of which banks could quickly return their money (in order to issue mortgage loans again), and bonds began to circulate in the stock market and be bought by various companies and corporations. But as soon as a mortgage in the United States faced a critical number of loan defaults, mortgage bonds plummeted in price, and their holders faced huge losses.

Moreover, a soft monetary policy pursued by the US Federal Reserve System since early 2000s has stimulated the issuance of banks loans. Average annual growth rate of consumer banking crediting in 2003—2007 were at the level of 5%, the growth of consumer loans in the III quarter of 2007 amounted to 7.2%. Mortgage loans issued increased from 238 billion dollars in the first quarter of 2000 to 1199 billion dollars in the third quarter 2003. As the US economy enters recession the trend of reducing the volume of bank loans. In this way, in the third quarter of 2008, about

415 billion dollars of mortgage loans were issued to the population loans (55, 206-208).

All this led to the fact that banks are too carried away with mortgage lending, began to go bankrupt one after another. As a result, tens and hundreds thousands of people left without work. In addition, due to a decrease in liquidity, consumer loans, as well as for companies, became more expensive. Many companies unable to take credit for development, which led to a new wave of unemployment.

Another reason that triggered the global economic crisis was the "overproduction" of dollars in the United States. American dollar in the last time was practically not secured. US produced goods and services much less than what they consumed. This country's GDP accounts for approximately 20% of global GDP, and consumes about 40% of the goods and services produced worldwide. At the same time, the USA spent huge sums on various social and medical programs, that is, on programs aimed at improving the living standards of ordinary Americans.

A key role in the development of the current crisis was played by the asymmetry of information. The structure of derivative financial instruments has become so complex and non-transparent, that assessing the real value of the portfolios of financial companies turned out to be almost impossible. Since the credit market is larger could not effectively identify potentially insolvent borrowers, it became ineffective. The development in the financial sector seriously affected on the real economy. Soon after the worsening of problems in the financial system, the United States entered recession. The US National Bureau of Economic Research is a board of economists and is considered official arbiter in determining the time of the beginning and end of recessions in the country, in December 2008 announced that the recession in the United States began a year ago - in December 2007.

#### 2.2. The causes of the global financial crisis

Over the years, many theories about the underlying causes of financial crises have been developed. Scholars distinguish between two main types of financial crisis causes. On the one hand, they consider asset price booms and bust as a major possible cause of a financial crisis; on the other, they argue that bust and credit price booms have the potential to turn into a financial crisis. Asset price bubbles and loan price booms need not necessarily lead to a major financial crisis, but they can be causes and amplifiers of financial distortions. (76, 150-153)

#### **Asset price bubbles**

The possible cause of financial crises is an asset price boom and bust. As the tulip bulb mania example shows in the introduction, a centuries-old phenomenon is a sharp rise in prices followed by sharp falling prices of the same good. Scholars refer as bubbles to such a sharp rise and crash in asset prices. Kindleberger (54, 57-58) describes a bubble as an "upward price movement over an extended range that then implodes." Garber (41, 103-109) believes that this definition lacks the necessary conclusion that a form of irrational behavior is reflected in the bubble pattern. His definition of a bubble is: a bubble is part of a grossly upward movement in asset prices that can not be explained on the basis of fundamentals. Scherbina (75, 13-45) sees a price movement as a bubble when the trading price of an asset exceeds the sum of future discounted cash flows, as shown in equation 1.

$$P_t > E_t \left[ \sum_{\tau=t+1}^{\infty} \frac{CF_{\tau}}{(1+r)^{\tau-t}} \right]$$
 (1)

 $P_t$  denotes the trading price and  $E_t$  the fundamental price of the asset. The basic price consists of all expected future cash flows discounted, as shown between brackets, by the appropriate interest rate. Risk should be included in the interest rate. Since in practice it is difficult to estimate the risk compensation, an alternative definition substitutes the appropriate interest rate with the risk - free rate  $r_f$ , so that the formula changes into:

$$P_t > E_t \left[ \sum_{\tau=t+1}^{\infty} \frac{CF_{\tau}}{(1+r_f)^{\tau-t}} \right]$$
 (2)

The cash flows of the asset have a positive correlation with market risk for most firms. The required rate of return is therefore higher than the risk - free rate and equation 2 is the upper limit of the fair value of the asset.

Scholars have developed various models to explain bubbles of assets. In these models, I make a trichotomy: I models that consider individual rational behavior to be the cause of collective mispricing, ii) models that consider microeconomic distortions to be the cause of mispricing, and iii) models that regard investor irrational behavior as the cause of mispricing (24, 13-28).

Blanchard and Watson (14, 36-55) develop a model that sees rational behavior as the cause of bubbles in asset prices. They argue that both behavioral and expectational rationality does not imply that an asset's trading price must be equal to its fundamental value. A number of conditions are required for this model. First of all agents must be rational and it should be common knowledge of all information. Second, the asset must have an infinite lifespan and the rate of growth must be equal to the rate of discount, as shown in equation 3. The trading price  $P_t$  contains the discounted value of all future cash flows and a bubble component in addition to the fundamental value  $P_t^{\text{fundamental}}$ , so that  $P_t = P_t^{\text{fundamental}} + B_t$ .

$$P_{t} = E_{t} \left[ \sum_{\tau=t+1}^{\infty} \frac{CF_{\tau}}{(1+r_{f})^{\tau-t}} \right] + \lim_{T \to \infty} E_{t} \left[ \frac{B_{T}}{(1+r)^{T-t}} \right]$$
 (3)

 $B_T$  is the total bubble component, which we undertake to grow at rate  $r_B$ , such that  $B_T = B_t (1 + r_B)^{T-t}$ . If  $r_B < r$ , which funds that if the bubble growth rate is lower than the discount rate, the present value of the bubble is zero and thus the bubble cannot exist. Alternatively, if  $r_B > r$ , which means that if the bubble growth rate is upper than the discount rate, the value of the bubble is infinite and thus it cannot exist. The bubble is deemed to rush, unless the state  $r_B = r$  holds. If an asset does not have an infinite lifetime, when the asset is liquidated at its fundamental and fair value, the bubble will definitely burst at the end of the lifetime of the asset. Backward induction – proposing that if one knows that the bubble will burst at T an agent will not be eager to buy it at T-1, neither at T-2 and so on – leads to the assumption

that a bubble cannot occur for an asset with a limited lifespan (75, 13-45). Other scholars, among them Allen, Morris and Postlewaite (6, 206-229), debate that a bubble can exist for a finitely-lived asset if agents have asymmetrical data and they cannot sell the asset short.

Microeconomic models are the second category of models explaining asset price bubbles. This category includes the rational models of new generation that account for factors such as personal incentives, non - standard market preferences and market frictions. These models consider the effects of herding on investor investment decisions, most market players limited liability, and perverse incentives. DeMarzo, Kaniel and Kremer (32, 19-50.) design a relative wealth model in which investors are involved in bubbles as long as others are involved in maintaining their relative. Allen and Gale (4, 87-95) relate bubbles to issues relating to agencies. Prices are driven up due to the risk of shifting from the agent to the money lender agents.

Rajan (67, 499-533) states that the limited liability of fund managers – who receive higher upside rewards than downside punishments – biases their portfolios to risky assets that may trigger a bubble in asset prices. Microeconomic and fiscal bubble such as interest rate deductibility for corporate debt and household mortgages can also contribute to asset price bubbles (24, 13-28).

Explanations for asset price bubbles are found in the third category of models in the irrational behavior of agents involved in investing in these assets. Scholars found deviations in actual prices or returns from the predicted prices and returns across different markets, time periods and institutional contexts. In an efficient market, an entirely new research area, behavioral finance, attempts to explain the price patterns deviating from the predicted price. The unifying feature behind behavioral models is that it is assumed that at least one group of agents act irrationally. Shleifer (79, 4-7) describes potential investor reactions to an Initial Public Offering, which may result in stock overstatement or underestimation depending on the 'mood' often highlighted and amplified by the media. Schwert

(77, 939-974) describes how certain effects that explained real price deviations from predicted prices in the past seem to disappear over time but still influence investor decisions. This lagging knowledge pushes investors into behavior that is irrational. An example is the so - called size effect, which argues that small businesses earn a higher average return than is forecast. This effect has been shown to have disappeared over time.

Rational models do not explain the creation of a bubble, as Diba and Grosmann (34, 697-700) point out; the bubble must already be present when the asset trading begins. Bubbles may occur in behavioral models when agents overreact to certain informative signals about fundamental issues related to asset value. A model describing the ongoing acceleration in credit borrowing and the corresponding development of higher - value firms (13, 1341-1393), the "financial accelerator" amplifies an initial positive shock to the fundamentals that leads to higher asset prices.

In what situations burst or deflate the asset price bubble? Several shocks can result in an asset price bubble bursting or deflating. One such shock may be when there is a decline in uncertainty about future earnings or when there are less binding short sales constraints. The highest asset price declines appear around earnings announcement, thereby declining future earnings uncertainty. (74, 533-565, 1113-1138). Another shock is the exhaustion of new capital supply, most commonly caused by a change in credit restrictions or a change in sentiment. These circumstances result in a reversal of the positive feeling, a slowing of the growth of the bubble, and consequently a fall in the price of the asset. The result is a spiral downward and possibly a "fire sale" of institutions attempting to get rid of the asset. Such a strong negative signal against the positive feeling can turn the positive spirit in any asset class into a freeze (75, 13-45). The burst of an asset bubble causes an evaporation of part of the initial investment and a decline in the asset trade.

#### **Credit booms**

A credit boom bust may be the second cause of financial crises. Mendoza and Terrones (58, 140-147) describe a credit boom as "an episode in which credit delivery to the private sector is significantly higher than its long-term trend." A wide range of scenarios can trigger credit booms, ranging from short-and long-term economic performance to macroeconomic and financial factors.

An extended period of economic growth is the first type of shocks that can lead to a credit boom. A positive investment feeling can cause the supply of credit to consumers and businesses to spiral upward. Dell'Ariccia et al. (31, 24-49) find empirical evidence that a credit boom is positively linked to lagged GDP growth. The average real GDP growth rate is 5.1 percent in the average three - year period preceding a credit boom, compared to an average real GDP growth of 3.4 percent in a quiet three - year average period.

A second shock that can result in a credit boom is a significant increase in international financial inflows (25, 267-293). As a result of the increase in financial inflows, funds are increasing for local banks. For corporations and households, this results in more relaxed credit constraints. An expansion of household and business credit is not an issue as long as the economy continues to expand. However, when the economy slips into recession, the leveraging of these households and businesses—by banks that relaxed their credit constraints—can lead to a more severe recession (49, 473-500). Scholars find evidence of rapid credit expansion and a sharp increase in real estate and asset prices with large capital inflows in many countries prior to the financial crisis of 2008 - 2009 (24, 13-28).

Financial reforms are the third and final type of shocks that can cause credit booms. These reforms can be long - term as well as short - term. Financial liberalization and financial innovation are structural changes in the financial landscape. Poorly designed and sequenced financial liberalization may result in excessive increases in borrowers' leverage. More accommodating monetary policies can be more short - term financial reforms. Low interest rates, for example, are associated with increased risk - taking. Lansing (56, 8) and Hirata et

al. (42, 9-14) find that relatively low US interest rates in the years 2001 - 2004 are a major factor behind rising house prices and household leverage. Increasingly easy providing borrowers with credit facilitates more risk - taking and thus increases the risk of over - investment.

In both industrial economies and emerging economies, credit booms have emerged. In industrial economies and emerging economies, there are differences between credit booms. First, in emerging economies, macro- and micro - economic fluctuations are larger than in industrial economies. Second, crises are associated with a higher degree of credit boom in emerging markets than in industrial economies. Third, credit booms appear more frequently in an emerging economy preceded by periods of large capital inflows but not preceded by gains in Total Factor Productivity and domestic financial reforms. There is a contrasting pattern in industrial economies (58, 68-70).

## 2.3. System analysis of the consequences of crises in the world financial market

This leads to the devaluation of certain financial assets if asset price bubbles or credit booms trigger a financial crisis. In some cases, a financial crisis only leads to monetary value loss, but not to real economy changes. A financial crisis, however, affects the real economy in a number of ways in most cases. In this section I discuss the possible macro-scale effects of financial crises on society, the possible impact of a financial crisis on GDP, other related issues such as unemployment and a decrease in value of assets and firm exports performance during financial crises.

#### Effect of a financial crisis on GDP

A financial crisis could drag a country or even the entire world into a recession (7, 183-190). A consecutive 2-quarter decline in GDP is the most common definition of a recession (39, 35-56.). Compared to normal recessions, recessions surrounded by financial crises last unusually long (47). Equation 4 defines GDP from the point of view of expenditure, giving the following equation:

$$Y=C+I+G+(X-M)$$

Where means Y the GDP which contains C (private consumption), I (business investment), G (government expenditures on final goods and services) and (X-M) the difference between gross exports and gross imports.

All GDP components can be affected by a financial crisis. Most scholars assume that the impact of a financial crisis on private consumption is negative. Consumption declines can be widespread across various sectors, ranging from improving housing to tourism (59, 92-96; 63, 39-45.). As a result of a financial crisis, there are several reasons for a drop in household consumption. The main reason is that banks' supply of capital becomes scarce: as banks face challenges in their returns on investment, they are more stringent on loans. This makes it more difficult for the average man to obtain a loan to finance expenses like a house or a car. Besides rising credit supply difficulties, the uncertainty associated with a financial crisis makes consumers prudent. Instead of spending money, households keep a worst-case nest egg that could be ahead.

Investment – the second factor of GDP – shows a pattern similar to consumption; financial institutions' difficulty in obtaining credit restricts firms in their investments. Campello, Graham, and Harvey (19, 470-487) find that financially constrained firms are planning to cut more investment, technology, marketing, and jobs than financially unconstrained businesses in the latest global financial crisis. Nearly 90% of financially constrained firms say their investment in attractive projects is limited by financial restrictions, while more than half of these firms cancel valuable investment chances. Furthermore, restricted firms have a higher propensity to sell productive assets to generate funds during the crisis.

The impact on government spending of a financial crisis depends on the government's monetary policy. Most countries follow John Maynard Keynes's (52, 7) counter-cyclical monetary policy. Governments try to boost the economy and increase consumption and investment by increasing government spending during

times of crisis. Governments intend as soon as possible to turn the tide. A countercyclical policy is based on the idea of a government spending multiplier; some economists and policymakers believe that government spending has an effect on aggregate demand that exceeds initial spending (71, 34-56). Other scholars question this multiplier effect's existence and magnitude (26, 281-295). Reinhart and Rogoff (69, 104-122) find evidence that, as a result of a financial crisis, real government debts tend to explode. Real government debt increased 86 percent on average during the 18 major financial crises that followed the Second World War. This large increase in real government debt is often contributed by countercyclical fiscal policies. Another factor that accounts for the rise in real government debt following a financial crisis is the tax revenue collapse. As a result of the decline in output, tax revenues in times of financial crises decline significantly. (69, 104-122).

A financial crisis often leads to a decline in both import and export trade. The financial crisis of 2008-2009 caused the largest trade collapse ever recorded; all countries of the World Trade Organization faced a decline in imports as well as exports (11). There are twofold explanations for a decline in trade. On the producer side, the decrease in external finance availability reduces the production and export capacities of a company. Due to long cash flow circles and uncertainty about payments, international trade tends to be financial - intensive compared to domestic trade. In times of crisis, companies tend to focus on internal market production. Disruptions in financing can harder hit international trade than domestic trade (37, 44-48). The negative economic prospects associated with a financial crisis lead to a slowdown in consumer demand in general and for imports in particular on the consumer side of the trade story. Chor and Manova (23, 117-133.) find that credit circumstances were an important channel over which trade volumes were affected by the global financial crisis over time; countries with higher interbank rates and thus tighter credit markets exported less to the United States during the top of the financial crisis of 2008 - 2009.

#### Other consequences of financial crises

There are several other potential macro - scale impacts of financial crises. These consequences are associated with a recession, but not directly accounted for by GDP's expenditure approach.

The first major result of a major financial crisis is the increase in poverty across the countries affected by the crisis. A 2010 World Bank report finds that the great recession that followed the global financial crisis of 2008 - 2009 turned 64 million people into scarcity. According to a survey, conducted by Hurd and Rohwedder (43, 37-40) among American households, nearly 40 percent of households have either been affected by unemployment, negative home equity, mortgage payment arrears or foreclosure.

Another consequence of a financial crisis is the prolonged decline in the prices of certain assets or the devaluation of savings. Reinhart and Rogoff (69, 44-62) find that real house prices declined 35 percent over six years on average over 18 post-WWII financial crises and real equity prices declined 55 percent over three-and-a-half years. A quarter of respondents between the ages of 50-59 in the survey conducted by Hurd and Rohwedder (43, 105-107) reported that they had lost more than 35% of their retirement savings as a result of the global financial crisis of 2008-2009. Bricker et al. (16, 9-12) found that 60 percent of U.S. households saw their wealth decline in the period 2007 - 2009 and 25 percent of households lost more than half of their prosperity in that period.

The rise in unemployment is the consequence of a financial crisis with the greatest social impact. Unemployment rises with 7 percentage points as a result of a financial crisis on average over a four - year period (69, 44-62). Fallon and Lucas (36, 21-45.) find in their study of several financial crises in the 1990s that employment fell much less than production; employment even increased in some situations. However, these numbers are country aggregates that mask considerable increases in unemployment in several sectors, regions and employment status.

Another result of financial crises may be a decline in real wages due to inflation. Real wages in Indonesia declined by 44 percent in one year and Turkey declined by 31 percent as a result of various financial crises. In addition to a decline in real wages and an increase in unemployment, a financial crisis leads to job insecurity among those who still have a job (1, 463-483.). This uncertainty leads to organizational turbulence that can cause organizations to leave the most capable and competent workers. As a result, it is left to the less skilled and able workers to lead the organization through uncertainties.

The change in financial perspective as a result of a financial crisis can also influence a person's well-being from a social point of view. Studying US data on self-reported well-being, Deaton (30, 1-26) finds that Americans reported sharp declines in their life assessment and sharp increases in worry and stress in the 2008-2009 period. In Greece, suicide rates rose significantly in the period 2007-2009, and the national suicide helpline reported financial difficulties faced by a quarter of callers (51, 1457-1458). In conclusion, I argue that financial crises, both economically and socially, can have a major impact on society.

#### Firm exports performance

A financial crisis can lead to a significant aggregate decline. The financial crisis of 2008 - 2009 caused the largest trade collapse in history, contributing to the emergence of a long - lasting global recession called the Great Recession by some scholars (11). Economists are primarily investigating the impact of the financial crisis of 2008 - 2009 on exports at national and industrial level. Research is underrepresented on the impact of the financial crisis on exports at the firm level. I give an overview of the literature on export performance at the firm level in this section. I derive the hypotheses that are tested in this paper's empirical analyzes based on this literature.

#### The crisis effect

Scholars agree that a financial crisis can adversely affect trade. Imports and exports may be affected by a financial crisis (38, 52-87, 117-133.). Iacovone and Zavacka (45) find that banking crises have a negative impact on country-level and industry-level export growth. My research's baseline hypothesis is that this export crisis effect also holds at the company level. I assume that the severity of the financial crisis is a factor in the decline in the value of exports at the firm level. The main hypothesis reads: **Hypothesis 1:** Companies more severely affected by the financial crisis are experiencing a greater decline in export value in the period 2008 - 2009 compared to firms less severely affected by the financial crisis.

#### The innovation moderation effect

Technical changes and innovations lie at the basis of international trade, according to Posner (65, 323-341). Temporary monopolies for a technical method or product are an incentive for businesses to imitate the method or product inventor. This imitation leads to global interaction and trade. In addition, innovation should be the main factor driving export flows in advanced economies, according to Schumpeterian view (35, 64-67).

In principle, company - level decision - makers - not country - level - make innovation investment decisions. It is also primarily companies that benefit from innovation; cost reductions, new markets, and potential rents for monopolies (81, 829-841). Wakelin (81, 829-841) finds that innovative firms are more likely to export than non - innovative firms of the same size in a study on UK manufacturing firms. Furthermore, the number of past innovations has a positive impact on the likelihood of exporting an innovative firm. Pla-Barber and Alegre (64, 275-293.) have similar findings among French biotechnology companies. They find that innovation and export intensity are linked positively and significantly. Roper and Love (72, 1087-1102.) find that being innovative has a strong impact on the likelihood and propensity to export for UK and German manufacturing companies. The degree of innovation and export tendency varies across countries; the scale of plant innovation activity is positively related to UK

export propensity, while there is a negative relationship between the scale of innovation activity and export performance in Germany.

During a financial crisis, little research was carried out on the relationship between innovation and exports at the firm level. Basile (8, 1185-1201) studies Italian firms' export performance at various exchange rates. The results suggest that competitive factors that help explain heterogeneity in export behavior among Italian firms are capabilities for innovation. The importance of technological competitiveness in influencing export declines in times of exchange rate devaluation. This is due to the fact that when the exchange rate is low, non-innovative firms can enter foreign markets more easily. The advantage of innovative firms over non-innovative firms in terms of export likelihood and export propensity decreases in economically more favorable times.

Opposing reasoning suggests that the advantage of innovative firms over non-innovative firms increases in economically harder times. A financial crisis affects innovative firms' export performance less than it affects non - innovative firms' export performance. In times of credit restriction, prices and quality are gaining importance, in which case innovative firms outperform non - innovative firms in terms of exports. Innovative firms can sell products of higher quality at lower prices than their non - innovative competitors or the same quality products. Hypothesis 2 assumes there is an effect of innovation moderation, that is, innovation moderates the negative impact of a financial crisis on exports at the company level. The assumption reads as follows:

**Hypothesis 2:** Innovative firms are less affected by the financial crisis than non - innovative firms in terms of export value decline over the period 2008 - 2009.

#### The import moderation effect

As producers have access to new input varieties from abroad, international trade can stimulate the introduction of new products in a country (70, 531-555, 377-409). The question is whether the company-level also holds this increased

productivity. Colantone and Crino (27, 147-165.) find evidence that new imported outputs lead to product creation for the European company. They also find that these new imported inputs are a significant stimulus for country - level production output growth. According to Damijan et al. (29, 189-204), imports of intermediate products and capital equipment are important vehicles of international spillovers of knowledge.

In times of financial crisis, literature on importing firms' export performance is virtually non-existent. Thus, I assume that importers have access to the highest quality of available goods and services. I assume that importers are more able to handle financial disadvantages than non - importers. Therefore, in terms of export performance these firms are less affected by a financial crisis than non - importing firms. I call this the effect of importation moderation.

**Hypothesis 3:** Companies that import raw materials, goods or services from abroad are less affected by the financial crisis in terms of the 2008 - 2009 decline in export value than non - importing companies.

#### The external finance severity effect

While literature on the relationship between import, innovation and export performance is virtually non-existent during financial crises, many scholars have researched the relationship between the credit supply channels of firms and export performance.

Rajan & Zingales (68, 129-131) finds that industrial sectors that require more external finance (such as the drug industry) are developing disproportionately faster in countries with more developed financial markets than in countries with less developed financial markets. Chor & Manova (23, 117-133) finds that sectors with a high level of external finance are experiencing a greater decline in exports compared to other sectors in the financial crisis of 2008 - 2009.

Empirical literature suggests that the decline in production and exports during financial crises can be explained at least partially at the company-level credit restrictions. With regard to the 2008Q3-2009Q2 trade collapse, Behrens et al. (9, 702-709) find that Belgian firms with shorter debt maturities and larger shares of financial debt in total liabilities tend to see a greater decline in exports. Bricongne et al. (17, 134-146) for French firms show similar results. In industries highly dependent on external finance, firms subject to tighter credit constraints are experiencing greater export declines than other firms. Outside Europe, Coulibaly et al. (28, 25-38) found that, during the financial crisis of 2008 - 2009, Asian firms with higher working capital requirements and greater dependence on external finance experienced a greater decline in total sales.

In this research, I check whether the hypothesis that firms more dependent on external finance are also facing a larger decline in export value across several European countries. Based on the empirical literature, I assume there is an effect on the severity of external finance. This means firms that rely on external finance are faced with a greater decline in export value compared to their counterparts that rely solely on internal financial sources. This results in the hypothesis as follows:

**Hypothesis 4:** External finance - based firms are more affected by the financial crisis in terms of export value decline in 2008 - 2009 than non - external finance firms.

#### The world after the crisis

At the end of July 2009, it is difficult to predict the duration and severity of the crisis, as well as the prospects for the post-crisis development of the world economy, and even more so for the economies of individual countries. In general, they will depend on the quality of crisis management, both globally and nationally.

The optimistic scenario is based on the hope that individual countries will be able to avoid protectionist temptations, and the current round of negotiations on the further liberalization of world trade will soon be brought to a successful end. The next optimistic premise is the expectation that we can create an effective system of international regulation of financial markets in order to avoid their renationalization by individual governments. If the situation develops according to the above optimistic scenario, the main achievements of globalization over the past thirty years will remain unaffected.

In the macroeconomic sphere, the course of events will depend, in many ways, on intellectual and political ability to move away from monetary and fiscal stimulus in order to avoid inflation or stagflation, which would mean the prospect of slowing economic growth for many years.

Even in an optimistic scenario, time is needed to stabilize the economy, return to growth and compensate for the losses caused by the crisis. According to the simulation made by Chandy, Gertz & Linn (21, 8-10), and based on the relatively optimistic IMF forecast, the world and CIS economies will return to 2008 gross domestic product not earlier than 2011. In Central and Eastern Europe, this will happen no earlier than 2012, in highly developed countries - not earlier than 2013, including in Great Britain, Spain and Italy - after 2014

In general, a post-crisis recovery, regardless of when it starts, can be very slow. The stagnation scenario is also not excluded, as in most countries of the world in the thirties or in Japan after the financial crisis of the early nineties, if the crisis management turns out to be worse than the optimistic scenario.

In any case, it is unlikely that the world economy will grow at the same pace as on the eve of the current crisis. At the moment, sources of rapid growth in labor productivity and other factors of production are not visible. Simple reserves, associated with market transformation and the liberalization of world trade, are already in demand.

The world economy will come across growing constraints in the availability of energy resources and increasing environmental costs of rapid development. Combating climate warming will require enormous resources and will be linked to

the need for serious structural changes, especially painful in the economies of rapidly growing developing countries.

To avoid overheating and new distortions, monetary policy will be forced to be more stringent. The financial sector will come to increase its capitalization, and follow more conservative practices, including more seriously assessing risks. The era of cheap and easily accessible money will not be back soon.

Most countries will have to face tougher fiscal constraints that will require a major adjustment to government spending policies. Under these conditions, the resumption of economic and institutional reforms can be the best way to increase the potential for economic growth.

#### **CHAPTER 3: Methodology**

The starting point of the scientific analysis of any problem is to determine the methodological foundations of its research. These are the basics: first, the definition of logic, that is, the sequence of research problems; secondly, the formulation of methods by which its analysis is carried out.

The logic of the study means the sequential definition, respectively, of the object, subject and purpose of the study.

The study of any phenomenon requires, above all, the question of the external boundaries of its study. The formulation and resolution of this issue is based on the thesis of the need to distinguish between an object and a subject in relation to any branch of knowledge.

Research methods: the methodological main when writing a work are scientific methods that are based on the requirements of an objective and comprehensive factor analysis of the financial condition of the organization. Research conducted using a combination of methods and methods of scientific knowledge. Abstract-logical method allowed to reveal the theoretical aspects of assessing the financial condition and financial stability, to determine the main characteristics of the processes and phenomena occurring in this area. The system-structural method is used to analyze the financial condition and identify structural changes. The use of economic-mathematical and economic-statistical methods allowed to determine the development trends of the organization, evaluate their dynamics, identify imbalances and contradictions, predict their further development and methods of improving the financial stability of the organization.

The theoretical and methodological base of the dissertation research was the provisions and fundamental concepts of Azerbaijan and foreign authors in the field of crisis analysis and cyclic growth of the world economy, analysis of the consequences of the formation of the global world economy, the importance of modernization processes for the economies of the world's states and the role of

innovation in them, the impact of innovations on the state of the economy in a crisis, implementing the provisions of the neo-technological, neoinstitutional and neo-Keynesian directions economic thoughts. Instrumental and methodological research apparatus is based on the use of general scientific methods (dialectical, historical and logical), as well as particular methods (cause and effect, statistical), methods of ascent from abstract to concrete, forecasting of economic processes of structural and logical modeling and other methods of scientific knowledge. These methods will be used at the appropriate stages of the research. To achieve the goal and solution of the tasks in this paper, the basis of the analysis methodology is comprehensive approach to addressing the problems of the global crisis and its impact on Azerbaijan firm-level exports. The theoretical basis of the study was the provisions of fundamental economic science, the theory of the world economy and world financial market, international monetary and financial relations, formulated in the works of domestic and foreign scientists, development and reports of international institutions.

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## CHAPTER 4: The impact of the 2008-2009 financial crisis on Azerbaijan economy.

#### 4.1. The impact of the 2008-2009 financial crisis on Azerbaijan.

Azerbaijan has not been as severely affected by the global economic crisis as many other countries have, but it has not been entirely immune due both to declines in oil prices, Azerbaijan's major export earner, and liquidity problems in the country's banking system. The impact of falling oil prices has received a lot of attention, but the effect of the crisis on banks' liquidity has not, although banks account for 70 percent of the country's non-oil GDP.

Any problems with Azerbaijan's banks can have a major impact due to the size of this sector. One reason or concern is that in 2007, commercial banks in the country tripled their foreign debt to US\$2.5 billion, most of which were in short-term loans (87). Approximately half of these debts had to be repaid because of this arrangement just as the financial crisis hit in 2008, putting particular stress on the banks of the country.

As Najafov (62) pointed out, the high short-term to long-term indebtedness ratio points to possible local banks' Ponzi financing schemes, making them even more vulnerable to failure. And even if that is not the case, asset returns fell to 2.2 percent by almost half a percentage point, with profits growing faster than assets, the CBA (86) reported. There was also a fall in the return on equity. And both of these developments, as a result of the crisis, reflect higher interest and non-interest costs.

Other songs also point to liquidity problems. On the one hand, loans extended to consumers have decreased. And on the other hand, banks' involvement in the securities and treasury bill sector has been reduced. CBA notes—about 91 percent of the total—and treasury bills dominate the debt market in Azerbaijan. In the first quarter of 2009, the placement of notes fell by more than two-thirds, and the secondary market fell nearly as much as a year earlier. These declines reflect the

more conservative strategies that banks have adopted to address their liquidity issues, analysts have concluded.

In response, the Central Bank reduced the refinancing rate in five steps from 15% to 3% and lifted the 5% reserve requirement on banks' foreign liabilities. It also reduced domestic liabilities reserve requirements in half from 12 percent to six percent. These changes brought the system an additional US\$ 438 million. But all these changes have not resulted in a significant reduction in interest rates on bank loans, an indication that the impact of centralized loans was not inordinate due to the relatively small volume and because the banks are more concerned with their own liquidity than with stimulating the business sector.

The Central Bank urged the banks of the country to re-evaluate risks to help recover the market. At the same time, it tightened the quality and securitization requirements for banking assets to improve the banks 'financial foundation. And the Central Bank has taken some extra steps to ensure that foreign borrowing can continue at safe and manageable levels. These steps reduced Ponzi's risk of funding, but it is already clear that reduced funding from abroad requires more local resources to be introduced, especially as loans from the Central Bank can not serve as an alternative.

Meanwhile, the government of Azerbaijan has waived the tax on banks' profits from 2009 to 2012. This will boost the banks' profitability in the medium term but will not address many of the financial crisis' short-term effects. And it's a serious situation. Two major banks in Azerbaijan, AGBank and Texnikabank have fallen from stable to negative, according to the Fitch ratings (88), given "the already significant levels of non-performing loans" in the former and "the high proportion of restructured loans" in the latter. Moreover, given its liquidity problems, Fitch has downgraded Unibank's rating from D / E to E.

Because of these problems, financial experts from Azerbaijan have asked the Central Bank to consider allocating part of the republic reserve funds in Azerbaijani banks to their assets so that they can help the business sector, take steps to ensure that the public does not lose confidence in banks by enhancing

depositor accounts guarantees and reviving the mortgage sector through the State Hypothecary Fund, which should also receive additional budgetary money.

Other resources could make a valuable contribution, the experts say, such as Islamic finance. Islamic banks currently seem more resilient than conventional banks to the global crisis because they are not engaged in interest-based operations and tend to avoid speculative tools such as derivatives. Islamic banks are hailed as "stability bastions" at a time when the world is experiencing an unprecedented financial crisis (66). And to draw on its strength, Azerbaijan needs to consider changing the legal codes of the country to all for the wider operation of Azerbaijan's international Islamic financial institutions.

The impact of the global financial crisis on the economy of Azerbaijan is an interesting case study, especially as it is a small transition country of the CIS heavily dependent on oil exports. Indeed, oil is about half of the country's GDP. Hence, the channels that influenced the local economy by the recent economic crisis are slightly different from those experienced by other economies in the region. Other transition economies, for example, have been badly hit due to massive foreign capital outflows, resulting in severe currency depreciation. In addition, decreasing demand and falling export prices, mostly raw and simple manufactured goods, accompanied by reduced demand for investment, resulted in severe reductions in GDP.

Although these negative trends were also experienced by the economy of Azerbaijan, they were not the main factors. Instead, a drop in oil prices mainly affected the economy. As a result, the global crises influenced Azerbaijan's economy through three direct channels:

- falling oil prices;
- falling external demand for non-oil Azerbaijani products;
- outflow of foreign capital.

#### Fall in oil prices

Decline in oil prices and the resulting reduction in oil export income is the most obvious and The visible sign of the impact that the economic crisis has had on the economy of Azerbaijan. The average drop in oil prices between 2008 and 2009 shows that Azerbaijan's Terms of Trade fell by nearly the same magnitude that led to the severe deterioration of the current account surplus – from 33.7% of GDP in 2008 to just 23.6% of GDP in 2009.

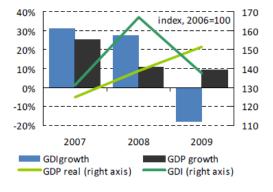
It also leads to a serious decrease in "purchasing power." Taking this into account and following the methodology of the World Bank (89) it is possible to calculate GDI growth in 2009 using the following formula:

$$GDI_r = GDP_r + (X/P^M - X/P^X),$$

Where GDIr refers to real gross domestic income, GDPr refers to real gross domestic product, X refers to nominal exports and PM and PX refers to import and export price indexes.

Assuming that the change in PM is equal to the change in the Real Effective Exchange Rate and that PX is equal to the price of crude oil, it can be concluded that the real GDI of Azerbaijan actually fell by 18% in 2009 (with GDP increasing by 9.3%). By contrast, GDI rose by 34 percent in 2008 while GDP rose by "only" 10.8 percent (see Figure 1).

Figure 1: GDP and GDI real changes in Azerbaijan in 2007-2009



Source: Proper calculations based on data from the Department of Economic Analysis and Projection of MoED's Macroeconomic Framework, version 12 October 2009.

This suggests that the actual "strength" of the economy of Azerbaijan depends not only on the dynamics of GDP, but on oil prices in large part. Oil prices, for

example, have significant direct budgetary consequences, as transfers from the State Oil Fund represent a significant share of its revenues. The fall in prices resulted in severe reductions in revenue from SOFAZ – from AZN 11.8 billion (actually) in 2008 to AZN 8.2 billion in 2009. In addition, actual savings (increase in government assets) were only AZN 2.9 billion in 2009 compared to AZN 6.7 billion in 2008. Despite the decrease in revenue, state budget transfers increased from AZN 3.8 billion in 2008 to AZN 4.9 billion in 2009( Transfer from SOFAZ is the only item which is already executed precisely at the budgeted level).

The state budget revenues of Azerbaijan amounted to AZN 10.6 billion in 2009, which is 4.1 percent lower than in 2008. Budget revenues "cleaned" from Oil Fund transfers, however, fell by 22.3 percent yoy (year-on-year); 14.2 percentage points of this decrease resulted from a decrease in profit tax revenues. The main reason behind a fall in profits was the decline in oil prices: in 2008, the share of profit tax in the oil and gas sector exceeded 85 %, while in 2009 it fell to 70 %. Spending cuts were quite negligible thanks to SOFAZ transfers –they dropped by 1.9 percent yoy in 2009. This cut, however, was uneven: 6.7 percentage points of spending reduction were due to outlays in "mining, manufacturing and construction" (nearly 100 percent of which is public investment), while spending on education, social protection, public order and security, general government services and other programs increased. In fact, there were only four spending cuts in budget items (total contribution is -9.5 percentage points). The important take-away is that in 2009 oil transfers were aimed at increasing spending on non-investment budgets, not just those needed to tackle the effects of the crisis. These developments, however, are quite dangerous for fiscal sustainability in the long run.

Cuts in public investment have shown themselves to be a serious reduction in investment, hence a slowdown in GDP. Total investment decreased by 18.7 percent yoy in 2009; 12.5 percentage points of this decrease were due to a decrease in public investment. Foreign investment (-4.4 percentage points) was another source of decline. Private domestic investment has also fallen. Only bank loans

have become one of the few sources of increased investment. But their increase was only achieved through two large loans from the Central Bank (CBA) to Azerbaijan's state-owned International Bank.

The decrease in public investment was aimed primarily at severe construction cuts. This sector experienced a contraction of 8.2 percent in 2009, contributing to a decline of -1.5 percentage point in the non-oil sector's overall growth rate. This suggests that oil price reductions not only had direct effects on the reduction of national income and future wealth (increased SOFAZ transfers), but also had a strong indirect negative impact on the non-oil economy through lower public investments.

Table 1: Financial performance of the State Oil Fund of Azerbaijan, AZN millions\*

| Date:            | ASSETS  | Year:      | TOTAL<br>REVENUES | EXPENDITURES |                                    |         | Savings minus |
|------------------|---------|------------|-------------------|--------------|------------------------------------|---------|---------------|
|                  |         |            |                   | TOTAL        | incl. transfer to the state budget | •       | expenditures  |
|                  | (1)     | _          | (2)               | (3)          | (3.1)                              | (4)     | (4)-(3)       |
| Jan 1, 2001      | 248.2   |            |                   |              |                                    |         |               |
| Jan 1, 2002      | 470.0   | 2001       | 225.2             | 3.4          | 0.0                                | 221.8   | 218.4         |
| Jan 1, 2003      | 677.8   | 2002       | 294.9             | 87.1         | 0.0                                | 207.8   | 120.8         |
| Jan 1, 2004      | 805.0   | 2003       | 364.1             | 236.9        | 100.0                              | 127.2   | -109.8        |
| Jan 1, 2005      | 950.3   | 2004       | 316.5             | 171.2        | 133.0                              | 145.3   | -25.9         |
| Jan 1, 2006      | 1280.5  | 2005       | 660.1             | 329.9        | 150.0                              | 330.2   | 0.3           |
| Jan 1, 2007      | 1267.4  | 2006       | 985.9             | 999.0        | 585.0                              | -13.0   | -1012.0       |
| Jan 1, 2008      | 2092.4  | 2007       | 1886.2            | 1061.2       | 585.0                              | 825.0   | -236.2        |
| Jan 1, 2009      | 8986.7  | 2008       | 11864.6           | 4970.4       | 3800.0                             | 6894.3  | 1923.9        |
| Jan 1, 2010      | 11868.9 | 2009       | 8176.7            | 5294.5       | 4915.0                             | 2882.2  | -2412.3       |
| Jan 1, 2011      | 12562.9 | 2010 (b)** | 5963.1            | 5428.4       | 4915.0                             | 534.7   | -4893.7       |
| TOTAL, 2001–2010 |         | 30737.4    | 18582.0           | 15183.0      | 12155.4                            | -6426.6 |               |

<sup>\*</sup> Data for 2001–2004 is presented in new manats (in 2005, denomination of 1:5000 took place).

Source: SOFAZ, see http://www.oilfund.az/en/account.

## Fall of external demand for non-oil Azerbaijani products

In addition to falling oil prices, the economy of Azerbaijan was also directly affected by the sharp decline in exports (non-oil). The balance of payment data shows that the total drop in Azerbaijan's non-oil exports reached 21.9 percent yoy in 2009, and it appears to have been driven mainly by a decline in GDP or a significant slowdown in growth among its major trading partners. GDP fell 7.9 percent yoy in Russia in 2009, 4.7 percent yoy in Turkey and 4 percent in Georgia (estimates).

Real exchange rate strength also played some role, according to estimates, but it was both weaker and less statistically significant (78). Finally, on March 2009, the

<sup>\*\* (</sup>b) states for budgeted amount.

appreciation of manat that started in 2005 stopped. In addition, the effective real exchange rate decreased annually by the end of 2009, both due to lower inflation and the absence of nominal manat appreciation against the US dollar.

The export decline structure also supports the conclusion that it was driven mainly by the decline in industrial production among the main trading partners of Azerbaijan. On average, exports of metals and chemicals lost about two-thirds of their value in 2008. The main positive contribution came from "transport vehicles", but one deal with Russia can attribute this. The transaction amount was equal to 10.7% of total non-oil exports.

Allowing to our estimates, the fall in exports of non-oil merchandise in 2009 resulted in a 1 percentage point decrease in Azerbaijan's non-oil GDP (taking into account a 3.2 percent increase in non-oil GDP, which means a positive contribution to domestic demand for non-oil products). Most likely, it also had severe economic and social negative regional effects, especially in locations where metallurgical and chemical factories are located. In 2008, exports accounted for nearly 50 percent of these industries' total production.

#### Foreign capital outflow

The deterioration of the current account and decreasing SOFAZ savings (accompanied by a general lack of confidence in emerging markets) resulted in severe capital outflows resulting (due to fixed exchange rate policies) in decreased international reserves (\$ 1.2 billion in 1Q2009). While the decline stopped in Q2 of 2009, this may explain why commercial banks decided to follow a more stringent credit policy, especially as they are heavily indebted in foreign currencies.

Large outflows of capital also led to a temporary crisis of confidence in the local currency. The changing proportions between foreign currency and manat deposits demonstrated this. Nearly 50% of household time deposits were held in manats in December 2008. Half a year later, this share fell to 29% and then began to rise slowly to 34% in December 2009. Low trust in the national currency, however, only partially explained the outflow of manat deposits. Banks raised interest rates

on foreign currency deposits nearly to the level of manat interest rates at the beginning of 2009, making foreign currency savings more attractive and taking into account the expectations of devaluation. It lowered the efficiency of the stable manat policy of the CBA and required major domestic currency market interventions.

The negative balance on "other investment" was further evidence of capital outflow. It reached 6 billion dollars in 2009 compared to 2.7 billion dollars in 2008. Most of this outflow (\$4.8 billion) took place through non-oil sectors and in the form of cash outflows and deposits. In addition, despite restoring trust in the manat, capital outflows remained significant throughout the year.

#### Recent changes and the main short-term challenges

Economic recovery among its main trading partners in early 2010, along with higher oil prices, contributed to the recovery of the non-oil sector in Azerbaijan. First, since December 2009, non-oil exports had recovered, mainly due to growth in the chemical and food industry. Second, non-public investment began to grow in the oil and non-oil sectors as early as January 2010. However, growth in household income decelerated (mainly due to accelerated inflation), resulting in slower growth in services.

Inflation is currently becoming the main short-term challenge for the economy of Azerbaijan. Despite the increase in liquidity through net foreign assets, the CBA did not implement any measures to limit liquidity (for example, it kept reserve requirements at a level of 0.5 percent). This has resulted in significant acceleration of the supply of money. The monetary base increased by more than 30 percent yoy in March 2010 (it fell by 1.1 percent yoy in December 2009). As a result, from 0.7 percent in December 2009, inflation increased to 5.8 percent in March 2010.

Fiscal policy is another major challenge. Based on the assumption that oil prices would be \$ 45 per barrel, the government planned the 2010 budget after a sharp decline in oil prices at the end of 2008 – beginning of 2009. Higher than planned profit-tax revenues (because of much higher actual oil prices) may result in a

revision of public spending in the second half of 2010, but an increase in public spending could exacerbate inflationary pressures.

Inflation growth has already led to an appreciation of the real effective exchange rate – it is still lower than early 2009, but higher than November 2009 (REER's lowest value). The economy of Azerbaijan faces two major real appreciation threats. First, it can undermine a recovery in non-oil exports from Azerbaijan and second, it can contribute to both an increase in imports and a non-oil foreign trade deficit.

Statements are currently appearing on the world news headlines about the end of the crisis throughout the world. Any tiny glimmer of growth in the global economy is seen as a sign of hope for the end of the crisis. However, given the currently observed downward economic patterns, it's too early to talk about the end of the crisis. Conversely, economists warn about the crisis' potential second wave beginning next year. The crisis first began with the U.S. sub-prime mortgage crisis, which later spread across the entire global economy to varying degrees in various countries. Countries responded in different ways with different bailout arrangements to the unfavorable con-sequences of the crisis. Individual countries' degree of susceptibility to the crisis is linked to their degree of exposure to the global economy, with more integrated economies adversely affected by the crisis.

As a result of the crisis, Azerbaijan also had its share of adverse effects, though to a lesser extent than other countries. Today the concern remains over potential challenges that Azerbaijan's economy is bound to face in the event of the global financial crisis prolongation. Where Azerbaijan was before the cries and how enduring its economy is against the adverse effects of the crisis are key policymakers' questions. It is widely held that Azerbaijan can cope more easily with the crisis than any other state simply because its economy is based on strong economic fundamentals. This belief is supported by the perception that the banking system is more resilient to the impacts of the crisis since Azerbaijani banks are not very much financially integrated into the global financial system.

Another stream of thought argues that for such a small economy, the effect of the crisis effect was significantly high. Similar arguments can be found in statements made by international financial institutions, such as the IMF about countries within the Commonwealth of Independent States that have been severely affected by capital flow reversals. The activity is expected to contract by 0.5% in 2009, according to the IMF. The IMF also predicts a 2.5 percent GDP slowdown for Azerbaijan in 2009 as opposed to the projected 14 percent government slowdown.

Clearly, thoughts are multidimensional and inconsistent with regard to the extent of the crisis – showing a lack of harmony on opinions about how critical the topic is and how devastating consequences the economy might encounter if the downturn continues and proper policy action is not taken.

#### **Economic Fundamentals and Crisis Challenges**

Over the past five years, Azerbaijan's economy has steadily grown and had the highest GDP growth rate in the world in 2006 (34.5 percent) (85). Similarly, per capita GDP has risen and reached its peak of 42.5 percent in 2006 (84). Despite the slowdown after 2006, the country is still ahead of many other countries in terms of economic growth, both in total and per capita GDP. The expected GDP growth would be at 14 percent, according to pre-crisis estimates. However, GDP only increased by 3.6 percent in the first half of 2009, and if this trend continues, development will be much lower than expected. Oil has traditionally been a dominant factor in the formulation of GDP and accounted for 59% of GDP, compared to 41% for the non-oil sector (57).

In addition to higher growth, state budget revenues have increased over the past few years, with the exception of the crisis-related slowdown to 16.1% expected in 2009 – as opposed to very promising growth figures of 82.0% in 2006: 41% in 2007 and 74.5% in 2008.

Global growth was set to decline substantially with the start of the global crisis in response to the US mortgage market failure. Economic activity is expected to decrease from 3.5 percent in 2008 to 0.5 percent in 2009 before starting a gradual

recovery in 2010, according to an IMF analysis. The projections are that development patterns will also be affected by funding limitations, lower commodity prices, weak external demand, and related spillovers to domestic demand in emerging and developing economies (46).

In all major macroeconomic forecasts of Azerbaijan, the same patterns of deceleration can be observed. For example, the economy actually registered a slower pace, down to 10.8 percent in terms of its GDP growth performance at the end of 2008, than 18 percentage points originally expected. It is expected that an equally important forecast for GDP per capita will drop sharply to 21 percent compared to 22 percent in 2008 and 39 percent in 2007. Personal incomes are also expected to deteriorate in 2009, and official projections show that people's incomes will only grow by 22.2% compared to 29.4% and 29.3% in 2007.

The budgetary position of Azerbaijan was also destabilized as a result of the crisis. The share of government budget revenues was lower than ever in both the consolidated budget and GDP. Investments in the economy have also declined since the beginning of the year by ten percent to \$4 billion, \$82 million. The State Statistics Committee reports that the construction of production facilities was diverted by 77.7 percent of this investment. Despite the seven percent increase in domestic investment, foreign investment fell by 48 percent, with the least investment going to the mining industry, 31.3 percent. In addition, lower investments were also made in transportation, communication and agriculture.

State budget dependence on oil revenues further strengthened with oil taking up 65.4% of all revenues in 2009 compared to 62.4% in 2008 and 61.3% in 2007. In addition, the percentage of transfers from Azerbaijan's state oil fund to the state budget increased as a result of falling oil prices on world markets. By increasing transfers from the state oil fund, the government compensated the budget deficits and 92.4 percent of the oil fund spending will be transfers to the state budget in 2009, 29.3 percent higher than in 2008. For the non-oil sector, the increased government budget dependence on oil revenue had a negative externality. The

deficit in this sector rose from 32% in 2007 to 42.5% in 2008.

Another important aspect is taxes – mainly profit and personal income taxes in the state budget, which are related to the economy's job performance and are actually expected to fall from 23.3% in 2008 in profit taxes to 18.2% and to 7.4% in income taxes from 7.6% in 2008. The share of GDP taxes declined from 19.4% in 2007 to 16.5% in 2008, reflecting the impact of the global financial crisis on lower taxgenerating economic activity. The share of GDP taxes fell from 19.4 percent in 2007 to 16.5 percent in 2008, reflecting the impact on lower tax-generating economic activity of the global financial crisis. These arguments, however, do not prove to be sufficiently convincing; at least statistically, only a small fraction of the population receives more than \$ 1,200 in salaries and the number of staff working in the oil sector is not sufficiently large (only two percent of total employment) to effect the projected goal of personal income tax revenues. According to official statistics, 20-22,000 people worked for foreign oil companies before the crisis, and as a result of the crisis, about 1,500 to 2,000 were laid off. In addition, official statistics show that wages were raised by 25% and an additional 105,000 jobs created in 2008, which would have brought more personal income taxes into the state budget, at least theoretically.

#### **State Economic and Social Policy**

There has been calm and trust in the government of Azerbaijan since the start of the global financial crisis in the fall of 2008, based on the assumption that the crisis would bypass Azerbaijan due to the country's strong economic fundamentals and sufficient reserves. Nevertheless, the effects of the crisis on Azerbaijan have been exacerbated by subsequent falling prices on world oil markets, thus weakening local currencies. The impact became evident especially during January-April 2009 in the government's key macroeconomic forecasts. Since the exports of the country are mainly oil products, there have been severe downward effects on the economy that can be seen first in the decrease in the consolidated budget for 2009. In addition, imports of contracted products and services decreased by 17 percent and

exports decreased by 80 percentage points in the first seven months of 2009. Lower demand and the consequent dramatic decline in world oil prices nearly 50% from its peak in March 2007 hit exports, consisting primarily of oil products (92%). Oil fund assets slowed and are expected to be lower by 17.6 percent compared to 2008 projections or by 29.5 percent compared to 2008 revenues from the actual oil fund. The final figure for the 2008 cumulative GDP by the government was twice the originally expected figure (actually 10.8% vs. 21% expected).

The downward trend in development has further exacerbated given the increased reliance of the government budget on oil revenues. Unlike the growth in minimum wages in previous years (2004-2007), the government has not announced any upgrades in the 2009 minimum wages or pensions. Social spending has been reduced from 3.3% to 25.6% in 2009 and 41% in 2003.

In 2009, social protection shares and expenses for provision will increase. However, the share of transfers to the State Social Protection Fund in total social expenditure will drop from 48% in 2008 and 46.8% in 2007 to 44.3% in 2009. Despite the 39.3 percent increase in social expenditure, only ten AZN or 12 dollars will be added to the pension base in 2009, which is certainly not sufficient compared to the current volume of problems. In-vestment spending in the state budget, however, rose from 37.5% in 2007 to 49% in 2008. Despite an increase in domestic investment size of seven percent last year, foreign investment accounted for only 48 percent. Despite an increase in domestic investment height of seven percent last year, foreign investment accounted for only 48 percent. In the mining sector, the highest investment decrease was 31.3 percentage points. Investments in transportation, communication and agriculture also declined along with this. The crisis decelerated the country's growing inflation from an inflation rate of 20 percent in 2008 to just 3-4 percent in the first half of 2009.

#### **Financial Sector and Bond Markets**

Until recently, banking has been perceived as one of the economy's most advanced

areas. Though, when the crisis began to hit the economy hard, oil prices, as elsewhere, became less significant in supporting economic growth, and banks were either forced to suspend credits or their cash became more expensive (because of higher interest rates) and therefore unavailable to many individuals and businesses. They are now being offered at a 25-35 percent higher annual interest rate. This is because banks themselves suffer from insufficient financing (liquid money) to channel credits and accept the higher risk of credit repayment when they give money to households and businesses. But before the crisis, households were given over one-third of the banks' credit portfolio (about 38 percent) for consumption. It can be inferred that credits did not promote economic growth successfully and covered only a small portion of the money demanded by the manufacturing sector. Azerbaijan lags behind many other transition states in terms of bank credit shares in GDP (18 percent).

Although Azerbaijan's government has not announced specific stabilization packages such as in other oil and gas producing countries such as Kazakhstan, Azerbaijan's central bank has taken several steps to provide flexibility in its liquid money management for commercial banks, by loosening its reserve requirements on domestic liabilities to nearly six percent in 2008, from 12 percent and from 15 percent to two percent. This was meant to allow commercial banks to earn money for their increasing liquidity preference; at least 350 million AZN liquid money was injected into the local banking system for a short period of time by decreased reserve requirements.

Though, improving liquidity by administrative means may be ineffective given the magnified impacts of the crisis resulting from residents withdrawing or exchanging their deposits for "safer" currencies. Though, improving liquidity by administrative means may be ineffective given the magnified impacts of the crisis resulting from residents withdrawing or exchanging their deposits for "safer" currencies. A third of credits issued by banks came from deposits before the crisis unfolded, and another 30 percent came from foreign loans. But now the Central Bank noted a

four percent drop in deposits. Deposit withdrawals in February this year amounted to 1.1 billion mantas. In addition to the deposit decrease, the Central Bank repaid foreign debt worth \$ 1 billion in 2008 and projects to repay another \$ 1.5 billion in the future. The condition becomes even more serious given that 60 percent of the construction financing came from bank credits and construction companies were forced to stop their business due to bank credit suspension. At best, as a result of the high risk of non-repayment, maximum credit amounts were reduced to \$6,200. Because of reduced funding and the frozen construction industry, real estate bubbles began to decay and apartments began selling much cheaper than before.

Bank credit issuance reduced household consumption ability and was most influenced by the automotive market, where vehicles are essentially bought through bank credits. When banks prevented credit lending, car owners were unable to sell their cars and people were unable to buy new cars. If stagnation continues on the housing market and oil prices continue to fall, it will remain unclear how these credits will be paid back to banks by construction firms. Delayed repayment of bank loans may further aggravate the need for money for banks. All of these have already resulted in the local banking system's liquidity squeeze. The pressing question now is where these additional funds will come from in order to provide the economy with credit. Western banks are seeking funding on their own and can not be depended on for future financing. Companies were unable to continue their operations profitably as a result of the suspension of credits and thus tax collections fell.

The state decided to introduce a policy to help banks attract domestic depositors by raising the minimum level of bank deposit insurance to AZN 30,000 from AZN 3,000, despite the fact that banks predicted this amount to be raised to AZN 50,000, given all these limitations and challenges associated with the crisis and the situation banks. To some extent, this stabilized the condition with bank deposits. As of April 2009, the size of depositors started to grow. Experts believe that this is a more effective policy in the short term than directly financing banks, as there are

no effective management tools in place to identify which banks are to be allocated and on which standards such funds are to be allocated. The government would first need to prioritize areas to preserve against the crisis in order to finance banks directly. What are those credits going to be spent on? Will they be spent on repaying debts, continuing to provide credits for consumption, or for other purposes? Therefore, determining the spending directions of government funds to banks as bailout is equally important.

The global financial crisis has also affected Azerbaijan's stock market and there is money deficit in the stock market, as in all other spheres. By the end of last year, when the impact of the crisis was the highest, stock companies' shares in all sectors, particularly banks' own share prices, have fallen by more than twice. Major share buyers used to be shareholders and, as a result of the crisis, they stopped buying shares and, as such, decreased interest in shares. Also, as only a few large investment programs are being implanted, some stock companies have not been able to meet the assumed construction demand. Lastly, stagnation in the construction field reduced stock companies' workload. Price changes have also occurred in non-capital regions. Lower interest was also caused by stock companies' undermined ability to pay their shareholders dividends in a timely manner. Because of the market's underdeveloped stock, banks did not accept the company's shares as credit collateral, leading directly to a decline in investor external revenue sources and a reduced overall market dynamic. Fence, it can be concluded that private sector credits in Azerbaijan have been sharply reduced by the financial crisis.

Central Bank also faced additional spending stresses linked to its efforts to prevent currency depreciation and, as a result, Central Bank reserves have declined steadily since the beginning of this year (due to financial crises and dropping world oil prices). As a result, reserves of the Central Bank depreciated and were also used to maintain the manat rate stable. The Central Bank's reserves for 1 August 2009 amounted to \$ 4 billion 787 million, 8.4 percent or \$ 436.7 million less than the

same period of the previous year. Also in August, reserves fell by 22 percent (\$ 1 billion 350 million) compared to the start of the current year, and by 5.8 percent (\$ 294 million) compared to 1 July. Such a collapse continued until May and during the next two months the condition stabilized. Yet, as previously mentioned, the reserves began to decline again in August.

# 4.2. State of firm sector of Azerbaijan before and during the 2008-2009 financial crisis.

When discussing the impact of the global financial crisis on national economies, first of all, the changes in macroeconomic policies and business environment and the response of governments, businesses and households to the crisis situation should be assessed. Thus, the crisis in the world economy was characterized by a worsening of normal and harmonious activity in the financial sector and capital markets of developed countries, the slowdown in economic growth and the widespread statistics of losing jobs in the economy. From the middle of 2008, mortgages, the problem loans of banks, the decline in consumer spending and investment have been observed in leading countries. In the first quarter of 2009, the world's most aggressive tendencies emerged, the Gross Domestic Product declined sharply, commodity markets prices, leading indices in the financial markets dropped, and unemployment increased. In these circumstances, monetary policy was significantly softened in many countries; state expenditures and deficits were increased, and control over the financial system was strengthened. For this purpose, in many countries, financial stabilization and economic assistance programs have been implemented to support the global demand.

The global crisis is the Azerbaijani economy, which is closely integrated into the world economy, but also compared to neighboring countries of the South Caucasus, Azerbaijan had a positive ending last year. Because the economy of Azerbaijan has met the global crisis with sufficient free financial resources, which are accumulated at the expense of oil export. This was possible thanks to the foreign exchange reserves created by the oil production and export growth in the

region. As a result, foreign exchange reserves, which play the role of the "nonsecurity pillow" of the Azerbaijani economy, have become macroeconomic and financial stability for the Burmese period. The other reason why the Azerbaijani economy demonstrated high stability to the global crisis and maintaining its GDP growth dynamics was an anti-crisis policy implemented by the Central Bank of Azerbaijan. Thus, with the decline of domestic and foreign sources of funding, the Central Bank had to soften its monetary policy, and the discount rate was reduced from 15% to 2%. During 2009 a number of additional measures were taken in the legislation: the amount of insured deposits increased by 5 times and reached 6,000 to 30,000 manat; necessary assistance was provided to banks to repay their foreign debts; legislation has been applied to capitalization of banks and insurance companies with tax incentives (charter capital deducted from tax), and financial loss from banks for possible losses has been further enhanced. All these measures were aimed at eliminating the tension observed in the banking sector in the first quarter of 2009 and stabilizing their liquidity. Despite the limited dependence of the Azerbaijani banking sector on international financial markets, the abovementioned anti-crisis measures and direct financial assistance of the Central Bank failed to break the banking system, but failed to address the fundamental problems of the banking sector, and considerable recession trends in insurance, securities and leasing markets.

Some products in the commodity markets during the global financial crisis, in particular as a result of the decline in oil prices, foreign exchange inflows, as well as the decline in the money transfers, which are of special social importance to our compatriots living abroad, have been subject to devaluation pressure. In the first quarter of 2009, the addition of population devaluation expectations, especially to intensifying pressure, forced the Central Bank to spend considerable resources in order to maintain the stability of the national currency, and in this regard, the net issuance of the Central Bank 1.8 billion manat. Looking at the roaring role of these

money, it can be more pronounced as a loss of government when it is embellished with bullets and finer pressures.

Studies conducted last year confirm that, for some reason, the global financial crisis has had a negative impact on the Azerbaijani economy, and the national economy has collapsed with a number of risks. The impact of the global crisis on the economy of the country is mainly due to the downside of oil and other non-oil export products, the liquidity problem in domestic commodity markets, and the downturn in the creation of value added due to lower purchasing power in the non-commercial sector, and the decline in export potential, the sharp limitations of foreign loans to the banking market, the decline in remittances from abroad, the decline in confidence in the banking sector in households and the increase in their negative expectations.

As a result of the government's indifferent attitude towards such negative trends and its global stance, the Azerbaijani economy has been aggravated by a number of risks that can be grouped as follows:

- high rates of sustained macroeconomic growth rates (especially the decline in non-oil GDP growth);
- violation of macro financial stability (devaluation of national currency and inflation rise);
- financial instability (significant deterioration in the quality of banks 'loan portfolio and recovery of savings from the banking sector, deterioration of banks' ability to turn over, business and household lending);
- the beginning of social resonance and social deformation in the economy, loss of existing jobs.

Thus, 2009, which faces these risks, can be characterized as the most difficult year for the Azerbaijani economy. Indeed, the manifestations of the global crisis that began in the second half of 2008 have led to the negative dynamics of nominal

GDP in the Azerbaijani economy, the decline in GDP per capita, the gap between GDP growth and the decline in the non-oil GDP reduction of state spending, reduction of competitiveness of business environment, and decrease in population growth rates. As a result, the average annual 22% economic growth rate observed in the Azerbaijani economy in the three years preceding the crisis has risen to 9.3% in 2009. At first glance, this increase is not only a global, but also a global indicator of crisis in the global crisis. However, it should be noted that Azerbaijan still remains a raw country and GDP growth does not adequately reflect the real economy of the country. Last year, the country's economy has once again demonstrated its dependence on the main export product - oil, or rather its price. Thus, structural analysis shows that two thirds of GDP is exported in Azerbaijan, and more than half of the national economy is formed by external demand factors. In this regard, the volume of oil produced in the country and its dynamics of world market prices are very important for the national economy. Growth of non-oil GDP by 14.3% and smaller than GDP by 3.2% in the oil sector resulted from the real GDP growth of 9.3% last year. It should be noted that real GDP growth is a sign of physical growth of production and its dynamics, of course, is regarded as an indicator reflecting the activity of the country's economy. However, it would not be right to characterize the growth of physical volumes for the dominant economy in the economy as the activity of the economy. Because the variable price of that raw material is determined by external factors, foreign demand, and the prices are cheaper than other landscapes. This is a 21.2% decline in nominal GDP for the first time in the modern history of the country in the modern history of the country, with the deficit level being 127.8% in 2008, 78.8% no longer. That is, more products and services have been produced, however and less money was earned. The more generalized indicator - the GDP per capita declined from 4604 manats (\$ 5603) in 2008 to 3917 manat (\$ 4874) in 2009. The decline in the nominal volume of GDP in Azerbaijan is due to the fall in oil prices and the slow development of the non-oil sector.

Table 2. Main macroeconomic indicators

|                            | 2007    | 2008    | 2009    |
|----------------------------|---------|---------|---------|
| GDP, mln. AZN              | 28360,5 | 40137,2 | 34578,7 |
| Growth rate,%              | 25,0    | 10,8    | 9,3     |
| GDP per capita, mln. AZN   | 2981    | 4603    | 3913    |
|                            |         |         |         |
| Oil "GDP, mln.AZN Growth   | 15411,7 | 22251,3 | 16257,3 |
| rate,%                     | 36,8    | 6,8     | 14,3    |
| Non-oil GDP, mln.AZN       | 9533,9  | 15197,2 | 15683,2 |
| Growth rate,%              | 11,4    | 15,9    |         |
| Inflation,% Average annual |         |         |         |
|                            | 16,7    | 20,8    | 1,5     |
| Population income growth   | 40,3    | 37,8    | 8,0     |
| rate,%                     |         |         |         |
| Average monthly salary,AZN | 214,0   | 274,4   | 298,0   |
| Growth rate,%              | 42,0    | 24,2    | 8,6     |
| Deflator                   | 121     | 127,8   | 78,8    |

In 2009, the real market prices in Azerbaijan amounted to \$ 34 billion. 579 million manat was produced. Previously, in 2008, 40 billion dollars in the country. 137 million Gross domestic product (GDP) was obtained. Thus, if the financial and economic crisis did not take place and the average prices in 2009 remained at the level of 2008, then the nominal GDP was 43 billion dollars last year. 882 mln. manat. The difference between the base and actual prices of nominal GDP in 2009 (AZN 43 billion 882 million - AZN 34 billion 579 million) was 9 billion. 303 mln. (\$ 11.6 billion). This is the loss that Azerbaijan has lost and can not earn as a result of the financial and economic crisis. These losses have shown itself in reductions in the planned revenues of the State Oil Fund and the state budget, as well as in the

profits that construction and other businesses can achieve. The calculations show that the decline in the price of \$ 10 per barrel means a \$ 2 billion loss for Azerbaijan's balance of payments. Taking into account that the average oil price in 2009 fell from \$ 96.5 to \$ 62 in 2008, resulting in a surplus of the balance of payments from government expectations (expectations for government surplus estimates of about \$ 16 billion) of \$ 5.8 billion. at least \$ 10.2 billion. level.

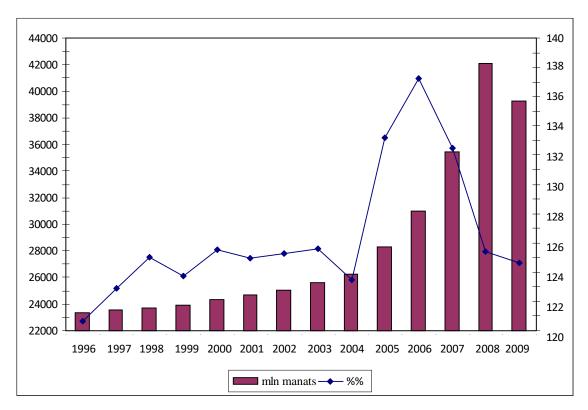
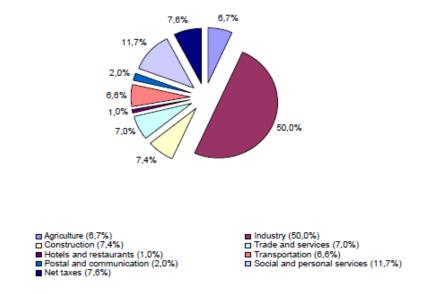


Figure 2. Nominal GDP volume and real GDP growth rate.

In 2009, real growth in the industrial sector, which accounted for half of GDP, was at 8.6%. The volume of crude oil, which is the main industrial products, increased by 13.5% to 50.4 million tons, and natural gas production to 16.3 billion cubic meters. Last year the volume of production in the mining industry, which is the main sector of the industry, exceeded the previous year by 12.5%. Growth in the industry was only due to the increase in mining, as the production and distribution divisions of the processing industry and the other two sectors of the industry had a 7.7% and 10.8% decline respectively. Nevertheless, GDP growth in the industrial sector was 12.8%. In other areas of the production of goods - the volume of GDP in agriculture increased by 3.5%, and in the construction - 8.2% decline. In

general, 64.2% of GDP was produced by the economy (where the growth of UDM was 10%), 28.3% in the service sector (+ 9.1%), net taxes paid on product and import, , 6% (+ 1.8%).

Figure 3. Structure of Gross Domestic Product in January-December of 2009



#### Chart 2. GDP structure in 2009

50% of GDP is in industry, 6.7% in agriculture, hunting and forestry, 7.4% in construction, 6.6% in transport and warehousing, 2.0% in postal and 7.0% in wholesale and retail trade, repair of cars, household goods and personal items, 1.0% in hotel and restaurant services, 11.7% in social and other services. The decline in world oil prices led to an increase in the share of the oil sector in GDP from 55.4% to 47% in 2008, resulting in the share of added value added in non-oil sectors of the economy in GDP as compared to 2008 interest rate increased by 45.4%. Increased non-oil GDP by 3.2% has resulted in notable growth in non-oil production facilities, including 13.1% growth in postal and communication services, 9.3% in transport, 8.9% in trade and 7.7% in social and other services.

According to the ConEC statement, the monetary income of the Azerbaijani population increased by 8.0% compared to 2008 and amounted to 22.4 billion manat in the background of the negative dynamics of nominal GDP. Manata, per

capita income increased by 6.7% to AZN 2 537.1 (211.4 manat per month). Speaking of the practice of individual countries and at the same time leading theories, almost in principle, the decline in nominal GDP leads to a decrease in the income of the population and an increase in unemployment. Given that, according to official data, the number of permanent jobs created last year decreased by 35,000 compared with 2008, while the number of employees reduced by 3 times (from 3037 in 2008 to 8,747 in 2009) In the case of official statistics on the increase in incomes of the population, doubts are raised. On the other hand, official statistics show that the incomes of the population have increased by 14 percentage points to 64.8% in the actual GDP. However, this figure was 50.9% in 2008. This, in turn, indicates a breakdown of parity between consumption and harvest due to the reduction of funds allocated to fixed assets, circulating assets and aggregate funds in general. In fact, this change, ie the increase in the share of the population's income in GDP, had to exert considerable pressure on consumer markets, as well as the increase in the average level of the existing price in the economy. However, the wage earnings, which are the main source of income for the past year, increased by an average of 8.6% to 298 manat, which did not lead to the rise in prices in consumer markets. The population prefered to slaughter the funds in their hands more economically.

Deflation and inflation in the country last year split the economic processes in Azerbaijan. Thus, the first half of the year was deflation and the second half was in the context of inflationary processes and the monthly consumer price index rose to 1.6% annually (-0.8% + 0.8% hesitated) did It should be noted that inflation in 2008 was 20.8% in comparison with 2007.

As a result of the negative effects of the global financial crisis, the accumulated portion of GDP and investments have declined considerably. According to official data, the volume of investments directed to fixed capital decreased by 18.7% last year (in 2008 the corresponding figure was increased by 34.4%) to \$ 7 billion. 359 mln. manat. As a result, the national economy lost 1/3 of the foreign investment,

and the volume of domestic investments decreased by 14.2%. State budget expenditures, which are the main sources of domestic investments, have decreased by 28% to \$ 2 billion. 678 million manat or 36.4% of total investments. The reason for the decline in budget investments was the lack of budget revenues over the whole year.

The price bar (\$ 80) used by the government as a computing base for oil at the forecasted budget revenues for 2009 did not justify itself. The average price of oil on the world market for the last year was \$ 62, as the 2009 budget was in fact tense. It is worth mentioning that the 2009 budget was weaker than the 2008 budget. The transfers from the SOFAZ to the state budget were \$ 1 billion more than in 2008. 115 million AZN 3 bln. 800 million to 4 billion 915 million in the backdrop. Nevertheless, in 2009 the state budget revenues and expenditures were lower than in 2008. According to preliminary data, last year the state budget allocated \$ 10 billion. 326 million It was possible to collect AZN 1mln. This is 4.1% or \$ 438 million more than in 2008. AZN is less. Budget expenditures increased by 1.9% or 112 million AZN compared to 2008. At least AZN 10 bln. 568 mln. manat was executed.

39.8% of budget revenues or 4113.5 mln. Ministry of Taxes of the Republic of Azerbaijan, 10.8% and 1112.7 mln. manat was provided by the State Customs Committee of the Republic of Azerbaijan, 47.6% or 4915,0 mln. State Oil Fund of the Republic of Azerbaijan, 1.8% or 184.7 mln. manat from other sources. 56.6% of total funds collected by the Ministry of Taxes of the Republic of Azerbaijan in 2009 or 2327.7 mln. non-oil revenues, which is 742.3 mln. manat or 24.2 percent less compared to the same period in 2008 and AZN 70 million. manat or 3.1% more.

The foreign trade statistics of Azerbaijan last year was not heartwarming. According to official statistics, more than 2.5 times the foreign trade turnover was recorded. In 2008, Azerbaijan's export-import operations totaled \$ 54 billion. 920 mln. this figure was last year \$ 20 billion To 818 million. Exports totaled more

than 3.2 times - \$ 47 billion in 2008. From \$ 756 million in 2009 to \$ 14 billion. To 698.5 million. Imports to Azerbaijan decreased by 14.6% to \$ 6 billion. 119 million organized. Despite the significant decline in Azerbaijan's exports, the country's active trade balance has been preserved. The positive trade balance in Azerbaijan's foreign trade in 2009 was \$ 8 billion. 579 million organized. For comparison, in 2008 this figure was 4.7 times more than \$ 40 billion. 593 million. The disappointing situation was observed in non-oil exports of the country. Reduction of global demand and consequent reduction of prices further weakened competitiveness of Azerbaijani products with relatively low quality. Exports of aluminum and its products declined 10 times, exports of chemical products 3 times, exports of ferrous metals and their products 2 times, and even 10% reduction in the export of fruits and vegetables. Non-oil exports per capita declined from \$ 167 in 2008 to \$ 124 in 2009. According to calculations, Azerbaijan is behind the average indicator for non-oil exports per capita in the Soviet Union.

Azerbaijan's foreign debt amounts to \$ 420.7 million in 2009 or by 14% to \$ 3421.8 million for January 1 this year. it was. Its share in GDP rose from 6.4% to 7.95%. Foreign debt per capita reached \$ 380.3. As of 1 January 2010, the amount of loans attracted by Azerbaijan for the implementation of economic reforms was \$ 326.91 million. or 9.6% of total liabilities (\$ 61.96 million of which is the IMF debt of \$ 264.96 million). Commitments \$ 3094.86 million (90.45% of foreign debt), including \$ 1359.8 million in the electricity sector, \$ 868.48 million for road construction and transport, \$ 309.81 million in water supply and amelioration, oil and gas and chemistry - \$ 207.34 million, social sphere - \$ 153.94 million, agriculture - \$ 124.78 million. and \$ 70.71 million in other areas. in the amount of loans.

As to the impact of the global financial crisis on the biconna, it should be noted that research conducted by the Center for Economic Research showed that about 80 percent of the 238 surveyed firms suffered from the effects of the crisis. 47.54 percent of Azerbaijani companies exposed to the negative impact of the financial

crisis have started to feel 52.46 percent since 2008, The survey found that 33.8% of the surveyed companies increased their revenues by more than 30% per year, and 38.3% of their income increased by 5% to 30%, while 60.3% of the revenues fell during the crisis from 5% to 30% 28.6% of revenues fell by more than 30%. According to the company's performance indicators, the situation was adequate to the amount of revenue earned from sales. Thus, if before the crisis, 22.8 percent of companies increased the number of full-time employees by more than 30 percent, and 33.3 percent - from 5 percent to 30 percent, but 60 percent of companies during the crisis, from 5 percent to 30 percent, 20 percent to 30 percent exceptionally. The research showed that the same trend during the crisis compared with the pre-crisis situation was observed in the reduction of companies' investments, the decline in their goods and services, and the use of their debts.

Comparative research has shown that the economic crisis has a negative impact on business income, turnover, and investment, and also increases the risk of delay in budget payments. In 2010, the profit tax rate was reduced from 22% to 20%, from 35% to 30% for individuals, and from 35% to 20% for individual entrepreneurs in order to develop local entrepreneurship under the global financial crisis and reduce their direct tax burden. Changes to the legislation last year on reducing the amount of state duty for obtaining a special consent (license) for a range of types of activities were made.

Due to the impact of households on living conditions, changes in the global financial crisis - the dynamics of consumer spending within GDP, the decline in infrastructure for infrastructure, the decline in the growth dynamics of permanent jobs in newly created jobs, increased workplace numbers, restrictions on credit, and the decline in money sent from abroad - have deteriorated the situation in this area. All of this has led to a decline in the rate of growth of official household income and, on the other hand, a decrease in access to the results of their socioeconomic progress. Nevertheless, the official statistics data indicate that the decline in poverty in the country by about 11 percent distorts the real situation.

According to official figures, poverty fell from 13.2 percent to 11 percent in 2009 compared to 2008 results. However, the fact that the poverty line in Azerbaijan is still above the limit is a reality. This is evidenced by the results of the Economic Research Center's survey conducted among 3,000 households in 2009. Thus, 16 percent of respondents reported having lived below the poverty line. However, the impact of objective factors can not be overlooked, as it should be noted that the share of refugees and internally displaced persons in the total population of the country is 12%.

The outcomes of the world economy last year showed that many of the emerging and growing economies, whose economic growth is dependent on credit and capital flows, have been hampered by the financial crisis and one of the reasons why Azerbaijan is less exposed to the effects of the global financial crisis is its dependence on credit and capital flows which can be explained by the increase in oil and gas production and exports observed in the country. However, despite all this, studies have shown that the global financial crisis, as well as macroeconomic trends in the Azerbaijani economy, is a horizontal, ie marketplace (commodity, finance, currency, money-credit, securities), and vertically economic agents (government, business and household). Thus, the global crisis has further aggravated the challenges faced by the Government of Azerbaijan in addressing the economic growth and the adequate management of the stability risks in the financial sector. Achieving a high degree of diversification of the economy, employment, budgets and export revenues in the medium and long term is the key challenge facing the country to ensure long-term macroeconomic stability and enhance international competitiveness of the economy. Given this challenge, one of the main tasks facing the Government of Azerbaijan is to strengthen macroeconomic and financial stability, which is a crucial element of economic sustainability, as well as overcoming the negative effects of the global crisis on the economy, business and households.

The past 2009 characterizes the most difficult year for the Azerbaijani economy. So that, the timely and systematic implementation of anti-crisis measures based on the adequate response of the Government of Azerbaijan in the face of the global financial crisis, which started in the second half of 2008, ultimately led to the negative dynamics of nominal GDP in the national economy, the decline in GDP per capita and GDP the growth of the economy, the growth of the non-oil GDP, the reduction of public spending, the decline in the competitiveness of the business environment, and the decline in the growth rates of the population's income. For these reasons, the real GDP growth in Azerbaijan has been registered for the first time in the modern history of the country by 21.2% of nominal GDP, deflator level decreased from 127.8% in 2008 to 78.8% the GDP per capita declined from 4604 manats (\$ 5603) in 2008 to 3917 manat (\$ 4874) in 2009.

The calculations show that in 2009, the real market prices in Azerbaijan amounted to \$ 34 billion. 579 million manat was produced. In 2008, 40 billion dollars in the country. 137 million Gross domestic product (GDP) was obtained. Thus, if the financial and economic crisis did not take place, and in 2009 average prices remained at the level of 2008, then the nominal GDP was 43 billion dollars last year. 882 mln. manat. The difference between the base and actual prices of nominal GDP in 2009 (AZN 43 billion 882 million - AZN 34 billion 579 million) was 9 billion. 303 mln. (\$ 11.6 billion). This is the loss that Azerbaijan has lost and can not earn as a result of the financial and economic crisis.

#### Finally I would like to note:

- The negative impacts of the global financial crisis on the Azerbaijani economy have not gone down as the officials say; the national economy, particularly the business environment and households, still suffer from adverse trends in this direction;
- The main reason why the Azerbaijani economy demonstrated high stability in the global crisis and maintaining a high growth dynamics of GDP was the currency

reserves that played the role of "non-security cushion" during the crisis created by the increase in oil production and exports in the region.

- The impact of the Azerbaijani economy on the global financial crisis, on the other hand, is not the result of a consistent and purposeful policy of the government, but the rise in growth rates in the national economy in capital and financial sources, and the rise in exploitation of natural resources and raw exports;
- Studies show that in which countries the hidden economy is high and the negative impact of the official global financial crisis on the national economy of those countries has not been seriously felt. According to the WB report on Azerbaijan, the share of hidden economy in GDP is 60 per cent.
- According to the calculations, as a result of the financial and economic crisis, the amount that Azerbaijan lost, which was lost and therefore lost was \$ 9 billion. More than Manat.

#### CHAPTER 5: Anticrisis policy in Azerbaijan

### 5.1. The anticrisis events in Azerbaijan Republic and its consequences

Let's consider the new indicators and models that have recently been used to assess the probability and forecasting of crises. In the work of the Kamin (48) and other authors, information on 26 emerging countries in 1981-1999 was used to determine the impact of internal and external factors on the financial crisis. At this time, nine indicators were used, reflecting the financial market situation, the balance of payments and the incidence of external influences. The authors have evaluated the impact of internal and external factors on the probability of occurrence of crisis based on the standard method of diagnosis.

The smaller impact of the balance of payments and external shock pressures on the probability of a crisis in a stable situation has been identified. However, these indicators are responsible for the sharp increase in the probability of the crisis. The authors have shown that the internal factors and the corresponding indicators are largely determined by the country's weakness, while external factors push the country out of danger. Internal factors are responsible for risk accumulation, while external factors are crisis detonators.

Caramazza and other authors have determined the importance of trade and financial relations to spread the chain reaction of the currency crisis (20). They are based on the effects of price hikes and the effects of declining income generated by economic slowdown in partner countries, have created a new indicator of mutual relationships. The importance of financial relations was determined on the basis of the crediting and accounting of the effects of stock markets on the standard ways of stock market consolidation with the country's financial markets. Following the standard macroeconomic factors such as excessive appreciation of the exchange rate, deficit on current account balances, and increased production of goods, the authors found that the relationships with the media in the form of ordinary loans significantly increased the likelihood of a chain of crises. Trade relations are less

significant, but when combined with problems with current account balance, their effect is increasing, and demonstrates the effects of international spreads to poorer countries with crises.

M.Bussiere and C. Mulder note the impact of the political instability on the depth of the crisis assessed on the basis of the average exchange rate of exchange and the official gold exchange reserves (18).

The author completed the analysis of the Mexican and Asian crises carried out by Tornell and used four political instability indicators (80). They include two indicators of the polarization of political forces (the existence of contradictions between the legislature and the government), uncertainty of the election and model variables for determining the history of elections. The authors have determined that the first two indicators are not important but the second two indicators are important and stable. It was observed that the post-election period is likely to result in more instability and weakness compared to the pre-election period.

The likelihood of emerging crises in the work of Mulder (61) and other authors had previously been that of Berg and Patillo (12, 561-586); The impact of the corporate sector's balance sheet, corporate governance, and the protection of shareholders and creditors' rights are examined in Sachs, Tornell, and Velasco's works (73, 147-215). It has been established that the large volume of borrowed funds and the short-term structure of the debt increase the likelihood of the crisis as well as its depth. The impact of these indicators increases when the corporate sector's bank lending is large, indicating a close relationship between corporate and banking sectors. Protection of shareholders' rights has a significant impact on the probability of emerging crises.

Impact of the Global Financial Crisis Azerbaijan was more psychologically related to the financial system and encouraged financial institutions to revise their development strategies. In spite of the unfavorable environment, the Azerbaijani banking system demonstrated sustainability in the risks involved.

A number of adequate measures taken by the Azerbaijani financial sector in 2008 resulted in stabilization of banks and stability of liquidity as a result of mitigation of the National Bank's monetary policy, several times reduction of interest rates, turning to stability in exchange rate policy and reduction of reserve requirements.

In 2009, especially in the beginning of the year, decline in trends in the world economy, prices in commodity markets and leading indices in the market have dropped.

In these circumstances, monetary policy has been severely mitigated in many countries, and government spending and budget deficits have been rising, with the financial system being tightened.

The global crisis had a certain impact on Azerbaijan, and the national economy was aggravated by a number of risks. The impact of the global crisis on the country has been largely due to the fall in prices for oil and other non-oil export products, sharp restrictions on foreign credit flows to the banking system, and the decline in foreign currency outflows. In general, almost all the sources of aggregate demand have diminished in sources of external financing.

The global crisis has created negative expectations in the national economy, particularly in the currency and banking sectors. As a result, the country's economy faced the following risks:

- 1. violation of macroeconomic stability (devaluation of national currency and inflation rise);
- 2. financial instability (significant deterioration in the quality of banks 'loan portfolio and outflow of savings from the banking sector, deterioration of banks' ability to turn over, crediting of the economy);
- 3. economic recession, loss of jobs created.

The Azerbaijani economy has faced the global crisis with a sufficiently prepared and powerful resource. This was possible thanks to the rational macroeconomic and monetary policy implemented in the country before the crisis, the established foreign exchange reserves, the financial risk management in the advanced mode.

The pillars have increased the potential for macroeconomic and financial stability by significantly enhancing the economy's "security pillow".

The overall positive balance in the oil and gas sector has contributed to the financing of the foreign currency needs of other sectors of the economy and the country's currency reserves. The country's strategic currency reserves increased 2.5 times and reached 18555.4 million manat as of January 1, 2009. \$. Of this, \$ 11219.2 million the assets of the State Oil Fund of Azerbaijan, \$ 869.0 million government deposits, \$ 6467.2 mln the National Bank's total international assets.

In 2008, the total balance of payments was positive and amounted to \$ 12.0 billion, and increased by 4.2 times compared with the previous year. The balance of current account surplus in recent years has increased by 1.8 times compared to the previous year and amounted to \$16.5 billion sum. The positive balance of foreign trade balance increased 1.5 times compared to the previous year.

23.02.2009 At a conference on the results of implementation of the "State Program on Socio-Economic Development of the Regions of the Republic of Azerbaijan" in 2009, President Ilham Aliyev announced the thesis in his speech as an anti-crisis measure: "The Azerbaijani state has invested heavily in the regions over the last five years, along with a large amount of loans for the development of the private sector, loans were granted on favorable terms, and great support was given to the development of entrepreneurship. Both moral support, both political and financial support. That is, when all these factors are united, of course, it is possible to succeed, and the road that Azerbaijan has over the past five years is a clear evidence of that. Azerbaijan's experience and our policy show that we used our financial resources in the best possible way. He invested in financial resources,

invested in the real sector of the economy, energy, gas, transport, health and education and humanitarian fields. Thus, the level of service has risen, opportunities have increased, and even better conditions for business have been created."

The President's anti-crisis directions of the President's complex of measures, which President Ilham Aliyev said at the Azerbaijani government's January meeting, are as follows:

- 1. The need to reduce consumer prices.
- 2. Anti-monopoly fight.
- 3. Financial monitoring, which includes the support to national banks, control of loans and interest rates. One of the main measures is to place the state's currency reserves in Azerbaijani banks. In the light of the loss of the World Bank, national banks of Azerbaijan are becoming more and more "storage places" of the assets of the country's Oil Fund. Additionally, anti-crisis measures provide entrepreneurs with a discounted loan.
- 4. Continuation of investment in the real economy.
- 5. Supporting social commitments.
- 6. Directing industrial enterprises to the domestic market.
- 7. Food security. In 2009, the country will fully support itself with all strategic food products. Accordingly, farmers will be provided with subsidies, fertilization and handing over on concessional terms.

Thus, it is important to note that the most important factor that enables effective anti-crisis management in Azerbaijan is the confidence-building and confidence-building system of the country's homeowners and business circles.

Taking all this into account, on January 16, 2009, President Ilham Aliyev analyzed the situation in the Azerbaijani economy in the context of economic processes in

the world at a meeting of the Cabinet of Ministers and explained the position of the decision-making on the world financial crisis. It was the first disclosure of the head of state at the level of the world's response to the economic crisis in the world. For the first time, it was officially a global economy an "anti-crisis package of action" that addresses reaction to the crisis.

The prudent approach to active participation in the international stock exchanges and the securities market in terms of providing our republic's financial security is among the main factors that weaken the financial crisis on our republic. President Ilham Aliyev points out the reasons for Azerbaijan's economic downturn in the global financial crisis: "In some cases, certain conservative trends in the financial sector in Azerbaijan were criticized by international financial institutions, and sometimes we were advised Let's get closer to integration tendencies, integrate into international trade organizations, but our position was always very cautious, because the economy of Azerbaijan is a self-sustaining economy, as some other countries do not depend on foreign aid, We have always stuck to our position."

Changes to the Law "On Central Bank" played an important role during the anticrisis measures in 2009. Changes and additions to the law reflected recent global trends in the status of central banks. The Central Bank has been able to provide loans to banks for long-term and various currencies, including subordinated loans. Taking into account the macroeconomic trends and macroeconomic trends in the real sector, the Central Bank has reduced its accounting rate from 15% to 2% and mandatory reserve rates from 12% to 0.5%.

Generally, from October 2008, the Central Bank, through direct and indirect instruments, has an economy of about 1.8 billion dollars. AZN. This liquidity support system, along with the banking system, is a major system of real sector enterprises including the State Oil Company of Azerbaijan (SOCAR), Azeraluminiy OJSC, in which the economy grew by 9% in the first 11 months of the current year.

At the same time, the Central Bank has the right to lend to banks on a state-guaranteed basis to support the real sector. In 2009, the Central Bank reduced the discount rate from 8% to 2% and the upper limit of the interest rate corridor from 13% to 7%, taking into account the major macroeconomic trends. Liquidity Transactions by the Central Bank and instruments to attract liquidity were restricted. Mandatory reserve rates were reduced from 6% to 0.5%. Average maturity of mandatory reserve norms was 1 month in both manat and foreign currency deposits.

On the basis of the fixed exchange rate of the manat, the direct aid package of the Central Bank was at the level of 5% of the Gross Domestic Product. Implementation of the Anticorruption Program has prevented the reduction of the money supply, provided financial sustainability and economic activity of the banks and provided necessary support for the production and investment activities of the major systems of the system.

On the one hand, successful anti-crisis measures, and on the other hand, the sustainability of the country's economy has been preserved at the expense of its strong financial and economic potential from previous years and its ability to withstand negative external influences has been successfully tested.

The Law of the Republic of Azerbaijan "On the State Budget of the Republic of Azerbaijan for 2010", adopted in the Milli Mejlis, also affirms that it is among the countries with confidence in the goals set by our republic in the context of a global crisis. Despite the slowdown in the economic growth of the developed economies in the context of the financial crisis, the trend of growth in Azerbaijan is likely to result in the formation of budget revenues. Of our Republic the new budget project, prepared in accordance with the concept of economic and social development, has also taken into account the trends expected in the world economy in the coming years.

#### 5.2. Problems of Crisis Prevention.

The issue of strengthening the international financial system was widely discussed at the end of the twentieth century following the next financial crisis, covering Europe, Asia, and many other Latin American countries. According to the IMF assessment, this crisis is in the forefront of the crisis over the past 50 years, and is therefore of great concern. That is why the subjects of the banking and financial system support the idea of changes in the "architecture" of the international currency and financial system in order to avoid repeating the same situation in the future.

The process of improving the international financial system was reflected in the following aspects:

- development of international standards for public disclosure of economic information (Social Data Dissemination Standard);
- Creating international standards for banking supervision (the Basie Core Principles for Banking Supervision);
- Increasing the IMF's financial capabilities (the New Arrangement to Borrow, NAB);
- Establishing a new Supplementral Reserve Facility that aims to help members of the fund to deal with unforeseen and destructive situations, such as the loss of investors' trust. Conditions for the provision of financial instruments on the SRF line should ensure the repayment of debts in case of interest.

The "new architecture" plans include "new means of overcoming crises" - the "targeted credit channel" (CRA). This will enable IMF members to maintain stability even in the global financial system. The CRA provides short-term funds to IMF members to ensure the effectiveness of the payment balance in case of adverse changes in the global equity market. To access the CRA, you need to comply with the following conditions:

- The country of IMF's Board of Trustees (IMF member) should have a stable financial standing at that time and there is no need to use the IMF's resources;
- The economic indicators of the candidate are positively assessed by the IMF in the final information review and provide the IMF with the necessary information within the framework of the "Special Data Transmission Standards";
- Observation of progress in the financial sector of the country as a result of regulation of foreign debt and external resources;
- The candidate must submit a convincing economic and financial program to be approved by the Board of Governors. At the same time, the IMF should be prepared to make the necessary changes to the program where it is needed.

Main development directions of BMS:

- 1. Regulation of financial markets and investment institutions:
- Strengthening the financial system through the development and implementation of international principles and standards for the supervision and regulation of the banking system, stock markets and various financial institutions, and reforming the activities of local financial institutions;
- Strengthening financial infrastructure through auditing, accounting, and adoption of more universal payment systems. Improve Basel standards on bank capital;
- Determine the ways to strengthen prudential supervision in the E & S and SES;
- Establishing a mechanism for investing in the securities market and investment activities where borrowing is actively used;
- Promoting the application of international standards in offshore financial centers;
- 2. Economic Policy:

- Determine the conditions for the liberalization of the domestic market and the application of adequate currency regime in the CEDAW, the development of international capital movements;
- Increasing the efficiency of public sector support mechanisms and allocating social benefits;
- Searching for ways to ensure that the population's losses are minimal during crises, and the development of policies to safeguard the interests of low-income populations;
- Increasing transparency in private and public sectors, including international financial institutions.
- 3. Activities of international financial institutions.
- Reforms in the BMS;
- Improving the crisis prevention mechanisms, seeking ways to involve the private sector in predicting and eliminating financial crises;
- Strengthen the IMF's control over member states in various areas, in particular the financial sector and capital flows;
- Increasing the effectiveness of macroeconomic policies at the international level.

# 5.3. Analysis of measures to reduce the economic and social consequences of the crisis in Azerbaijan.

Thus, as we noted in the previous paragraphs, as in other areas of the global economic crisis, the situation in the financial sector of Azerbaijan is positive and dynamic development pace is maintained. This, in turn, has a beneficial effect on maintaining the tendency to develop in other areas. As a result of the measures taken, the banking sector's crisis-oriented nature, in its turn, maintains the level of crediting, which in its activity prevents the problems arising in the areas where the

loan acts as an important point. All of this contributes to the minimal impact of the global crisis on Azerbaijan over the upcoming period.

The CIS countries include Russia, Georgia, Kyrgyzstan, Tajikistan, Kazakhstan and Armenia are the countries that will suffer more than the crisis. The impact of the crisis in Azerbaijan among the CIS countries is not so great and we are closely linked with the careful attitude to the financial market of Azerbaijan.

Of course, the increase of Azerbaijan's financial capacities plays an important role in the development of many key areas of entrepreneurship, especially in the country, and the measures taken by the state in this area. The preferential loans given by the state to the entrepreneurs are largely stabilizing the dynamic development in this area. For this reason, the volume of such loans extended by the state is increasing.

Thus, by the end of the year, entrepreneurs received preferential loans worth 80 million manat each year. This year the amount of loans is 130 million manat.

Another attractive issue for Azerbaijan in the global crisis is the development of securities, including bonds market. As you know, the foundation of the global financial crisis has just begun to decline the value of securities. The global financial crisis has led to a sharp decline in bonds and a global crisis all over the world. However, this situation did not prove itself in the practice of Azerbaijan. The most obvious example of this was the bonds of the Azerbaijan Mortgage Fund.

Remind that, on June 16, 2009, the placement of the Mortgage Fund bonds in the Baku Stock Exchange (BSE) has been started for the first time. Interest-bearing bonds worth 15 million manat were sold at the auction. The nominal sale price of one bond made AZN 1000. Bonds with annual yield of 3% are issued for 7 years and their maturity date is May 2016.

However, Azerbaijan is one of the least affected countries in the global financial crisis. All of this has been achieved by the country's government in a timely and

well-timed manner and as a result of carefully thought-out measures that we will look at below.

As a result of all above-mentioned measures, the financial sector of Azerbaijan is positively assessed by international rating agencies. Over the course of a while, the rating of foreign and local currency credit management in Azerbaijan has been steadily rated by the UK's FITC Rating Agency as "BB". Other international financial institutions are also positive about our country's financial policy.

In recent years, the banking sector has been rapidly developing in Azerbaijan. Assets of commercial banks at the end of 2009 amounted to 11.66 billion manat, which is 2.7 times more than in 2000. Domestic credit investments of commercial banks increased by more than 20 times.

All this led to the strengthening of the Azerbaijani financial system, causing 67% of the banking system's liquidity minimum standards to be up to 67%, and an increase of 12% over the nine months of 2009 compared to the beginning of 2009.

It is reported that the measures taken by the Central Bank of Azerbaijan to reduce the discount rate by 15 percent to 2 percent from October 2008 to May 2009, as well as to reduce mandatory reserve requirements, have provided additional liquidity for \$ 1 billion in the country's banking sector.

In the present reality, the research of Azerbaijan's national development model on the basis of concrete scientific principles is particularly important in the financial system. The end of the transitional period in the economic field transforms the unbroken unity of science and economy on the basis of mutual influence mechanisms, the modernization of economics and strong human capital in accordance with the requirements of the new era in the financial system and the use of scientific predictions in the regulation of the economy.

Academician Ramiz Mehdiyev, head of the Administration of the Republic of Azerbaijan, pointing to actual issues with his unique scientific approach, writes in his article, "Public and humanitarian sciences: a look at time context": "... estimated. Our achievements in the economic field are not easily achieved. Our main goal is to make a serious turn in education, science and intellect in the coming years, and the process of building a knowledge-based economy should intensify." (1)

Although 2009 was accompanied by the global crisis in many countries, the anticrisis measures undertaken by our country on the basis of internal potential enabled us to maintain a dynamic. In spite of the deepening of economic decline in some nearby and remote countries, the 9 per cent increase in gross domestic product in Azerbaijan is the result of a robust economic policy.

In 2009, the economy continued to be capitalized through domestic financing sources. Nevertheless, the share of the private sector in investment financing has increased. Thus, 57.2% of investments in the amount of 7.4 billion manat (21.3% of GDP) of fixed capital, or 4.2 bln. The share of the private sector fell to the share of the private sector. Nevertheless, 5.2% of the investments were financed by bank loans and 36.4% by means of budgetary funds.

Thanks to the successful development and modernization strategy, the Azerbaijani economy demonstrated high stability to the global crisis and lost its stability, maintaining growth dynamics and level of social development. Antimicrobial policy, which has created a strong stability potential in the country, has also created good opportunities for maintaining financial stability.

As a result of the implemented anti-crisis program financial stability of the banking sector has intensified:

- 1. The banking system has liquidity assets at approximately 80% of its current liabilities, which is less than the minimum (30%);
- 2. The capital adequacy indicator of the sector was -19% more than twice the acceptable norm;

- 3. The quality of the loan portfolio was maintained at an acceptable level; the share of overdue loans in the total portfolio was 3.3%;
- 4. The banks' financial results were positive and in eleven months of the current year profitability was 2.6% and profitability equity was 17.8%.

Thus, thanks to the successful development and modernization strategy, the Azerbaijani economy demonstrated high stability to the global crisis and did not lose its stability, maintaining growth dynamics and level of social development. Antimicrobial policy, which has created a strong stability potential in the country, has also created good opportunities for maintaining financial stability.

The Azerbaijani manat kept the exchange rate, and the government did not allow the manat to be based on the social interests of the population.

The successes of this progressive development model, which is typical for Azerbaijan, are carefully monitored and met with interest beyond the borders of the country. The World Bank, the World Economic Forum (Davos forum), the International Monetary Fund, the CIS Statistical Committee and other organizations counted the results of the year quite successful for Azerbaijan.

Anti-crisis measures are needed to reduce the negative impact of the global financial crisis, as well as to maintain sustainable economic development in the country. Anti-crisis measures should be based on the local characteristics of each country's economy. The result is that anti-crisis programs developed in the European Union countries are essentially different from each other. But at the same time, all anti-crisis programs encourage the state's intervention. It should be noted that the way out of the stagnation in the West in the 30s of the last century was the increased state intervention. At that time, Keynes identified five functions that stimulated state intervention in the economy.

It is important for the government to be with entrepreneurs, bankers and all citizens at the time of the crisis. The state is helping its citizens using their own resources.

In doing so, it creates the basis for a quick break in the crisis. The US government has already approved a \$ 1.7 trillion aid package. European Union countries also help businesses. State support to business in Azerbaijan has already been declared at the highest official level. The concept implies both the direct and indirect assistance of the state to businesses or entrepreneurs.

Taking into account the problem of shortage of financial resources as a result of the global crisis, the concepts give preference to indirect assistance methods. At this time, there is no longer any need for cash funds. Nevertheless, as is envisioned in the concept, there is a need for direct assistance in a number of situations, which is the basis of the measures directed to economic revival.

Bearing in mind the structure and peculiarities of the economy of the Republic of Azerbaijan and taking into account the experience of foreign countries, the Economic and Social Development Center considers the following anti-crisis measures in concrete sectors of the economy appropriate.

## **Entrepreneurship sphere**

One of the main goals of anti-crisis measures is to stimulate the development of small and medium-sized businesses in the country. The main direction of anti-crisis programs developed in the CIS and developed countries is the implementation of measures aimed at stimulating entrepreneurship. Over recent years, the National Fund for Entrepreneurship Support has been granted a loan of up to 400 million manat under the Ministry of Economic Development. Unfortunately, as noted at the conference on the economic and social outcomes of 2008, chaired by the President of the country on January 18, there have been serious, even criminal character shortcomings in the activities of the Fund. This did not mean that the funds directed to the development of entrepreneurs would not be spent entirely. At a time when the global crisis is observed, it is important to increase the amount of financial aid allocated to this sector in order to support entrepreneurship development in our country. Of course, the development of

entrepreneurship, especially small and medium-sized businesses, has a positive impact on both employment and competition. The development of small and medium enterprises also positively affects the application of new innovations. In this regard, it is advisable to implement the following measures to support entrepreneurship development in the country:

- Increase the volume of loans provided to entrepreneurs through the National Entrepreneurship Support Fund. This year it is planned to allocate 74 million manats to the National Fund for Support of Entrepreneurship for preferential loans from the state budget. In general, it is forecasted that in 2009, entrepreneurs will receive a preferential loan amounting to 130 million manat, including loan repayments and loan interest rates. Considering the importance of small and medium-sized businesses in reducing the negative impact of the global financial crisis despite the fact that this year's funding is comparable to previous years, it is deemed appropriate to increase the volume of concessional loans to entrepreneurs by up to 250 million manat. Increasing the amount of discounted loan will expand access to finance sources for small and medium-sized enterprises and increase their performance. In fact, after the onset of the global financial crisis, the main problem of local businesses is the lack of financial resources. One of the main reasons for deepening the problem is that banks stop the mass lending and interest rates on loans offered. This does not allow entrepreneurs to resume their activities at the previous level. In this regard, increasing the volume of preferential loans is a serious development of entrepreneurship in our country can stimulate.
- Reduction of loan interest rate. The Fund for Assistance to Entrepreneurship under the Ministry of Economic Development offers loans to banks from 1 percent, to banks to entrepreneurs no more than 7 percent annually. Taking into account that the interest rate of the National Bank is 3 percent and the level of inflation declines considerably in 2009, it is desirable to reduce the credit interest from 7 to 4 percent. This will allow entrepreneurs to use loans more efficiently.

- Increase of maximum loan amount. The maximum amount of loans currently offered by the Entrepreneurship Support Fund under the Ministry of Economic Development is 3 million manat. Despite the shortage of financial resources during the crisis, as a result of the increase in the amount of loans, entrepreneurs will have the opportunity to implement larger projects. From this point of view, it is advisable to increase the maximum loan amount from 3 million to 5 million manat. In the case of increasing the volume of loans to be allocated in this direction, the maximum amount of the loan will increase.
- To involve civil society and entrepreneurship associations into the loan process to increase public oversight and transparency. As noted at the meeting presided over by the country's presidency, there were serious shortcomings in issuing preferential loans in recent years. From this point of view, the involvement of civil society in the granting of loans will help to make the process more efficient.
- expanding the fight against monopoly. Despite the fact that the President of the country, as an economic and social outcome of 2008, pointed out the anti-monopoly struggle as one of the main objectives of the government, the situation in that area is still unsatisfactory. Strengthening the fight against monopoly by the Cabinet of Ministers and the Ministry of Economic Development can also promote competition and protect consumer rights of citizens. Obviously, monopoly is generally considered to be the main obstacle to economic development. Therefore, fighting against monopoly is crucial as one of the main anti-crisis measures. From this point of view there is a need to sign a special document against monopoly and artificial price increases. The document, which is intended to be signed by the President, proposes to define specific tasks in front of government agencies in order to expand the fight against monopoly.
- Strengthening complex fighting against artificial price increases. Artificial price increases have a negative impact on the social status of citizens, while violating consumer rights. After the staff changes in the Ministry of Economic Development, the fight against artificial price increases is observed. This should be

regarded as a positive step, but it is important to take complex measures against artificial price increases. A complex fight against artificial price increases can lead to revitalization in a number of sectors, including construction.

An analysis of Azerbaijan's economic trends in the circumstances of the global financial crisis indicates that the economy of Azerbaijan will not be adversely affected by the first waves of the global financial crisis. Low oil prices, unfavorable situations in international financial markets, reduced foreign investment flow, hard access to cheap loans, and so on, could result in a downturn in economic development. The severity of the economic and social issues will depend primarily on the period of the global crisis and the price of oil.

#### Conclusion

An analysis of Azerbaijan's economic trends in the conditions of the world financial crisis shows that the economy of Azerbaijan will not be adversely affected by the first waves of the global financial crisis. Low oil prices, unfavorable conditions in international financial markets, reduced foreign investment flow, difficult access to cheap loans, and so on, could result in a slowdown in economic development. The severity of the economic and social issues will depend primarily on the duration of the global crisis and the price of oil.

To alleviate and eliminate the consequences of the global financial crisis on the economy of Azerbaijan, timely and comprehensive implementation of the government's anti-crisis program is needed. In order to achieve sustainable development, the country must move to a new stage in economic re-forms where special emphasis must be placed on structural and institutional reforms along with monetary policy measures. The country should move on to an innovation path of development, modernizing the economy, increasing the competitiveness of the country, and improving living standards based on these reforms.

As a result of oil and gas revenues over the past few years, Azerbaijan has made great strides in building huge reserves. Because of the so-called strong economic fun damentals, there are expectations, at least at the reported level, that the vast reserves of the country will help overcome the adverse effects of the financial crisis in a short time. However, much will depend on real policy arrangementsments will be employed by the government to take the country through the crisis. While the effects of the crisis for Azerbaijan may lag behind other countries of the world that are more financially integrated, its eventual impact may be severe, particularly given the lower level of economic diversification and higher state budget dependence on oil. There is already the worst of the global downturn in the past. However, under such risky and unpredictable circumstances, Azerbaijan's government needs to manage its policies cleverly.

Based on the above analysis, the government should continue its loose monetary policy for now as a lead recommendation. At the same time, a mixed approach should be preferred, involving policies both at the level of the Central Bank and at the level of government as a whole. First of all, the government should pay more attention to lessening the dependence and hence the budget's elasticity on oil revenues and developing the non-oil sector through more tradable goods and services, while more effective planning should be carried out by applying a permanent oil income model with a fair and equal distribution of income between present and future generations. The state budget should be long-term planned in order to predict all the risks and take appropriate action to mitigate any adverse effects. Of course, in the circumstances of greater dependence on oil on the budget, it is less likely that the budget will be long-term planned. That is why it should be a priority to reduce the economy's dependence on oil. This can happen by boosting long-term development in the more labor-intensive sectors such as agriculture, which accounts for 40 percent of total employment and contributes only one percent to the country's overall employment.

One of the key recommended reforms is that the government should reduce the internal market prices of oil products or at least adjust them to the world market prices in order to eliminate the imbalances between the world market and the local market prices of oil. This assumes that exporters in the country will be able to profitably produce and sell their products to world markets.

Lastly, the Central Bank should continue its efforts to create bank liquidity. The Central Bank provides commercial banks with credits from its reserves at a discount rate. The government should increase mortgage credits and stimulate construction firms, insurance or appraisal firms, and ultimately the buying power of new apartments for people.

Another important aspect is to avoid increasing the supply of money in circulation without increasing the overall GDP and therefore the supply of money should be increased gradually on condition that the national currency rate is stable and that

inflation does not increase. There is no risk of higher inflation so far, and the Bank can therefore delay returning to its tighter liquidity position in the long run to meet inflation targets.

The other suggestion of particular interest would be to insure credits from commercial banks so that credit risks ultimately go down and rates go down so that people can take credits from banks easily. However, the challenge with such an option is not to adequately develop the insurance market, so creditors would insure their credits from commercial markets.

The government should continue its policy of raising deposit amounts for insurance. This policy can be extended to cover the insurance of larger deposit amounts to support economic growth as economic conditions improve.

In conclusion, I would like to cite the words of President Ilham Aliyev of Azerbaijan. Speaking at one of the meetings, he noted that Azerbaijan is the least affected country by the crisis. The strength of the economic situation in Azerbaijan has been ensured thanks to a sound economic policy pursued under the leadership of the President of the country. Forced economic growth in

In recent years, the creation of large currency reserves relative to the size of the economy and a restrained debt policy have become the guarantors of the financial strength of the economy, as a result of which the country has been reliably prepared for the global crisis. This applies both to the economy as a whole and to its financial and banking system.

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