GLOBAL ECONOMIC CRISIS

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Abstract: The presented work is focused on the Global Economic Crisis. The first part is centered on how the Global Financial Crisis happened together with a lot of explanations. There are also facts on how the Global Crisis of Bulgaria.

The second part of this study is comprised of what kind of measures we have to take in order to overcome the crisis. Infrastructure is insisted on as a factor for economic growth; how to support large companies, small and medium businesses which are in difficulty; how we can reduce unemployment; support the first work experience; state subsidies and promote innovations.

The study is concluded by reflections on the next crisis – the energy crisis, and what the world must do in order to solve this problem and reach sustainable development.

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1. The Global Financial Crisis – what happened?

Despite the structural similarities there are a number of essential differences between the 1929 – crisis and that in 2008. One of them is the ability to invest money in economics. Before 1929 the American dollar had adopted the gold standard. This naturally limited the means for issuing new banknotes in order to stimulate demand. But this was not the case in 2008. After the abandonment of the gold standard in 1971 the American national currency turned into an ordinary sheet of paper and its value depended upon supply and demand. This had allowed a large amount of currency to be issued. The development of different financial instruments gave the chance to realize various fictitious profits. This made a large amount of money go into currency. In 1981, during the Reagan presidency the U.S. government began to stimulate the consumption of goods at the expense of the flow level of issued money. This would have lead to serious growth of the inflation level. Then the government reduced the credit value in order to “keep the previously described scenario” alive (the Federal Fund dropped from 19% in 1981 to 0% in 2008). Only in these two crisis years the amount of money in USA has doubled.

![Figure 1: Monetary Base (1917 - 2009)](image)

In fact the Dow Jones is an indicator of crucial importance. It was the first to give signs of the forthcoming crisis. The Dow Jones index reflects the current state of American enterprises at the Fund Market. The Dow Jones Index was at a level of 4,000 in the 90s of the last century, the time when the world was changing. The index overtook expectations in 1997 – 1998 and exceeded 10,000; and in 2008 it reached record-breaking levels of 14,000.
The explanation for the permanent growth of the profitability in the American market within several years sounds illogical. To clarify this statement we should note that investing in shares has profit in two ways:

- First, by way of dividend. It shows the net profit and it is shared out between shareholders;
- Second, by way of capital profit. It reflects the price growth of shares at capital markets;

The Dow Jones Index exactly proves this capital profit. These purposefully growing share prices are keeping investments in the American economy, and in return, new foreign investors are being involved.

This is both in the government's and dealer's interest; especially, the dealers have big profits from selling on high commissions. But in return, the economy does not start working better. One of the effects is that investment funds take away considerable amounts of money. In this way investment funds also take away the ability of the banks to attract “fresh” capital and this makes banks turn into pyramids. In addition, investment funds are investments in different financial instruments, which...
do not generate real profit, but a hollow victory. In return, banks reduce their control on giving credits and begin to finance absurd mortgages. These mortgages only postpone the time of the crisis, because they allow goods and services being consumed (in order to be compensated for the overtaking of supply). In fact, the consumers have not worked for these goods and services; theoretically, they cannot buy them. In the meantime, more and more government securities are issued to reduce the effect of inflation. In the end, all these actions lead to colossal debt of more than $10 trillions. The high rates of the government securities attract a significant number of foreign investors which means “fresh” money from foreign savings. Most of them come from China and Japan.

In 2009, 86% of the consumer’ goods in USA came by import and only 14% were manufactured in the country. This means, that the USA is a country that does not manufacture goods, but only consumes in large quantities. The country lives on credit and the differences of that are covered by issuing dollars, without gold standard, goods, energy resources or other real assets to secure them. Unfortunately, it is not easy to solve such a problem, because all economic entities are involved in it – from government to ordinary households. If all these credits cannot be paid off, they will be crossed out or restructured. This plan is almost impossible, because every debt is an asset for the western financial system. Crossing out of these debts would lead to bankruptcy of banks, insurance companies and the whole credit system, which is the core of the western financial system. On the other hand, if debts stay unchanged, this will mean complete disaster for the financial sector of the economic and the social – economic model of the West.

2. Impact of the global financial - economic crisis on Bulgaria

Typical for Bulgaria is that it is a relatively small and economically open country with a large share of international trade in Gross Domestic Product (GDP). Because of its openness to the global economy, our country did not remain isolated from the global financial - economic crisis. By the end of 2008 and early 2009 we were under the indirect influence of the turmoil besetting the world. This actually occurred, because the ongoing crisis in the financial system of the USA and Europe did not have the greatest impact on us, at least initially. Our weak integration into the global financial system protected us from the direct impact of the crisis since its inception, launched by investment banks. In Bulgaria, they are not as strongly represented as commercial banks. The initial impact of the global financial crisis on the Bulgarian banks occurred mostly in limiting the intake of foreign credit, increased interest rates and reduced the volume of lending. But the difficulty, which started in the financial sector, had moved to the real sector, and had more tangible influence in our country. As already mentioned the global financial economic crisis hit Bulgaria in the financial system so as through several channels directly related to the real economy.

- The most important of these is the export of goods. Bulgaria's total exports constitute over half of GDP and exports of goods represent the majority of it. The sharp contraction of manufacturing and consumption, and the massive layoffs in many sectors of the economy in Western Europe and the U.S. seriously affected Bulgarian exporters. In this way a lot of small businesses that were exporting had gone into liquidation and the larger ones were forced to cut back production and try to stretch the payments with suppliers.

- The second channel through which the global economic crisis was brought into the home country was tourism. Tourism forms about 15% of GDP.
Not only are summer and winter skiing affected, but all kinds of traditional tourism. A cruel blow underwent again on smaller, usually family businesses dealing with hotels and restaurants. Many of them failed to service their loans to banks because of low native employment. In this way not only the firms suffered which were directly related to tourism, but also industries that service it, including the banks. Low incomes are a result of both the crisis and fewer tourists (20% decreased tourists from Russia and over 50% of Western European countries only within 2008 - 2009), and also from the devaluation of the British and Russian currencies.

- The third channel through which the crisis entered our economy were the investments - both foreign direct investments and local ones. Many of the companies now rethink their investment programs and constrict budgets for capital expenditures to the bare essentials.

- The fourth channel is the constriction in bank crediting. This is already visible not only on loans, but all other types of credits. Interest rates rise a lot, and requirements for lending to borrowers are becoming greater.

- The fifth channel was the contraction in construction and the real estate market as a whole. Due to the small market, lower demand and consumption, many construction companies were forced to release most of the workers. Many banks and leasing houses, which granted loans to entrepreneurs in the construction industry, began to defer contributions over time to allow borrowers to repay their monthly installments, but those who couldn't, failed.

It is noticed that at the end of 2008 and the early 2009 exports from our country have decreased significantly as did also domestic demand. The inflow of foreign direct investment and foreign tourists were reduced, domestic inflation and wages were lower. Domestic investment and government spending were limited due to additional budget cuts and the private consumption in households. Economic growth was slowed, prices of energy resources and raw materials were raised, market demand was weakened, the government deficit and unemployment rose, and the economic situation deteriorated.

The first affected sectors and industries were metallurgy, mining of metal ores, the textile industry, and the extraction of construction materials. In 2009 almost all sectors and branches of industry declined in production in some cases reaching 50% - 60% (manufacture of wood products, chemicals, vehicles). The lack of raw materials and buyers, both national and international, the continuing declining of prices as a consequence of the oversupply and the restriction on consumption affected even more negatively. Enterprises from manufacturing industries were also affected by weak domestic and external demand and sought to limit their expenses to minimize the negative impact of the crisis on their financial situation and to remain competitive.

Other sectors affected by the crisis were construction and real estate, machinery, the chemical industry, transport, textiles and the clothing industry. In construction the biggest threat was the realization of projects that were already built, the lack of funding for construction and sometimes even possible bankruptcy of small and medium enterprises in the business. In machine building, constraints are visible in the continued reduction in orders from abroad, production, and loss of export markets. The sewing industry had to deal with issues such as price undercutting by imported goods, reducing the production of materials and withdrawing investments from Bulgaria.

Despite the serious crisis that spread throughout Bulgaria in 2008 and 2009 there are also sectors that have real growth potential. These are food processing,
distribution of medicines and cosmetics, technology and communications, treatment and recycling facilities, renewable energy and road construction. The food industry is one of the few sectors which had a growth of 3% in 2009 compared to the previous year. This is due to larger household budgets for food and beverages, European financing of producers and the increased number of orders. As for the pharmaceutical products (medicines and related cosmetics and dietary supplements) it is considered that the crisis has no negative impact on the amounts of their trade. In addition, the funds from the state budget allocated to healthcare are increasing. Trade in pharmaceutical products is favored by the increased importance of healthcare - insurance funds. High technology and communications are also less affected by the crisis. The demand for software products and provision of outsourcing services has jumped by about 10% in one year (2008 - 2009). Improving road infrastructure and initiated treatment plants projects protect the infrastructure sector from the negative impact of the crisis.

In 2010 the global crises had already directly affected about one third of the Bulgarian households. They were forced to limit costs, to shrink consumption and to exclude purchases of goods which were not essential. The income through additional and extra work strived to increase. But still in times of crisis consumption does not stop. People continue to buy food, drinks, and clothing, organize their trips and vacations, but invest less money.

For the period 2008-2009, poverty in Bulgaria increased by 2% and reached 23% of the whole population. It is not surprising that most were households where the head of the family is unemployed, low educated or in households of single mothers and large families. Social payments by the state as pensions, benefits and allowances were increased significantly by 34% between 2008-2010. The minimum wage has increased by about 20%, as have the minimum pension and unemployment benefits for the same period.

During the crisis, it is favorably reflected that despite the increased unemployment, most employers refrained from mass redundancy in the workforce. Instead, they took measures such as switching to shorter working hours and forced holidays. But still many people lost their jobs due to reduced workload and insufficient demand for manufactured goods and services on their part. The Bulgarian average unemployment rate in 2009 was 7.59% with which our country is ranked ninth in the lowest unemployment rate in the EU27, where the average unemployment rate was 8.87% and 9.37% for the Euro area. However, in comparison with 2008 when unemployment in our country was 4.73%, it has risen by 2.86%. In subsequent years, unemployment has risen and even reached 12.6% in the first quarter of 2012. The average indicator for the EU27 was 10.2% and 10.9% in the Euro area. In cities every third person aged between 18 to 35 years was unemployed. The newly open job positions for 2009 were 2.3 times less than in 2008.

Compared to other European countries, Bulgaria successfully avoided bank bankruptcies and liquidity problems. Before the beginning of the financial crisis in 2008 Bulgarian banks managed to increase their capital, to ensure stability of the cash flows and to maintain a good public image. This was a result of the restrictive policies towards credit operations and the increase of the interest percentage by the Bulgarian National Bank (BNB). In addition, the requirements for approved bank loans and funding were significantly elaborated, leading to better preliminary selection and a decrease in “toxic” or nonrefundable credits. Furthermore, the International Monetary Fund and the European Union prohibited some operations, in which BNB could finance the Bulgarian government or other institutions from the public sector. This
action aimed to protect the Bulgarian economy from speculative capitals and to constrain the growth of the public debt.

During the financial crisis, Bulgaria marked a decline in its economy and the amount of the GDP dropped significantly between 2008 and 2009, as it is shown in the graph below. Many economists state the lack of foreign investment, the decrease in domestic consumption and lower trade activity as main contributors for the negative trend. Unemployment rate increased to 12.6% in April 2012 and GDP growth contracted from 6.2% (2008) to 5.5% (2009). In 2009 investments dropped by about 5.3 billion Bulgarian levs, which is 24% less than their value in 2008. The Sofia Stock Exchange also recovered, which is the only stock exchange, operating in Bulgaria. In 2010 shares traded on it lost more than 50% of their value and continued to fall. From that decline not only did the speculators lose, but also retirees because pension funds are major investors in Bulgarian markets.

Table 1
*Gross Domestic Product of Bulgaria (2004 - 2011)*

![Graph of Gross Domestic Product of Bulgaria](image)

3. Measures to overcome the crisis

The crisis - the most discussed topic by ordinary citizens and politicians. How to get out of it? What measures would be the most appropriate to take?

These are the questions that the whole world is looking for an answer to. There is not an exact recipe, but each country tries to introduce certain measures that stimulate or restrict so that they can overcome the “dead end”.

Some of the measures are:

- Public investments in the infrastructure;
- State subsidies and promoting innovation in various sectors of the economy;
- Support with resources for large companies, small and medium businesses, financial institutions, who are in difficulty;

3.1. Infrastructure as a factor for economic growth

The financial - economic crisis has attracted the attention of politicians and economists to the problems of infrastructure and its role in ensuring long-term sustainable economic growth. Many countries, including the U.S. and China have launched an ambitious program of development and modernization of infrastructure. Investing of public funds in infrastructure leads to many positive effects. In the beginning a
well-developed infrastructure helps to reduce firms' costs, increase their competitiveness in the market and helps them to improve foreign trade, which heavily depends on the transportation and communication infrastructure.

The infrastructure can be an important factor in the formation of aggregate demand. By investing in specific infrastructure projects, the government also encourages private companies to participate. Building of a road in the countryside can help the integration of this area into the regional economic environment, to attract other private investments and accelerate economic growth in the region as a whole.

3.2. Support by funding large companies, small and medium businesses, and financial institutions, which are in difficult positions

For overcoming the financial - economic crisis the small and medium businesses play a crucial part. They are the backbone of any economy, in developed countries 50% of GDP growth is thanks to them. They employ 40% of the total workforce, in countries like Japan and Italy - more than 60%. The small business has a specific role in the developing of innovations. In the USA, for example, small businesses are 5 times more innovative than the larger companies.

Possible measures that the state can take for small and medium businesses are:

In the area of credit policy:
- Providing the necessary lending to small and medium businesses through state banks and commercial banks;
- Providing the necessary service credit for working capital needs;
- Increasing access to credit through programs to support businesses;
- Ensuring access to financing at the expense of issuing shares;
- Providing access to finance for exporters.

In the area of tax policy:
- Reducing value added tax;
- Reduction of excise duty;
- Reducing taxes on the basis of jobs safeguarded;
- Return of customs duties (duty drawback on imported goods used to produce output that is exported).

3.3. Reducing unemployment

One of the most serious problems during the crisis is the high levels of unemployment. Measures that can be used to reduce unemployment in terms of companies are:
- Reduction of the working week (to avoid redundancy);
- Suspension of work;
- Freezing wages or limiting its growth;
- Sending workers to vocational training courses;
- Relocation of workers (employees) in manufacturing facilities, businesses or institutions where there is bigger demand;

Special attention should be paid to youth unemployment. The youth unemployment rate (over 20%) was twice higher than that of the whole working population and almost three times higher than the ratio of active population among adults. In some countries this rate reached 40%. Faced with rising unemployment, young people find it difficult to get a job and many of them decide to continue their studies. This can be an investment in the future, as long as they acquire the appropriate skills. But what we see in most young people is that they neither work nor
study. To overcome these challenges, the world must invest in our young people, students, and offer effective actions that can prevent or deal with high levels of youth unemployment.

3.4. Supporting the first work experience and development in the work place

Training Skills should take place in parallel with a strong focus on employment in order to develop the professional experience. Apprenticeships, practices in enterprises and internships are particularly important because, provided that they meet the required quality standards, they give young people the opportunity to acquire both professional skills and experience. Social partners can help development schemes, through which more young people enter the labor market, even for short-term professional commitments. Active employment policies and better services in this area should help young people to find such opportunities. They can help to further the training actions and job search, including in other regions and possibly in other countries. It is also essential to be carried out reforms in the labor market, which may contribute to the opening of labor markets for young job seekers, and young entrepreneurs through the removal of unjustified restrictions on business services and professional services, legal professions, health and social sectors.

3.5. State subsidies and promoting innovations

One of the major fields in which the country has to aim its subsidies and the search for innovative methods, in order to overcome the financial crisis and increase its growth is energy. With the world’s evolution the society’s need of energy increases more and more. In 2010 the fuel consumption was 13 billion (one kilogram QRI = 29 307.6 kJ/kg), 85% of this consumption is from non-renewable energy sources such as oil, natural gas, coal, uranium and the current stock of these resources is decreasing.

This requires a search for new alternate energy sources. The sources of renewable energy are natural occurrences like sunlight, wind, tides and outgoing tides, the growth of plants and also geothermal energy. They are an environmentally clean alternative to fossil fuels and are naturally renewable or inexhaustible.

One of these sources is the pure and inexhaustible sunlight. The Earth gets $1.96 \times 10^{21}$ Kcal sunlight a year, which is 10 times more than all of its energy stocks altogether. A part of this energy falls on the Earth’s surface; another part reflects back to itself, a third part is consumed by clouds and water. The only obstacle to this energy’s assimilation is technology. In the last 50 years people have been working hard on using all of the sun’s power, on electricity production through PV collectors, and also on heating different fluids.

Another alternative source is the wind. Its energy is a type of renewable energy. The most common method of transforming it into electricity is through wind farms. In the last few years the wind’s energy is growing by much higher rates than the other alternative energy sources, hence the growth of wind farms in the world. The volume of the energy made by these farms in the period 2000 – 2006 has multiplied by 4. The market’s growth rate of wind farm electricity plants in the last years constitutes 25-30%. The sum of the produced power from all the wind farm electricity parks in the world is rated at 74 Gigawatts.

The next alternative source is water. People have been using water’s power as an energy source for thousands of years, mostly for grinding wheat. In 1882, Fox river, USA, using hydro generators was producing enough energy to supply two factories and a house with electricity. Nowadays there are many hydroelectric plants,
which provide around 20% of the electricity in the world. The most common type of a hydroelectric plant is a dam, built on a river in order to keep the water as a reservoir. The water released from the reservoir flows through a turbine, which sets off an electrical generator. Hydroelectric plants can produce a lot of electricity at a low cost.

4. Conclusion
As we all know, the world has been through many crises and it will experience more, because that’s the way the system that we live in works. In times of crisis, such as the last one that occurred, people focus on the financial aspect and the reasons caused by the financial institutions, which led the global economy into a crisis. Four years after the collapse of the financial markets, the world finally saw Wall Street’s triumph and millions of people lost their jobs. More than half of the bank assets in the USA are the property of the 10 biggest banks and their profits have gone back to the previous levels. The financial sector’s lack of wisdom and the enormous mistakes of key political figures led our economy to collapse. And it wasn’t the people who were guilty that paid the price – the victims did.

In conclusion our team isn’t going to talk about this crisis! We aren’t going to remind you of derivatives, hedge funds, mortgages, the Federal Reserve, Wall Street and all of the other factors that led to the crisis. Our team will put aside these factors that are connected with the financial institutions. We consider the current financial system too far away from the initial idea of the economy. Since by definition economics is a science responsible for the “rational use of the scarce earth’s resources, a science about the behavior and decisions of the economic subjects which lie in the foundation of society’s economic life.” With all due respect, we remind the financiers of this definition they might have forgotten.

We will conclude with the next crisis – the energy crisis. And unlike the others that occurred, it won’t be a result of an embargo on a country by another one, it will be an embargo by our planet on all of us!

A term that today sounds too positive – the two magic words which should be in the ideology of the economy – sustainable development. What does it mean?

When we are developing sustainably, we have to aim for two main things:

- Growth, economic development, which provides us with a high standard of living;
- Preservation and improvement of the environment for the future.

Regarding the first criterion, the answer is clear - yes, we are developing, not all of us have a high standard of living, but all in all, the world is going through changes. However, if we pay attention to the second point about the environment - things aren’t so good and green.

Our economic system has undergone a vast number of energetic crises. They give an idea of what is currently happening as the world needs energy, which cannot be obtained from anywhere. Furthermore, they predict what will happen with the world unless we take the necessary measures before it is too late.

As we all know, petroleum is the driving force in every contemporary society. The widespread use of petrol begun roughly 150 years ago. Nowadays, it is the largest source of energy. Moreover, it is the main fuel for our cars and most transportation means, as well as for many industries and products.

Since the middle of 2009 till the end of November 2010 the price of Brent petroleum is between 70 and 90 US dollars. This is considered to be fine for the producers and consumers of petroleum, but at the end of February 2011 the price had
risen to 120 dollars per barrel and after that it stabilized at 115 dollars. Petroleum expenses are around 5% of the world GDP and the rise of 20% means that there would be rise of 1% and drop in the demand of other products. According to "Morgan Stanley", the steady rise of 1 dollar in the price of petroleum in the USA is equivalent to the rise of taxes by 120-130 billion dollars. This corresponds to 1.1% of the disposable income of the average American.

New York’s economics professor Nouriel Roubini claims that: "With the price of 100 dollars and level of 140 dollars we are already in a dangerous platform. Let’s not mention how the level of 200 dollars will influence the demand and will have a negative impact in the economic growth of the developed economies, developing economies, the world will enter a recession, thus, the price of petroleum will fall dramatically".

The given facts have clearly shown us how the economies of the countries remain paralyzed for a certain moment. The report “Hush” which belongs to the U.S. Department of Energy warns us that in order to avoid serious global economic damages is necessary to find an alternative to petroleum. This should happen from 10 to 20 years before the peak of production. Simultaneously, petroleum usage must be reduced and gradually stopped during the next few decades. The good news is that this plan sounds incredibly good. Unfortunately, the peak of petroleum consumption is right before us. Moreover, according to some analyzers, we have even reached and passed through it. Financial crises, crises of overproduction cause global economic shock. Despite the fact that at school we are taught that these crises are inevitable, that’s just how our systems work. These crises are cyclic and acquiescence with them is perhaps due to the fact that the world, more or less, gets rid of them. They are symptomatic of the system. It is a sign that something is not all right. But the world has always managed to get over them.

Despite this, petroleum reserves won’t be exhausted during the next few decades. Petroleum crises will start earlier- when the world production cannot fully satisfy the constantly increasing demand. The big question is when will this moment come? An analysis made by the Pentagon claims that the world will fall into a petroleum crisis in 2015. According to the research, if that happens, serious economic and political consequences will follow.

Are there any alternatives and is our aim reachable? At least for the moment are all our energy resources renewable? Europe has developed an ambitious plan for solving the problem. It is called Europe 2020. One of the main purposes is after 8 years, 20% of the energy resources are to be renewable. It is great that the European leaders have started thinking in the right direction for steady development and effectiveness. Despite this, the plan is late but still gives a certain level of hope.

The Stone Age is not over because there were not any stones left. The usage of solar energy, wind energy, tidal energy, and geothermal energy will put an end to the petroleum era. The only problem is that they are still quite expensive and are not available in the necessary quantities.

All in all, when we take into account the data of the prices for energy, we can conclude that they are constantly rising and a decrease is slightly possible. Meanwhile, if wind and solar energy grow in size, at one moment in the future they will become economically profitable, even if the expenses for shipment of the energy are included. Solar energy can become quite affordable if it is highly demanded and can become as cheap as the other types of energy. Of course, this can be accomplished in a long term plan when the price of production of alternative energy will be considerably lower.
The world must take the right decision! We have to increase the scale of production of alternative energy! This can be done through a large amount of investments. Investments in oil fields need to be stopped and redirected to green energy.

The world can cope with the shortages of petroleum and we have the necessary technologies but we are not concentrating enough on the problem. A big complex system of alternative sources can fully satisfy the demands of humanity. Located in the right places, depending on climate and natural features of the regions, they can supply us with endless energy, energy we need for sustainable development!

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