Contemporary Development of the Commodity Markets – Consequences and Challenges for the Revitalization of the World Economy[1]

*Peter BALÁŽ – Stanislav ZÁBOJNÍK**

Abstract

*The paper analyzes selected examples of the impact that the economic crisis has had on the development of commodity markets and global economy. Authors focus mainly on the segment of energy resources, in which plays a dominant role crude oil and its condensates**;** It accentuates the highness of dependence between financial markets development (USD), and oil markets. This paper describes consequences of the energy markets development on strategic development plans of the EU. The revitalization of the global economy can only be successful if the result of coordinated strategic cooperation-oriented or even most affected national economies to international and supranational bodies, and without that they are not taken into account and target the interests of the various parts of the world economy.*

Keywords: *commodity markets, economy crisis, energy security, globalization, industrial policy, oil market*

JEL Classification: B30, E62, F10

Introduction

The world economy is experiencing its first contraction since the Second World War. The bursting of the housing bubble in a number of countries, the subprime financial crisis in the United States, rising commodity prices, and in several countries, restrictive monetary policies led the global economy to the

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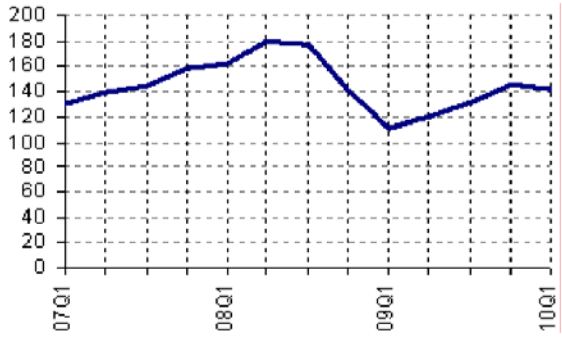
"brink of recession" Whereas the exhaustion of credit-based demand growth brought these economies to a standstill, the collapse of credit supply and financial asset prices pushed it into a severe recession. After slowing down from 3.5% in 2007 to 1.7% in 2008, global GDP fell by more than 0.6% in 2009 (IMF, 2010). This crisis is unique, not only in terms of its depth but also in the extent of its global reach: virtually no economy has remained unaffected. Even economies that are expected to grow this year, such as those of China and India, are slowing down significantly from their previous years of rapid growth. It shows to what extent national economies around the globe have become interdependent, which makes it difficult for them to "decouple" from the global economic slump, especially as the initial shock originated in the largest economy. The speed at which the crisis spread to different countries was also remarkable: many developing and transition economies that had enjoyed robust growth until the second or third quarter of 2008 experienced a fall in GDP already in the last quarter of the year (UNCTAD, 2009).

F i g u r e 1

World Merchandise Exports, First Quarter 2007 to First Quarter 2010
Indices, first quarter 2005 = 100



Source: <http://www.wto.org/english/news_e/pres10_e/pr604_e.htm>.

There are several statistics affirming that world economy has experienced several good years. Prior to the economic crisis, global growth was strong and the gap between developing and developed countries was narrowing. This is empirically attributed in part to the growth of Asian economies, particularly China and India where economic growth exceeding 11% and 9% in 2006 and 2005 respectively. Elsewhere, Africa recorded economic growth of over 5% (Stiglitz, 2009). The world economy was provided impetus primarily by high demand and its pace with optimism on financial markets sufficiently covering several warning market signals that suggested that something is not completely "well running".

Though very optimistic, still decreasing, economic growth rates in all critical world regions (with the exception of the so-called emerging markets) reacted on fast-growing prices of nearly all kinds of commodities – mainly oil, metals and foodstuffs. The decline was partly compensated by the fact that a major part of trading in the Eurozone attenuated the lowering value of exports in USD and, on the other hand, transatlantic exports were structurally oriented on export of goods with higher rate of added value. To a certain extent it compensated losses in exchange rate developments.

Although it has been published, many authors often offer different analysis of who, or what, is responsible for the crisis. However it is important to find out who or what was wrong "set" in the international economic mechanism that the global economy can in future "avoid" or better prepare for such an economic collapses. Most of the experts simply point out that the downturn, after five years of relatively fast growth, was in their view, due to a number of factors: the global fall-out from financial crisis in United States, the bursting of the housing bubble and in the other large economies, soaring commodity prices, increasingly restrictive monetary policy in the number of the countries, speculations and stock market volatility. Above all the fallout from the collapse of U.S. mortgage markets and the reversal of the housing boom in the number of the countries has turned out to be more profound and persistent than was expected before. Global asset scarcity led to large capital flows toward the U.S. and to the creation of asset bubbles that eventually crashed. Firstly, the crisis exacerbated the shortage of assets in the world economy, which triggered a partial recreation of the bubble in oil markets. It led to an increase in petrodollars seeking financial assets in the U.S., what became a source of stability for the U.S. In the second phase, it influenced the real economy through an economic growth slowdown. This slowdown worked to reverse the tight commodity market conditions required for a bubble to develop, ultimately destroying the commodity bubble (Caballero, Farhi and Gourinchas, 2008).

Huge blast of crisis phenomena in the world economy shows that it is not only because galloping globalization, more and more intrinsically linked and dependent but also that these close ties are highly "infectious and toxic". These terms are used by experts to explain the strong horizontal (capital – financial – commodity markets) and vertical (tertiary – secondary – primary sector) links that in this economy characterized by the massive international liberalization could not be somehow continental or regionally isolated. These are perhaps the main risks that this economic crisis now presents us with.

Most of advanced international experts emphasized the profound coherence of economic fundamentals which play a dominant role that the whole crisis has rapidly turned from the sub-prime mortgage crisis which extends only the US

market into the international financial meltdown. It was confirmed that half a decade of dynamic growth in all world territories have very different outputs: the progress of transition economies (developing countries) which dynamically enhance their own transformation and using the advantageous situation on international markets through FDI and export growth effectively refinanced this process through the Euro zone countries which turn taking dozens of new members, create new markets and gain additional cooperative partners to Southeast Asian countries which had lessened during the financial crisis (1996 – 1998) and prepare their own successful measures to keep their own economic progress. The result was an expansion of the APEC-8, but especially Chinese and Indian economies which have gained new trade outlets and they could concentrate the production and exports with increasingly higher added value and support their own investment plans, particularly in the EU building a strategic base for obtaining raw materials from Africa or Latin America.

Pre-crisis development characterized by unusually high economic growth with unusual consistently high standards of production and final consumption caused a growing demand in almost all segments of the global commodity markets. This suggests that it is energy commodities, in all its mutually replaceable forms, have become one of the most dominant phenomenon determining the degree of human need satisfaction, but also competitiveness and prosperity of enterprises, countries or even complete integration groupings. Developments, in the recent decade, especially in the period of financial crisis, have also shown that although no absolute shortage of its carriers in the long run has been registered in spite of numerous catastrophic scenarios and threats, a technologically- and price-related accessibility has rather been visible. Mitigation of induced risks jeopardizing global economic development increasingly depends on the rate of advancement of technical and technological methods aimed at effective energy exploitation, as well as on the capability of countries to cope successfully with the rapidly rising energy acquisition costs in a sufficient quantity and structure in line with individual demands of national economies (Baláž, 2008). Although during the economic crisis came to a sharp decline nationally in production demand it should be noted that even though energy prices themselves have fallen to about half, their production and sales worldwide fell by only about 5 – 10%.

1. Commodity Boom and Economic Crisis

If we were to identify the crucial link in the context of a threatening world economic crisis indicating why the upcoming critical phenomena were so fast and unprecedented, it would certainly be an undoubtedly very general, yet,

a more straightforward feature – globalization. On the one hand, it accelerates and simplifies shifts of financial, merchandise or capital inputs from one part of the world to another; it also fosters liberalization of world trade, but concurrently enforces abolition of most protectionist mechanisms that proved to be effective in eliminating numerous unfavorable recession-related elements or symptoms of various types of crises until recently.

Unprecedented economic growth since the beginning of this millennium resulting in a price hike of energy sources demonstrated to what extent the world economy is tied to prices and security of supplies. In 2008 the spot price for a barrel of crude oil hit USD 147 in a short term, which was nearly four times more compared with 2003. Such trend "pulled" prices of other energy carriers, metals and agricultural commodities, too. Subsequently, along with the breakout of the mortgage crisis in the U.S., the financial crisis in the EU as well as in Asia, and extensive dropouts in natural gas exports from Russia to the EU that followed, such trend decelerated. Forecasts of experts even envisage that economic recession with severe consequences may be expected in the coming 2-3 years even in the case of the Euro zone's energy security. In this content it is important to note the fact that not only economic crisis bring decrease in consumption of primary raw materials but also whether the high price fluctuations or volatility in world commodity markets bringing back very serious implications to the entire international economic mechanism. On the other hand, preliminary signals of the economic recovery are growth in demand (price) of primary commodities, especially energy resources. As shown on Table 1, most of the crisis in the last century really correlated with high commodity prices, particularly crude oil, which price is the key indicator of other prices on the commodity markets. Its price finally affects in extreme cases as an important determinant of GDP growth. Based on this, it is essential to identify, to what extent crude oil price growth determines the volume of generated GDP. From a logical standpoint, this extent has been historically changing and thank to a dominant role of the strategic commodity in the 70´s of the last century and in the full power during the first oil shock.

Not only financial crisis, but several events in the past such as oil shocks declared the position of oil as a crucial. Undoubtedly, energy sources are the most strategic material and it is not able to substitute them by a production of any good. Historically, crude oil plays the most important role in the development of the world economy as well as the consequences of the international financial crisis proved its position. Apart from well known facts regarding its irrecoverability in the transformation process, unique technical features, efficiency concerning its use, lack of reserves as well as its delivery conditions for the final

consumer determine the existence of companies, countries and the whole world economy. Any significant change of crude oil price evocates automatically a change of other commodities, not only energy sources. Based on expanded oil prices what occurred in the 3rd Q of 2008, prices of other commodities behave in a similar way but internally, however, they behave differently. In the final result, international demand is the key determinant as a natural effect of an instantaneous situation of the world economy or the crucial trends and tendencies which actuate it. Growth evokes a rising demand on all of them, however, it is important how the long-term territorial accouplements of its producers and exporters are set, but also what is the level of complementary among them (oil-natural gas-coal-nuclear energy etc.). The importance of this commodity is not only high, but there is also no adequate substitute. It is important to say that oil reserves are limited and in terms of territory dislocated in areas different from the ones of major consumption. For several years it seemed that the world economy has successfully coped with historically unique increases in prices and energy carriers alike with resulting naturally rising inflation.

T a b l e 1

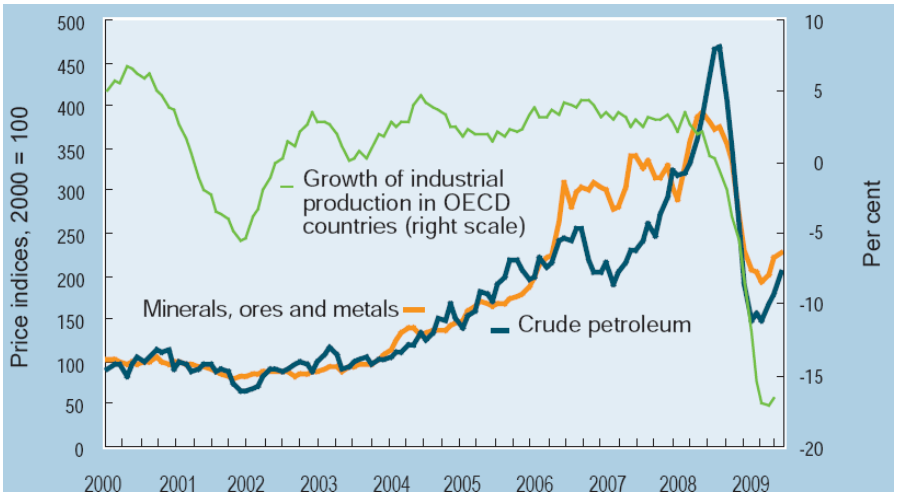
Principle Characteristics of Major Commodity Booms

Common features	**1915 – 1917**	**1950 – 1957**	**1973 – 1974**	**2003 – 2008**
Rapid global real growth (average annual percent)	–	4.8	4.0	3.5
Major conflict and geopolitical uncertainty	World War I	Korean War	Yom Kippur, Vietnam War	Iraq conflict
Inflation	Widespread	Limited	Widespread	Limited second round effect
Period of significant infrastructure investment	World War I	Postwar rebuilding in Europe and Japan	Not a period of significant investment	Rapid buildup of infrastructure in China
Centered in which major commodity groups	Metals, agriculture	Metals, agriculture	**Oil, agriculture**	**Oil, metals, agriculture**
Initial rise observed in prices of	Metals, agriculture	Metals	**Oil**	**Oil**
Preceded by extended period of low prices or investment	No	World War II destroyed much capacity	Low prices and a supply shock	Extended period of low prices
Percent increase in prices (previous trough to peak)	34	47	59	131
Years of rising prices prior to peak	4	3	2	5
Years of declining prices prior to trough	4	11	19	–

Source: World Bank (2009).

Figure 2

Oil, mineral and metal prices, and industrial production in OECD countries



Source: UNCTAD (2009), p. 9.

2. Influence of Crude Oil Prices on Commodity Markets

Increasing prices of energy raw materials influence the terms of trade of their exporters in a positive way. This also leads to increased demand for commodities. Finally, these imbalances manifest in the form of growing inflation resulting from bigger demand for crude oil and bullions (that save the value). Negative effect of high energy prices on industrial production reduces the demand for metals, thereby putting downward pressure on their prices. As a result the correlation between metals and oil prices is much lower than between oil and food prices (World Bank, 2009). On the demand side, some commodities compete directly with synthetic products, which are produced from crude oil (cotton with man-made fibers, natural rubber with synthetic rubber). The demand for other commodities (maize, sugar, rapeseed, and other oils) has increased to produce bio fuels. And the price of energy commodities such as gas and coal are affected because of their substitutability with crude oil (World Bank, 2009, p. 63).

In emerging markets the growing prices of crude oil manifest with a more negative effect, because their production is not so sophisticated and the most of generated wares are based on high energy intensity.[2] This has been a reason why

[2]Characteristic for developed market economies is the production and export of products with a low consumption of commodities and a high value calculated for the weight, in the case of developing economies it is reversed. (Radetzki, 2008) comes to the conclusion that modern products with a higher added value request lower consumption of commodities, especially crude oil. While

economic impact of record prices of commodities in 2008 had very severe influences, especially on developing countries (Heady-Fan, 2008). According to several studies (Kpodar, 2006) a 20% increase in oil price causes incomes of the poor to decline by 3.6% (Coady and Newhouse, 2006), cost of living of rural poor rises by 3.1%; 25% increase in oil price reduces average real consumption by 2.5% with high-income groups slightly more affected than low-income groups (Clements, Hong-Sang and Gupta, 2003).

The sensitivity of national and global economics to the price of crude oil has been quantified by many authors (Aguiar-Conraria, 2007; Barsky, 2004; Gramlich, 2004; Mork, 1989; Bernanke, 2006, etc.) but their conclusions cannot be applied to the conditions of record prices of crude oil in 2008 for more reasons. The authors used data from different time periods when the position of crude oil in the international transport, the position of its substitutes, and also the control over the international oil trade were on different levels. We can consider the work of H. Huntington (2006) to be the first, relatively exact analysis of price volatility of crude oil. He comes through synthesis of more results of previous research to the conclusion that the impacts of growing price of oil are differentiated on the basis of two key factors – to what extent the economics is able to react by an appropriate mix of economic policy (before all monetary) implements and in what time period the price increase occurred.

In case of influence of the first factor concerning the circumstances of the radical oil price growth, we can consider it as justifiable because already in the second quarter of 2008 the interest rates of FED touched 2% which signalized beside of an average inflation and a permanent new emission of American dollars quite a limited room for acting. On the basis of this theory we can thus state that the negative influences of higher prices of crude oil were stronger in this regard.

H. Huntington differentiates the intensity of price increase according to time criteria on a moderated level when he assumes a proportional price increase of "black gold" in the period of a few months constantly, which prepares households and companies for an adequate adaptation of their consumption. On the other side, price increase in a short period – "oil shock" causes a faster decline of the growth rate of national economies. In this connection we shall emphasize that the prices of crude oil in the period before crisis expanded between February 2008 and July 2008 at almost 100%. In case that this most negative combination of factors appears, the analyse predicts a recession of about 5% (Huntington,

the value of 1 kg of newspaper was in 2008 about 0.87 USD, the value of 1 kg of a produced car was 33 USD, cell phone 4,448 USD/kg and for example telecommunication satellite 89,000 USD/kg (World Bank, 2009, p. 62).

2006). The conclusions of Huntington's theoretical postulates emphasize the impact of high price of crude oil as the most intensive for OECD countries but especially the USA. It manifested in a high deficit of trade balance and the following foreign debt and expansive monetary policy. These consequences in combination with the fact that the financial market of the USA is the heart of global economics, undoubtedly contributed to the rise of present global recession.

There were several reasons why the prices grew so fast and what related consequences resulted. Most experts agree that prices of all sorts of energy grew since 2003 predominantly due to the following reasons:

- Unprecedented economic growth, as though in madness of optimistic atmosphere on world markets as no attention was given to how much crude oil and other energy derivates will be paid for. Still, investments into the energy sector were minimized.
- Leverage effect of high oil and gold prices invoked a long-term period of a decline in purchasing power and stability of the dollar.
- Effectiveness of protectionist mechanisms available in the world economy (particularly in OECD countries) – be it strategic reserves, stability, a network bringing production and consumption together, etc. – proved to be less effectual. This is also why prices of all energy derivates rocketed.
- Currently available know-how demonstrates that an enormous volume of speculations on commodity exchanges also stretching to financial markets proved to be one of the leading causes. Permanent money streaming among them sustained fuel supplies highly tense. It seems that even though not an extensive one, still some segments of oil demand was reinforced especially in cases of rather frequent delivery failures. This factor has been often the decisive one.

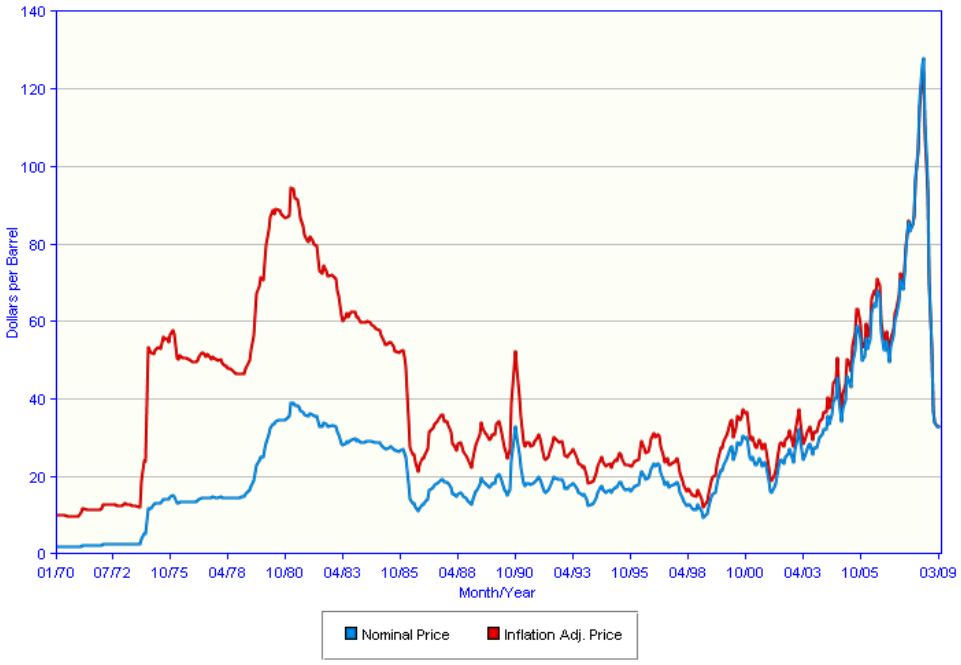
Various experts often suggest that growth of oil consumption and parallel increase of its price resulted from other – predominantly non-economic factors, e.g. J. Stiglitz (2008) often points out at quintuple oil price hike since 2003 above all due to the insufficiently considered US military intervention in Iraq. P. Drucker wondered already at the beginning of this millennium when examining developments in the US economy that its slow adaptation to trends on the world energy market prevented it from being affected by a financial crisis as early as in 2003.

Crude oil has also an important function in the whole financial system. For some decades we can observe a lever effect that works between the value of American dollar (petrodollar) and the price of crude oil, or other energy resources. Some specialists show its function in „freezing" the disposal mass of money, others point to the fact that the consumers consider the products from it (gasoline, oil) as almost the sole products that they are not able to give up. In the

consumption basket, especially in USA, they play a dominant role, regardless of whether there is a crisis or not. Its high price also finally enables to justify price increases of other wares, not only wares which directly depend on its price but also for example foodstuffs and beverages. Their price increase has a long term sterilization effect on the disposal volume of money in circulation as well.

F i g u r e 3

Crude Oil Prices 1970 – 2009 (2009 US Dollars)



Source: <http://tonto.eia.doe.gov/country/timeline/oil_chronology.cfm>.

The correlation between the oil prices and USD has been documented by several authors. Obadi (2006) stressed the impact of dollar devaluation differ from one country to another. Moreover, consumers in countries with non-dollar appreciating currencies enjoy cheap oil, while people in dollar-pegged countries pay a higher price for the same barrel of oil. Dollar devaluation makes oil relatively cheap in countries with non-dollar appreciating currencies such as the euro and yen and devaluation increases oil demand in countries with appreciated currencies because of an increase in purchasing power (Obadi, 2006).

By the analysis of the trends in commodity prices is important to understand, that their fall, which came after six year dynamic growth, were not just the circumstance of the global economic crisis, but according to authors´ meaning one of its important triggers. The surge in the prices has been mainly the result of the

rapidly increasing demand from several fast growing economies, owing to their highly intensive use of energy and raw materials. The most of the reputable analyses consider the economy of China and India to be the major market factor responsible for the crude oil prices increases (Izzo, 2008). Growing demand encountered supply constraints because during the period of relatively low prices in the 1990s, investment in new capacity has been low, especially in oil, gas, metals and minerals. The evaluation of prices of individual commodity groups has varied.

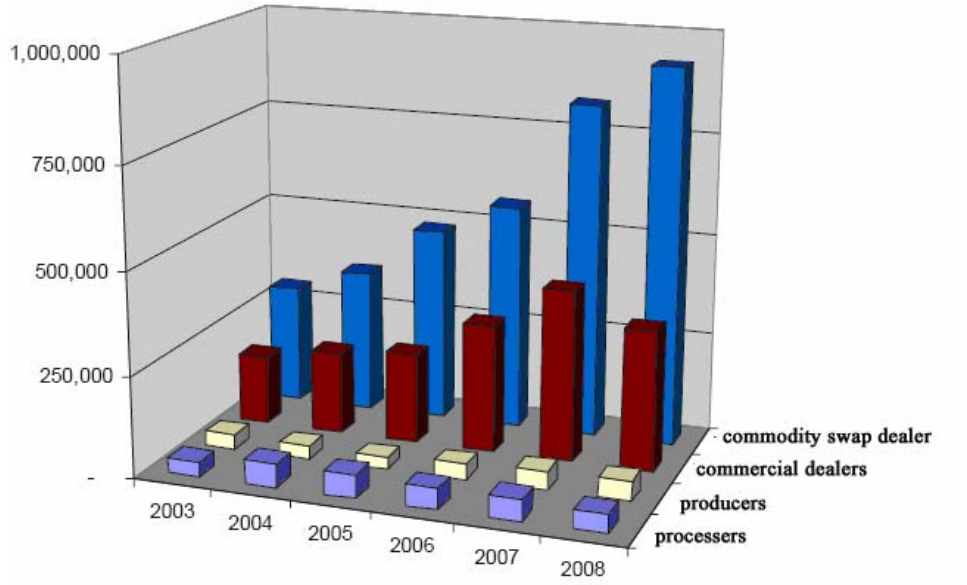
These were the deciding factors which were, according to our opinion, the real fundamental influencing the development on the oil market. As these analyses also show, the main cause for expanding prices of crude oil that were then the cause for a growing inflation pressure on the majority of national, mainly developed economies, resides in the trade with oil futures (a more detailed analysis in the next part), speculations with them as well as in the increasing mass of money generated by American FED. It does not underlie to inflation pressure resulting from fundamental principles of functioning of financial market to such an extent as other key currencies. Although investment in exploration and new production capacity has increased gradually since 2002, this process met with severe political, technological and geological constraints. Therefore the new supply so far has been weak. The slow supply resulted in low inventory levels for many important commodities and it created the new business space for increasing speculation. The increasing turbulence on financial markets forced financial investors to invest more in commodity futures and options. Another reason of higher prices on primary commodities was the depreciation of the dollar, which is used for the settlement of 80% of all international transactions. Their price increases are smaller in the currencies that appreciate against that currency. For instance, between May 2007 and May 2008 UNCTAD non-fuel commodity price index based on dollar increased by 41.9%, but only 32.7% in SDR and by 23.3% in euro. Crude oil between January 2007 and July 2008 increased about 250%, to reach 147 USD per barrel, and they were in real terms above the level of 1979 (the second Oil-shock) – the peak of previous oil crisis.

One of the most discussed factors that influenced the price increase of crude oil in 2008, besides the aforementioned fundamental reason, were speculative transactions. Figure 4 proves the already mentioned assumption about persistently higher share, almost control over the oil market, by speculators. Because the increase of volume of speculative transactions on commodity markets with crude oil WTI was significant, and a man can hardly imagine in the period of stagnation or depression on other markets another reason which would motivate the traders to enter the markets with oil futures than the vision of price rise and

resulting profit. From the above mentioned graph it is apparent that the movement of open interest positions at subjects physically dealing with crude oil almost did not exist. These subjects secured their supplies through stock exchange and exploited positive features of futures for the customer.

F i g u r e 4

Average Number of Open Interest Positions of Commercials Brokers at WTI Crude Oil



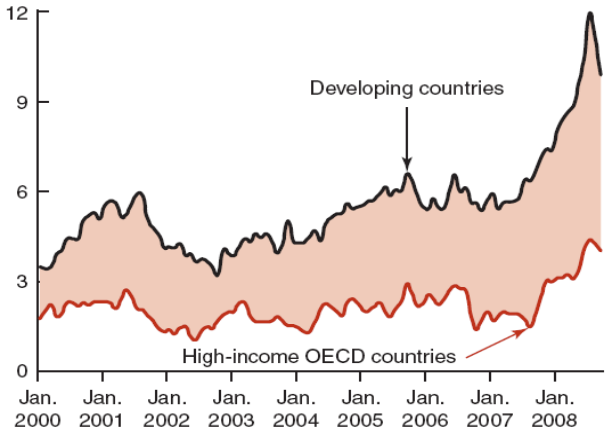
Source: Büyüksahin et al. (2008), p. 26.

However, other market players did not follow safe supplies but expectations of price increase. The frequency of transactions on WTI market in the first half of 2008 was proportionally related with the price level of this raw material. This is also confirmed by IPE data. According to them the number of transactions with Brent oil in 2006 increased at about 63% in comparison with the previous year. In 2007 it was 82% and the volume of speculative transactions culminated in the first half of 2008 – by a real outbreak of the crisis (IMF, 2010). Since the speculations with commodity futures exclude physical taking over and the prolongation of contract for the next period is limited by broker companies, a closing of positions before termination of contract is often used, which explains the strong decrease of activity in some months. In case the majority would be represented by oil refiners, the development on the market would be just reversed, it means the demand would grow in the period of dropping and would fall in the period of rising, that is also confirmed by the fact that the demand for

fuels made of crude oil is very non-elastic but it sinks under a long term high price. In case that the moment of growth and expectations supported by news and analyses predict a short term price decrease, traders close their positions, demand sinks and thereby also the price. As a consequence of expectation of further decreases, the market becomes empty and only those traders stay which are interested in physically taking over the commodity; the volatility is unacceptable for them and that is why they try to keep the price on a stable level, same as it was in the first quarter of 2009. All the increases in the spot commodity prices noticeably influenced the inflation rate and it reversely determined general situation on the market, but also in the development on the international financial markets.

F i g u r e 5

Inflation in Selected Countries Caused by High Food and Energy Prices



Source: World Bank (2009), p. 55.

This conclusion is clear evidence that the inherence of speculators in the pre-crisis period was very high and in fact they ruled the whole market. Warnings expressed by many specialists were ignored and only during Economic Forum in St. Petersburg in June (2009) the Russian vice prime minister I. Setchin expressed his opinion that too high prices of crude oil and consequently the financial crisis are due to speculators and suggested decidedly to limit their influence on oil prices. In July 2009, U.S. Commodity Futures Trading Commission (CFTC) admitted that: "prices of crude oil in this year and previous years have been forced to sky high dimensions mainly by speculative capital". In spite of this, a legitimate regulation of financial companies in the form of standards for investments in crude oil futures and setting of limits for commodity futures purchasing do not exist yet.

3. World Economic Growth Reconstruction and Position of Crude Oil

It is apparent that the world economy in the period of the rapid economic development (2003 – 2008) has been able to absorb overpriced energy inputs so far as a result of a combination of several positive factors:

1. In regard to its enormous productivity growth based on a high rate of investment, especially into education and technologies, China exported deflation as a matter of fact.

2. United States of America took advantage of it and lowered interest rates to an unprecedented level, whereby they caused bubbles of low-cost living, whereas mortgages were accessible for everyone and the concept of „risk“ lost its true meaning.

3. In the world, lower real salaries and on average lower share of GDP were accepted, as world wealth grew a fictive volume of long-term world prosperity arose.

It is evident that the pretension of such worldwide prosperity, which failed to adhere to effective and rational use of sources as well as substantial moral hazard, is over. The sooner we acknowledge the meaning of this statement, the better the outlook for successful recovery of the world economy will be. Perhaps it may be agreed that indisputably it is the USA that may be blamed in the first place; nevertheless, in terms of self-reflection the remaining countries are not innocent either.

Whilst most of the European Union members and Asia based their economic growth primarily on export, which increasingly materialized particularly between developed market economies and Asia as a sign of the fast-progressing specialization with the Asia-EU trade often served merely as a sub-input for trading transactions among major world regions, the US development strategy differed.

Enormous domestic consumption fostered by cheaply accessible money oriented mainly on consumer goods and construction of new houses did not incur either new production sources or opportunities for export directly. Conversely, it was at the expense of other more productive and export-oriented investments. Mass deficit of the trade balance and the balance of payments incurred by such situation was refinanced through loans provided by countries, which were top US importers at the same time. “Furthermore, our transatlantic ally exported its economic difficulties including inflation abroad not just through depreciation of European investments, expansion of contaminated mortgages and bad financial practices, but also by means of the permanently weakening dollar, partly in consequence of inappropriate macro and micro politics.” (J. Stiglitz, 2008)

T a b l e 2

Price Development of Selected Energy Sources and its Influence on the Prices of Selected Commodities

% change	2000 – 2005	2006	2007	2008	2009 (forecast)	2010 (forecast)
Energy	13.5	17.3	10.8	45.1	–25.0	0.9
Oil	13.6	20.4	10.6	42.3	–26.4	1.8
Natural Gas	10.4	33.9	1.0	57.2	–10.8	–4.2
Coal	12.7	3.1	33.9	97.8	–23.1	–10.0
Non-energy	8.3	29.1	17.0	22.4	–23.2	–4.3
Agriculture	6.0	12.7	20.0	28.4	–20.9	–1.3
Foods	6.0	10.0	25.6	35.2	–23.4	–0.3
Grains	4.8	18.4	26.1	50.9	–27.7	2.6
Raw Materials	5.0	22.7	9.0	13.0	–14.9	–2.7
Metals and minerals	12.3	56.9	12.0	5.0	–25.5	–5.5
Copper	15.2	82.7	5.9	–0.6	–32.2	–4.2

Source: World Bank (2009).

Contemporary development of the world economy is based on a decline of aggregate demand affects not only major European exporters, but also China and the USA. Cheap dollar namely boosted competitiveness of American exports and since the latter were in 4/5 oriented on exports of hi-tech and services, their effectiveness was high on the one hand. On the other hand, however, the share of export on GDP formation was relatively low, although with a possible far-reaching impact. Europe is in an even worse situation because it has been increasingly focused on its exports to the USA despite the lasting appreciation of the euro. This is also why Europe has suffered the most.

It seems that China will be the least affected player in this "game" due to the fact, that thanks to its high level of competitiveness as well as a huge amount of assets, it will be able to cope with this situation successfully. The entire situation is further complicated by the fact that recession leads to a massive global redistribution of income from oil importers to exporters, which will ultimately have unfavorable consequences also for outlining new energy strategies related e.g. to a more extensive utilization of alternative sorts of fuel, reduction of the volume of emissions or introduction of various rationalization programs in their consumption. Currently, there are several scenarios concerning how developments on the energy markets will be shaped. The question which one will ultimately materialize is a challenge for experts and national governments. Paradoxically, it may be stated that low prices will not help the world economy and at least in the short run they will be a sign of its weakness and limited success in coping with the impact of the financial crisis alike.

The financial crisis also brings about some changes that seem positive at first glance. As a matter of fact, e.g. the price of oil dropped to 40% of its July 2008

level. It might seem logical that the reduction of transport costs and fuel prices for consumers will provide an additional impetus for demand and revitalize certain elements of the world economy "lagging behind". Nonetheless, it appears that even despite this fact that it is not only consumption, which plummets, but also sales of all kinds of means of transport and other industrial production, too. Moreover, impressive development programs and the launch of new technologies were suspended; it is also evident that national governments will lack sufficient fiscal revenues to be in the position to sustain the present level of wealth, running social programs or financing of health care and education programs.

Authors consider to be essential to refer to the scenario of economic development in countries of Eastern Europe facing strong pressure on their economies resulting from effects of the financial crisis. Although forecasted economic growth could be considerably higher than the all-European average, the fact to what extent these countries will be able to finance their strategic development plans and to what degree such lower rate will make it possible for them to cover the increased rate of inflation, employment rate or the ability to settle their international financial commitments remains questionable.

While the criticism of those who are directly or indirectly responsible for the difficult situation and risks associated with the entire financial crisis implicitly or explicitly, is targeted and the one who had triggered it is more or less known, it still remains the leading issue how to mitigate the growing threats arising from the critical situation. Having accepted the fact that globalization is the crucial element of the current stage in the development of the world economy affecting all of its territorial segments (even though it optically appears that such impact will be to a large degree differentiated), regardless of this fact, all countries must jointly contribute to finding a solution. It is just to be added that in case of continuing distortion of the economy, the global financial crisis will not be selective; vice versa, it will globally and even more seriously affect all countries and all classes of population with no exception. Protectionist scenarios, especially of big developed countries, can be already predicted. Besides the obvious ones, it is necessary to point out the fact that even traditional models of national autarchy, attempts to introduce various individual or integration-based protectionist measures and barriers could "revive". This would bring the world economy many years back, and the question is what this would mean for international politics as well as the worldwide process of liberalisation characterising its development in recent decades, too. It will prove crucial whether the world economy will finally learn a lesson from such economic shock and be able to join forces in finding effective solutions.

4. Adaption of EU on the Changes on the Commodity Markets

European energy policy is currently extraordinarily influenced by global political and economic tendencies and fulfillment of ambitions of individual member states. If the European community is not in the position to ensure sufficient quantity of energy from domestic sources and to reinforce its competitiveness in terms of price, it will need to cover roughly three-quarters of its energy demand from imports over the following two to three decades. It is not just energy demand, which grows worldwide, but also its price – particularly in the case of crude oil and natural gas. It may be seen that the process in question will probably become permanent so that it may necessitate drafting alternative programs of energy acquisition soon and accelerated construction of new investment projects in this sphere as well. Apart from economic and ecological issues, uneven regional distribution of sources of fuels and their differentiated consumption trigger far-reaching geopolitical threats. A realistic approach to their appeasement may not omit any individual opportunity provided by location of each country, its own sources, available technology or the ability to save some of them. There is no solution without respecting factors shaping real environment for efficient exploitation of all alternative energy sources either.

In the Central European region an approach respecting an appropriate mix of coal- and nucleus-based sources with natural gas, reasonable support to renewable sources and a universal focus on saving energy as well as materials may prove to be the most efficient one. Adoption of a new energy-related doctrine that the Union has focused on over a longer period with its subsequent incorporation into national strategic plans is, still, merely an initial measure, which will just minimize, but not eliminate, strengthening risks. No other feasible solution seems to be available in the EU, which is not and will not be self-sufficient in terms of energy supplies, considering the current compendium of knowledge and mastering energy-producing technologies.

The Energy strategy of EU – even though not definitely formulated and, thus, not pursued as a jointly adopted doctrine yet – is in a rather unfavorable "starting position". Therefore, its heading will be also complicated because it will need to provide such conditions for uniting opinions across EU-27, which are essential to be observed not only within the Community, but also externally mainly on the side of key suppliers of energy media. Sources of petroleum and most own fossil fuels will be depleted by 2050 at the latest so that it will depend much more on a prompt identification of new alternatives. Moreover, the remaining sources will be probably so expensive that even their most efficient exploitation possible will exceed current prices of natural gas or black coal by far. Estimates acknowledge that in 2005 energy consumption was by 20% higher than it was economically

justifiable. Hence, there is a considerable potential resting on local savings. Their absolute value is estimated to reach 5 – 10 bn Euro on a yearly basis and its exploitation is equivalent to over 200 mil. tones of oil per year (Hospodářské noviny, 2006, p. V.). Having adopted an action plan at the end of 2006, besides the generally pursued target to accomplish energy savings of 20% in the EU by 2020 the European Commission (EC) outlined a road map indicating what measures it aims to implement year by year in order to meet this objective. Total savings potential was determined e.g. in housing at 27%; in non-residential premises at 30%; and in industrial production at 25%. In addition, it claims a share of 25% on renewable sources even without reflecting differentiated conditions and real possibilities of individual Member States to meet such goal.

Conclusion

Dynamic growth of the world economy and its major territorial segments lasting for nearly a decade experienced initial noticeable economic disturbances since the second half of 2007; a little less than a year later they gained momentum. Initially more or less isolated critical symptoms were accompanied by a series of bankrupts and since September of 2008, insolvency of U.S. investment markets and gradually the slow-down of the euro zone economic growth, too. Stated observations and facts confirm that in spite of the fact that the causes of the global financial crisis are linked especially with moral hazard and high credit toxicity dislocated primary in the U.S. economy and its financial system, then with consequences that they have brought to European and Asian economics, it is necessary to mention the development on international energy markets, too.

Various analyses of the causes and consequences of financial (economic) crisis confirms that the risks entailed were the result of concentrated impacts as many local or sectoral economic distortions, but their activation reveal further and further weakness in the global financial system. It also proved highly dependent on and under the pressures of globalization are intrinsically linked with the world economy. Experts predicted that fast development of the world economy recorded until mid- 2008 is under the “control” and the rapid growth in unit prices of all types of inputs inclusive financial, will be his natural being dampened, under the influence of international organizations and national governments, threatening risk sine qua non inhibited. Although it seems at first sight that this market only reflected negative consequences resulting from the development on financial markets and the increased ingerence of speculative capital, we can see that it also has its own development dimensions and a constricted

space for development. It is likely that the world energy sector – regardless of the fact whether the financial crisis will come to an end swiftly or will last longer – will experience colossal changes in the coming decades. Perhaps, many of them will not seem rational at the first glance and their efficiency will be hardly comparable with traditional alternatives.

Prices in all commodity markets which have fallen since July 2008, reflecting slower GDP growth, increased supplies and revised expectations on this market minimally to the end of 2010. Real energy prices are projected to decline by 26% between 2008 and 2010. In the longer term, growth in the demand for commodities should ease. The extent to which commodity demand does slow and how easily supply is able to keep pace with the demand will very much depend on the policy environment and the pace of technological change (World Bank, 2009, p. 5). Strong cohesion of financial and commodity markets and their direct connection with the development of the whole global economics confirm that the solving of the financial crisis consequences and the reform of financial system will only be possible if they are complex and take all outlined connections and risks into consideration. Only under this condition and with a far reaching reorganization related to the whole energetic sector it will be potentially possible to eliminate the most consequences that it has brought for this economy. Such reform will not occur overnight. But they will not occur ever unless work on them is begun now (Stiglitz, 2009).

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