Will Low Crude Oil Prices Cause a Global Recession?

MARIANA PAPATULICĂ
Centre of European Studies
Institute for World Economy
13 September Street No.13, District 5, Bucharest
ROMANIA
m.papatulica@yahoo.com

Ph.D. PETRE PRISECARU
Centre of European Studies
Institute for World Economy
13 September Street, No. 13, District 5, Bucharest
ROMANIA
petreprisecaru@yahoo.com

Abstract: - International crude oil market faces almost 2 years of sharp fall in benchmark crude oil prices (mainly Brent) from $ 105.7 / barrel in June 2014 to $ 36 / barrel in December 2015 and a minimum of $ 27-28 / barrel (for the last 13 years), in January 2016. Several economists are raising the question whether low crude oil prices are a "growth factor or a curse" for the world economy, and whether they could even cause a recession. Opinions about the effects of the sharp decline, in world oil prices are divided. Some analysts say that such evolution is good for consumers, while others consider it is bad for the global economy. Low oil prices could create disadvantages by causing deflation. The risk is that deflationary expectations determine consumers to refrain from additional purchases in anticipation of even lower prices. This would lead to an excess of production capacity and to ample inventories that will force down the prices even further. When buyers' suspicions are confirmed, they delay further consumption resulting in a vicious circle. Historically, plummeting crude oil prices have been perceived as a growth factor, especially in the net importing countries. But this has not yet been translated into tangible positive economic effects worldwide.

Keywords: - crude oil price, crude oil supply, fundamental factors, macroeconomic effects, deflation

JEL Classification: Q43, Q41, E31, E32, D43

1 Introduction - Reduction of crude oil prices during 2014-2016 period and its economic effects

A big decrease of oil prices (not to be confused with deflation, though apparently has the same results - falling prices) plays the role of a positive external shock in the case of net oil importing economies: the economy's capacity to produce goods and services increases, because the price of imports decreases. Falling prices of oil derivatives in an economy is not necessarily a negative phenomenon but a form of redistribution of benefits to consumers. Revenues do not decrease, consumers may invest or consume the excess revenues and the impact on real GDP is positive. When prices fall due to cheaper raw material in terms of not changing the demand curve, sales grow or production increases the economic agents using raw material employ more people. At the same time disposable income in the economy increases, and revenues of raw material manufacturer decrease. Deflation, as an economic phenomenon, is related to internal shocks on the demand side.

The steep decline of oil prices during 2014-2016 had **winners** and **losers.** In the category of **winners,** who have benefited from lower crude oil prices, enter in general *all net importer countries – mainly the US, Japan and the Euro zone, China and, India*. This has positively influenced those kinds of business that massively depend on transport or on the industrial production of these countries. China has been for almost a decade one of the largest net oil importers worldwide. Even if the Chinese economy registered a slowdown of economic growth in the last years the decline in oil prices has helped this country to increase its foreign exchange reserves. However, only a drop in oil prices is not sufficient to support the Chinese economy. In this respect it should be noted that many analysts don't question whether the growth of Chinese economy will be

slow in 2016, but rather how great will be the contraction. Opinions about the state of the second largest economy in the world vary, but most of them support the idea that the government has the economy under full control.

US are both the largest producer and consumer of oil in the world. Oil price boom of the latest decade and the improvement of hydraulic fracturing technology have led to an increase in the production of shale oil. Some of the extracting oil companies have taken large loans to expand production but under the circumstances of the recent price fall, these loans are likely to become unusable or cannot be returned. Unemployment in this sector is growing, and wages are either stagnant or declining. New investment projects have been postponed. Because the US economy is much diversified, the overall impact is not alarming. The advantages are important for end users, as well as for auto and airline industries. Not all consumers have felt the drop in oil prices with the same intensity as those from US, as in the EU high taxes on auto fuels blur some of the beneficial effect of cheaper oil. However, cheaper fuel left more money for shopping in the pockets of the population and for saving in accounts, which caused a certain increase in the market value of shares of companies producing consumer goods in the importing countries, in parallel with the decline in stock prices of oil companies. As low crude oil prices led to a higher aggregate demand in the US, this in itself may stimulate economic growth. According to a monthly report from December 2015 of the International Energy Agency on the international crude oil market, last year the global demand for crude oil recorded the highest annual growth level in this century, from 1.7 mil. barrel/day to a total of 94.5 mil. barrel/day (IEA, 2015).

In the category of **losers** one may include *major producers and exporters of crude oil and oil services companies*. Capital market analysts warn that although the US dollar seems to have benefited from lower prices of crude oil, some independent companies that extract oil from shale rocks are on the verge of bankruptcy. Producers of shale oil in the US have already received a blow, but stubbornly refuse to leave their businesses. One reason is that due to technological advances they have managed to cut the cost of well drilling and to increase the extraction efficiency. The borrowing cost for the emerging countries is likely to increase because pretty much of them are oil producing and bankers have already penalized with higher interest rates the possible decrease of revenues from oil exports.

Russia sought to offset the revenue losses following the collapse of oil prices by maximizing the oil production. The Russian budget, heavily dependent on oil exports, fell without recording a dramatic collapse as in the parallel the Rouble devaluation offset the revenue loss. With no other significant source of foreign exchange, Russia will continue to produce and export oil and gas, even if prices will remain at low levels.

Effects of low crude oil prices have been felt even at the level of OPEC countries. OPEC is made up of twelve countries accounting for 40% of world oil demand. Saudi Arabia was the leader of OPEC nations and the changes in its production policy, in the sense of supporting the market share to the detriment of the oil price had a strong negative impact on oil prices. For the first time in the last years, Saudi Arabia is on the verge to lose its status as the decisive factor influencing oil prices on the international market. Smaller nations such as Algeria, Venezuela and Ecuador are the most affected by low oil prices. Although Saudi Arabia has huge foreign exchange reserves that may well support its economy it also began to feel the pressure of low prices, resulting in a high budget deficit of 16% of GDP in 2015.

2 The impact of the decline in crude oil prices on different policies.

2.1. Fiscal Policy

A number of developing countries have provided large subsidies to petroleum fuels, in some cases, over 5% of GDP (IEA, 2014). Subsidies tend to benefit middle-income households and to produce undesirable effects in the sense of directing consumption and production to energy-intensive activities (World Bank, 2014). Falling of oil prices reduce the need for subsidies for fuels and provides an opportunity to reform this funding system, with limited impact on prices paid by consumers. Egypt, India, Indonesia, Iran, Malaysia have implemented such reforms in 2013 and 2014 by removing some distortions and inefficiencies associated with subsidies. Tax resources released by lower fuel subsidies could be saved to rebuild fiscal space eroded by the global financial crisis or can be reallocated to more targeted programs to assist poor households, as well the critical infrastructures and investments in human capital.

2.2. Financial and monetary policies

Financial markets were also affected by the low price of crude oil. Falling of prices may affect the financial performance of energy companies, as the effect of reducing the amount of proved reserves that these oil companies may count as marketable assets/reserves (after freezing or cancellation of projects for

exploration/exploitation) which are one of the main drivers of the market value of these companies. As crude oil prices fall, increasing production costs of some fields make these reserves commercially unviable. These deposits will become "stranded assets", a term used to define the fossil fuels that will no longer be used because the fears about climate change have prompted governments to stimulate the use of alternative energy sources and to make more expensive hydrocarbon consumption.

The problem of many countries is that the steep fall in interest rates would increase the risk of accelerating the depreciation of national currencies. John Bulford and Gabriel Sterne, economists at Oxford Economics Ltd., a research group in Great Britain, have noted in a market report from June 2015: *"Expansionary impact of the oil price shock is slowed down, to some extent, by the limited ability of central banks to ease monetary policy."*

The recent sharp decline in oil prices has significantly reduced the overall inflation during last year (2015) and increased the number of countries with low or even negative inflation. In most cases, central banks could react by further adjustment policies, by relaxing monetary policy. In fact, monetary policy should react to all factors and shocks that could lead to a deviation of expected inflation from medium term monetary policy objectives (De Gregorio, 2012). This puts a particular emphasis on the probability of a second round of effects on other prices and of the expected impact of the oil shock on aggregate demand.

2.3. Structural policies

If they become sustainable on the medium term, lower oil prices could encourage the revival of energy intensive industries. This runs counter to the broader objectives of environmental protection in many countries. To compensate incentives on medium-term for increasing the oil consumption, while ensuring a more appropriate fiscal framework, policymakers could alter tax policies on energy, especially in countries where fuel taxes are low.

For oil exporters, the sharp decline in oil prices is also a *memento* about the inherent vulnerabilities of their economies, which are too dependent on oil exports, and an opportunity to step up efforts to diversify the economy. These efforts should focus on proactive measures to transfer the incentives from this sector to non-commercial activities from other sectors and to employment in the public sector, including activities to encourage high added value sectors, exports from non-resource intensive sectors, and developing skills which are important for employment in the private sector (Cherif and Hasanof, 2014a). Saudi Arabia is already aware of these issues and is considering launching a national plan of reforms designed to diversify the country's economy.

3 Comparison between the current episode of falling prices and previous similar episodes

Steep decline of oil prices during 2014-2016 has put a strong imprint on the global economy and petroleum markets, but it has not been translated into tangible positive economic effects worldwide. Examples of similar episodes from the past show that the sudden decrease of oil prices has generally been followed by quite different results in terms of global economic growth worldwide, pointing to other important forces, as attenuators or amplifiers for the impact of price fall on economic activity. Supply, namely oversupply, seemed to have played a major role in the recent collapse of oil prices. However, the uncertainties remain, and positive effects could be mitigated by the crisis reminiscences or by the reduction of long-term growth prospects in some oil importing countries.

Conversely, signals that the tensions build in global markets and in the world economy are increasingly visible: Chinese exports have slowed their growth rate, as well as international trade; with some exceptions, including gold and uranium, the prices of industrial metals, crude oil and other commodity prices are on a downward path; US economy has not grown as strong as it was expected, after years of huge liquidity injections; in the EU, the recovery has been slower, and the ECB is doing now that the US Fed did many years ago, respectively adopts quantitative easing measures; oil-exporting countries have experienced intensified social and geopolitical turmoil; divergent monetary policies have led to increased volatility in exchange rates.

"Drivers" responsible for the recent decline in oil prices compared to previous episodes indicate a predominance of *factors related to the supply side, with important similarities with the 1985-1986 episodes.* Both episodes have followed after periods of high oil prices, the first being related to the effects of the rapid expansion of non-OPEC oil production in Alaska, North Sea and Mexico, the second to the spectacular growth of shale oil production in the US and renewable energies in the US and EU. Also in the both

periods of price crash, OPEC changed its strategic objectives, moving from a policy of supporting the oil price (by restricting supply) to a policy supporting market share (by maximizing supply).

Prices decline during 2014-2016 was considered, at least theoretically, a factor with positive potential impact on the global economy. Baffes et al. (2015) have calculated that a 45% drop in oil prices could generate a growth of 0.7-0.8% of global GDP on the medium term. However, under a confluence of structural and cyclical forces acting in the global economy, the positive effects in terms of economic growth, due to the decline in oil prices, delay to occur. These mitigating factors include: current financial vulnerabilities, high indebtedness oil companies, especially those in the oil shale field, the limited application of stimulative monetary policies in the major economies, high unemployment and slowing growth prospects on long term in big oil importing economies.

The above mentioned factors may encourage attitudes of prudential type, especially in countries facing yet the effects of the crisis and with deficits in balance of payments. Secondly, the involvement of market fundamentals - supply and demand – in the recent collapse in oil prices remains uncertain, subject to further debate. According to Baffes et al. (2015), supply shocks have mattered about twice more than the demand shocks from mid-2014, especially after OPEC decision to abandon price control. In an analysis of International Monetary Fund (IMF, 2015) it is indicated that the relatively weak demand played a more important role in the initial phase of decline (July to mid-October 2014), while factors related to supply dominated thereafter. Other studies, such as those of Baumeister and Kilian (2015) or of Badel and McGillicuddy (2015) have indicated different effects of the global economic slowdown on oil prices in the years 2014-2015.

4 Could low oil price trigger a recession in 2016? Pros and cons

Lately, in certain economic circles circulates more frequently the idea that low oil prices during 2014-2016 could trigger a global recession. Energy is the engine for much of the global economy. In the periods when oil prices were high, it was alleged that they caused economic recession. Now, when prices go down, it appears paradoxically the same fear, though conditions are different. If it occurs, it would be the most unusual recession - the first ever caused by lower oil prices. Economic history has recorded a series of recessions caused by increasing oil prices: 1973-1975, 1980-1981 and 1990-1991. Due to these situations, the decline in oil prices was caused by falling demand. But in the years 2014-2016, the oil price fell by 70%, while demand increased substantially, reaching in 2015 the highest level in this century worldwide. The crude oil price decline of the last 2 years was due, for the most part, to the effects of spectacular fracturing horizontal technology introduced by the US, which generated an abundance of shale oil on the market, that ultimately led to the price collapse, causing progressively higher losses to important companies/institutions that previously benefited from high oil prices, the amount of damages being estimated at about $3,000 billion. Hydraulic fracturing is what some experts have called as a "disturbing" innovation, with positive effects for consumers, who enjoy a sudden abundance of cheap oil, but with negative ones for much of the operators already engaged in extraction activity and whose business models were built on the exploitation of oil scarcity.

Therefore, why cheap oil creates so much anxiety? Because such phenomena has as main negative effect a low inflation and even deflation in some countries. In the Euro area, inflation is below anticipated expectations. As a consequence the European Central Bank decided to hasten the program of its monetary stimulus, so that in March, 10, 2016 has reduced the reference interest rate and increased asset purchases to halt the spread of very low inflation in the overall economy. In parallel, the European Central Bank has diminished its estimates for economic growth and inflation in the Euro area, both for 2016 and for 2017, while the low price of energy will affect the prices of other goods and services (ECB, 2016).

Peter Cardillo, Chief economist at Rockwell Global Capital, said in January 2015 to International Business Times: "*Deflation - not to be confused with disinflation, or a slowing rate of inflation - is dangerous because it reduces the supply of money and credit and may reduce demand for durable goods. In the worst case, the reduced demand can lead to economic depression worldwide. Now that Europe is on the verge of a relapse into recession, it is feared that oil falling prices could lead to deflation and this would propagate into the global economy* "(Cardillo, 2015).

So far, the decline in oil prices has been mainly positive for the importing and consuming oil countries such as the US, as commodity prices fall, as those for gasoline and other products, so this provides savings in the budgets of consumers.

However, Karl Snyder, chief strategist at Garden State Securities (US), believes that *the global economy is moving on a fine line between disinflation and deflation. There is some evidence that the global*

economy is heading towards deflation, he said (Snyder, 2015). Some investors and institutions have already begun to insure against these risks through massive purchases of US government bonds. If prices remain low for a considerable period of time, this may lead to another crisis, based on deflation.

4.1 Pros

(1) M. Turner, former chairman of the UK Financial Authority believes that *"slowdown in investments and construction in China transmit deflationary pressures worldwide, causing the fall of oil prices."* Oil producers cannot afford to cut production in anticipation of higher prices of crude oil, since most of them have made massive investments in exploration and exploitation of new deposits for the bank loans.

(2) *The global economy is based to a much larger proportion on the oil-rich nations* for economic growth than it did 15 or 25 years ago - when it was registered the last period of very low oil prices- and these economies are currently facing great financial difficulties. In the past, the damage caused to exporters was more than offset by the gains of importers (Blas and Kennedy, 2016).

Except for China and India, the most important developing countries are rich in oil and basic raw materials. Emerging economies now provides about 40% of the world's GDP, almost double the share held in 1990 (IMF, 2016). In Russia, Saudi Arabia, Nigeria and Brazil, economic growth slowed and in many cases, turned negative. *Many oil exporters are facing difficult circumstances*, said Gian Maria Milesi-Ferretti, IMF deputy director, from research department. *So now they have to cut costs significantly and this will impact on growth* (IMF, 2016).

Countries that have based their economy on the oil production and export are going through a critical period. Many are in danger of bankruptcy as a result of their dependence on revenues from oil and IMF experts see no chance that oil prices would come back soon to a high value (CNN, 2016). Even Saudi Arabia has resorted to an austerity policy to reduce the impact the oil price on its budget and other producing countries of the Persian Gulf are facing even more severe challenges. Meanwhile, Russia is preparing for a second year of recession and other countries (Nigeria, Azerbaijan,Venezuela) with a greatly reduced income, are on the verge of economic collapse. The latter are the most critical cases that international financial institutions need to manage.

(3) Larry Elliot, editor-in-chief at The Guardian expressed a different point of view that seeks to motivate why the low oil price will not be able to lead to an economic boom (Elliot, 2016).Although theory and practice have shown that after a sharp decline in oil prices follows an economic boom, Elliot says that, this time, the situation could be different. The explanation offered is that *markets fear that the lower oil price is more a symptom of weak demand, than of an oversupply.* Oil producers record losses and the global growth is slowing down rather than accelerating. Support for this new thesis is provided by the following factors: modest growth rate of international trade; decline in US shipping; decrease of Baltic Dry Index- an imperfect guide, but representative for maritime freight transport, and the abrupt decline in prices for industrial metals. Prices of copper, iron ore and aluminium plummeted, making it difficult to argue that the collapse in oil prices is just simply a reaction to the oil saturation of the market and the inability of OPEC to act in consensus to control the supply. That said, a sharp decline in the oil price should, finally, be a stimulus to the economy because accumulating more money in the hands of consumers and businesses have an effect similar to a tax cut. The oil price is lower, so that economic momentum should be higher - with two important reserves:

- The first is that some of the large oil producers and other raw materials are already facing with a “toxic cocktail” of large trade deficits, weak currencies and high debts that must be refund in dollars.
- The perception (which proved to be wrong) that a period of prolonged deflation could have been avoided. When oil prices fell strongly to the end of 2014, the central banks impression was that the impact will be transitory. Fed's decision to raise interest rates of monetary policy in the last month of 2015, was governed by the belief that a drop in unemployment rate would allow more generous salary payments and would eventually lead to inflation raise, which has not happened. Falling oil prices mean lower inflation for longer time with an increased risk of deflation through the secondary effect on wages.

(4) Other specialists (Kawa L, 2016) warn that the world should not expect that steep decline of commodity prices will contribute too soon to improving global economic situation.

Sylvain Broyer, chief economist for Euro Area at the investment bank Natixis (France), claims that *“turmoil resulting from lower oil prices will counteract the positive effects this year”* (Naxitis, 2016). *“I call pure hell the situation in the oil market”* said Jim Teague, head of Enterprise Products Partners at IHS CERA Week conference (Houston) in the last week of February (Financial Times, 2016). The oil market has become increasingly concerned about the vast surplus of crude oil stocks in storage worldwide. Oil price influences

inflation level and lately seems to have an effect on capital markets. Stanley Fischer, vice chairman of the Fed, told at the conference that the “*oil price has become a macroeconomic problem”*.

This analysis adds to complex growing comments, claiming that "*this time the situation is different from previous situations"*, lower oil prices appear to be a brake for the world economy. In 2016, opposed to the previous year, the fall in oil prices will start to encumber the global economy due to three main reasons:

- slowing demand growth in oil-importing countries;
- severe reduction in revenues for oil exporting states, which will affect their imports from developed countries;
- increasing inability of oil companies to pay off their debts, which will worsen the financial conditions.

So far, the factor that contributed mostly to the oil market saturation came from the supply side. Low prices have contributed to an increased demand in 2015, but this trend has started to moderate later that year and a further acceleration of growth in consumer spending is unlikely. According to Natixis, the problem is that the increase in profits has not accelerated the capital spending in Member States of the OECD: "*The recent decline in oil prices boosted household consumption of OECD countries, but has not spurred corporate investments, despite improved profitability*," explained the analyst Broyer of Natixis bank. The influence of relatively moderate demand on oil prices also does not bode well for investments. However, US example serves as a counterpoint to this overall evaluation. The immediate coup that low prices have given to economic growth has resulted in the reduction of capital expenditures in the oil sector, offering a partial explanation for the fact that the expected increase of productive investments in OECD countries failed to be more substantial. Natixis expects also that the insolvency rate for debts payment in the US to rise to almost 23% by the end of the year. The deterioration of financial markets at the beginning of 2016 has dimmed the growth prospects for the world's largest economy, said the decision makers in monetary policy from the Fed, USA.

For emerging oil-producing market economies, low prices of oil presents a set of more serious risks, because the possibility of a debt crisis in developing countries exporting raw materials cannot be completely excluded, and foreign exchange reserves of these countries are insufficient. In Argentina, Venezuela, Turkey, oil companies are making efforts to repay debts in foreign currencies (mainly in dollars), and the level of their public debt is on a unsustainable curve (Brazil).

(5) In normal times, between short term variations of commodity prices and the stock evolution on capital markets there was an inverse correlation. Recently, however, the evolution of the stock prices was very much synchronized with the dynamics of oil prices, and many experts have noted undeniable and perhaps inexplicable link in recent months, between the direction of the evolution of oil prices and the evolution of capital market, especially of Dow Jones index, an unusual evolution that highlights the fears regarding the evolution of world economy. In fact, the correlation coefficient between the oil price and the stock value on the capital markets was 0.5, over the past four months, the highest level for more than two years. But 2016 started even more worrying. Wall Street Journal has noted in January 2016, that the ratio attained 0.97, which means an unusual correlation, usually associated with recessions (Wall Street Journal, 2016).

4.2 Cons

(1) Cheaper crude oil, at least in theory, acts as *an injection of adrenaline* for the global economic growth .American typical car-driver who in 2013 spent an average of $ 3,000 for fuel at petrol stations has saved a minimum of $ 800 per year in 2014 and 2015.

Importing countries such as those from Euro Zone, India, Japan and Turkey have made significant profits. Since there is the probability that this money may be spent rather than stuck in a sovereign fund, global GDP should increase. Low oil price will further reduce the already low inflation and thus encourages central banks to adopt a looser monetary policy, which will stimulate economic activity. European Central Bank has already acted recently with more courage for removing deflation by buying sovereign bonds (QE).

(2) The idea that oil prices in sharp decline could be a negative problem for the economy is *a priori* wrong. Since the early 1970s it worked a simple equation: a sharp rise in oil prices is equal to a global recession, which took place, as we mentioned, during 1973-1974, 1979-1980, 1990 and 2008. At the same time the periods in which oil prices were in decline - the mid-1980s and the second half of the 1990s - were associated with economic growth.

(3) China's oil demand rose in 2015 at an annual rate of around 8%. The pace of growth is expected to slow in 2016, but at the projected growth rate of 6.8 %, China consumes more oil, currently, than 5 years ago, when economic growth was 10%/year. Likewise, in 2015, demand for gasoline in China rose at a rate of 10%, while there was a decline in demand for diesel and fuel oil - which strengthens the argument that the economy

of this country suffered some structural changes (International Energy Agency, 2015). Data for the first 10 months of 2015, provided by China Association of Automobile Manufacturers (CAAM), indicate sales of 16.5 million cars and for the full-year 2015 of 20 million units, which is equivalent to an increase of almost 20% of the car fleet of China (IEA, 2015).

(4) World economy, in general, has stalled in recent years and prospects for a return to growth levels before the financial crisis are minimal. However, in the updated report of January 2016, of the International Monetary Fund, (IMF, 2016), the rate of global economic growth for 2016 was revised down to an estimated rate of 3.4% and for the year 2017 to a rate of 3.6%. The rate for developed economies is expected to record a modest improvement, of 0.2% in 2016, to 2.1%/year, and will remain constant in 2017. Economic activity will be sustainable in the USA, while in Euro Area, a stronger private consumption, supported by low oil prices and the slight easing of financial conditions may counteract the decline in net exports. In Japan it is expected an improvement in economic growth in 2016, with the support of fiscal incentives, cheap oil, the prospect of improving financial conditions and income growth.

(5)US oil consumption was rising in 2015, while sales of motor vehicles stood at very high levels.

(6) In Asia, demand was relatively strong and Middle East countries have also recorded increases on consumption.

(7)The situation of emerging and developing is characterized by substantial differences, but the slowing growth and restructuring of the Chinese economy, low prices of raw materials, the tensions within some large emerging economies will continue to affect the growth prospects in 2016-17.

However, India, a large emergent economy has produced good results that give some hope for higher growth rates in 2016. According to the IMF, India recorded the fastest growth in the world. GDP growth was 7.3% in 2015 and is estimated at 7.5% in 2016 (IMF, 2016). Although India's oil demand is only a third of China, this growth should be more carefully assessed by analysts. India is on track to become the most populous nation in the world with a middle class that is likely to double in the next 15 years. The number of cars per 1,000 people is currently 40, but has a tendency of rapid growth. And this is not something that will occur sometime in the future. In 2015, oil consumption increased in India by 300,000 barrels/day.

(8) The number of oil companies that went bankrupt was lower than anticipated. Currently one talks about a risk of bankruptcy for 1/3 of US oil companies.

(9) Although China has commonly been noted as the engine of global oil demand growth, currently it attracts attention upon its declining role of oil major producer. China production is in a process of relative strong decline, which means that demand for imported oil should remain firm and prices will be stimulated to increase. The impact of the likely slowdown in China's domestic production will be that demand for oil imports will increase, certainly not enough to rebalance the global market for crude oil , and the country's dependence on oil from foreign sources will reach a new record level of 62 % this year (Wall Street Journal, 2016).The marginal cost of production for some of the most expensive crude oil fields in China makes unprofitable oil domestic production for Chinese companies, which could enter a period of *structural decline*, said Nelson Wang, oil analyst at brokerage firm CLSA from Hong Kong, adding that this decline will help to reduce oversupply on the international market (Wall Street Journal, 2016).

(10) Although one of the indicators defining the recession, more broadly, based on experience of the recession from 2008-2009 refers to the process of slowing or even shrinking the investments, it was determined that *the current relationship between crude oil prices, investments and oil future supply is not so smoothly and clear, as feared.* It is true that lower crude oil prices discourage investment expenditures, resulting in the delay or cancellation of projects and reducing the future potential for consumption. But other factors can come into play, distorting the relationship. Studies of correlation between investments and prices have not found conclusive causal relationship between these indicators (GIS Report, 2016)

According to the International Energy Agency, capital investments in the oil and gas extractive sector fell by 20% in 2015 (IEA, 2016). The trend is expected to continue during 2016. If this happens, it will be the first time in 30 years when the industry will experience two consecutive years of declining investment. Fatih Birol, the IEA's executive director, warned: "*Now is not the time to relax. On the contrary: a period of low oil prices is the right time to strengthen our ability to cope with the future threats for energy security*"(IEA, 2015). However, the steep decrease of investments is not a surprise, given the capital investments that preceded it. The annual investments in oil and gas industry increased by 50 % between 2009 and 2014 , up to $ 890 billion, according to a study made by consulting company Deloitte (Deloitte University Press, 2015).

Traditionally, a sharp drop in oil prices leads to a contraction of investments made by oil companies. *But their reduction should not be considered only the result of falling oil prices*. Some large oil companies had started to reduce their investments before oil prices began to fall. Since July 2013, the transnational company Total has announced it will cut capital spending in 2014. In March 2014, ExxonMobil has announced a reduction in investment spending from $ 42.5 billion to $ 37 billion for the period 2015 -2017. It is possible that a number of companies have intuited the future of price developments, given the exponential growth of US oil production. But a lot fewer have guessed OPEC reaction. Usually the perception is that higher prices translate into higher profitability for oil companies. In reality, international oil companies have faced underperformed stocks on the capital market, even during the period when prices were high. According to energy consulting firm Douglas-Westwood, combined yield of invested capital of large transnational oil companies - ExxonMobil, Royal Dutch Shell and BP - reached at the end of 2013 its lowest level in over 40 years.

A factor frequently overlooked concerns *sensitivity/reaction of upstream costs at the oil prices.* The upstream costs (extraction) increase when oil prices rise, usually with a lag of six to nine months. If crude oil prices rise faster than costs, as happened before 2011, spending increase may be compensated. However, between 2011 and the summer of 2014, costs continued to rise enough, while oil prices remained relatively stationary. Net income of oil industry shrank. No effect of government policies can be neglected, especially in terms of taxation.

A traditional approach of the correlation between prices, investments and supply must take into consideration the long lag time between initial investment and launching the first production flow**.** For conventional oil, this lag time is of the order of years and in some cases for over a decade. Current production of conventional crude oil is the result of exploration conducted more than a decade ago and investment decisions taken behind more than five years. In the case of shale oil investment this cycle is much shorter and the waiting time dropped to a few months. This is due in part to the technology involved in these operations and partly to the nature of companies operating in this sector, generally small sized, highly indebted, but much more adaptable to the changing conditions of the market, compared with multinational giants that dominate conventional crude oil businesses. This suggests that declining investment will have a relatively low impact on existing production from conventional oil fields.

(11) Federal Reserve Bank of Dallas has calculated that the fall in oil prices should boost global economic growth by up to 0.4 percentage points (Federal Reserve Bank of Dallas, 2016). Indeed, the market focuses on short-term adjustments and is ignoring the potential gains and losses on long-term, according to Laurence D. Fink, CEO of the BlackRock Inc. bank, the largest investor worldwide. *The reality is that 4 billion people will have access to cheap energy, cheaper heating and higher incomes,* said recently Laurence Fink. *And, finally, these will re-accelerate global economy. It may take six months or a year, but in the end it is a positive fact* (Bloomberg, 2016).

Joe Weisenthal (Bloomberg, 2016) quotes a statement of Francisco Blanch, analyst in the Bank of America Merrill Lynch, saying that *a sustained oil price decline will operate a reverse transfer of income amounting to $ 3,000 billion per year from oil producers to oil consumers, one of the largest transfers of wealth in human history*. So far, however, in developed countries consumers have not acted as it should: spending the relative unexpected gain from cheaper energy. Recovery of oil consumption in importing countries has so far been relatively weak compared with past episodes of declining oil prices - said an IMF official in January 2016. The reason: consumers use their savings to repay their debts.

Now, the most investors have come to see in the continued weakness of oil price a negative thing and a sign that global demand (for oil) is low. Analysts in marketing strategies of the Credit Suisse bank do not share this view. They believe that low oil prices are the result of excess supply, not lack of demand. In addition, remember that the IEA has stated that in 2015 the demand reached a maximum level of the last 15 years, and oil prices have disconnected from ISM Manufacturing Production Index, a key indicator of industrial activity. In the case that the evolution of oil prices would be a pure reflection of the global demand, the two would have moved in tandem.

Although dramatic reductions in capital expenditures of energy companies over the past 18 months have decreased by 1.4 pp the economic growth rate worldwide and by 1 pp the economic growth rate in the US, analysts of the Credit Suisse bank believe that the poisonous phase has passed, anticipating that US oil demand will increase by 1.6%, and finally, low oil prices would stimulate the increase of global economic growth by 0.8%-1.4%.

(12) Is there another perspective? Based on previous examples the answer is affirmative.

Most of the world's greatest economists have pointed out that a global crisis begins when consumers reduce their consumption. In 2008, just the drop in consumption has proven to be the most painful and the most dangerous wound. Now consumption increases in all areas which use energy resources: population, public establishments and manufacturing companies, large or small, public or private. This is relevant because the consumption area set in motion the engine of economy and great neo-keynesian thinkers, like Krugman and Stiglitz, think that policies meant to stimulate consumption are the key to economic recovery.

The phrase uttered by Christine Lagarde in an interview published by the Handelsblatt picked by Agerpres, (a Romanian news agency) that *advance of the global economy will be disappointing and unevenly in 2016*, it is far to be interpreted as meaning that 2016 will bring a new global crisis, as there were quick to assert numerous media sources worldwide and in Romania. Even if the managing director of IMF notes that *in many countries, the financial sector is still weak and on the emerging markets financial risks are growing*" or *the perspective of raising interest rates by the Federal Reserve (Central Bank) of the US and the slowing Chinese economy increase the high risk of economic vulnerability globally*, these are serious, severe warnings, but far from being lethal sentences (Lagarde, 2016). The conclusion of IMF managing director includes a potential, although anemic, optimism: *the beginning of normalization of monetary policy in the US and transformation of China in an economy based on domestic consumption is necessary and beneficial changes, but they should be achieved in an effective way*. In other words, the US, moving to normalize its monetary policy, gives the signal out of the crisis; and China, moving to a new economic model is preparing for a new paradigm of growth.

Romanian National Bank's position in this context is that the fear of deflation in 2016 remains equally unjustified as in 2015: *Deflation with significant increases in consumption and stores full of goods is nonsense. Furthermore, in 2016 we will see prices moving towards what the European Central Bank wants: inflation close to 2%, without reaching this percentage* (RNB, 2016).

5 Conclusions

1. As there was never been a recession caused by the low prices of crude oil, there are not clear indications to foresee such a development: everything depends on the dynamics of global consumption. Furthermore, the low oil prices increase resilience and elasticity of consumption, which may mitigate the severity and duration of a possible recession. The best news is that thanks to hydraulic fracturing, recessions caused by high oil prices are a thing of the past.

2. We consider that it is unlikely that a global recession to be caused by the low price of crude oil. The current decline in oil prices is due to increased supply and not to sluggish demand – a characteristic of traditional recessions.

3. The price drop is good news for all countries except for the oil producers. Lower energy costs act like a tax reduction in oil-consuming economies. Lower oil prices will spur global economic growth. High oil prices acted as an economic toll, not as an economic added value. The spectrum of bankruptcies and the speed and magnitude of price decline have scared financial markets, but the overall economic effect of cheaper oil will certainly be a positive one.

4. However, if it occurs, the recession will not be triggered only by the factors of tension on the oil market, but by a complex of factors, most of them quite independent of oil prices.

References:

[1].Badel&McGillicuddy (2015), *Oil Prices: Is Supply or Demand behind the Slump?*, Federal Reserve Bank of St Louis

[2].Baffes, J. et al. (2015), *The Great plunge in oil prices: causes, consequences, and policy responses*, Policy Research Note, World Bank Group

[3].Balaban, C. (2016), Mario *Draghi: deciziile BCE au fost determinate de temerile privind efectele secundare ale inflaţiei*, Agerpres

[4].Baumeister, Ch., Kilian, L. (2015), *Understanding the Decline in the Price of Oil Since June 2014*, Center for Financial Studies, CFS Working Paper Series, no 501, Goethe Iniversity, Frankfurt am Main, Germany

[5]. Bernanke, B. (2016), *The relationship between stocks and oil prices*, Wall Street Journal

[6]. Birol, F. (2015), *World Energy Outlook*, International Energy Agency *(IEA).*

[7]. Blas, J, Kennedy, S. (2016), *For Once, Low Oil Prices May Be a Problem for World's Economy*, Bloomberg Economics
[8]. Bulford, J., Sterne, G. (2015), *Central Banks at Zero Failing to Turbocharge Effect of Cheap Oil*, Oxford Report, Oxford Economics Ltd.
[9]. Cardillo, P, Menton,J. (2015), *Oil Prices 2015: Why Economists Fear „Nightmare" Deflation*, International Business Times (USA)
[10]. Cherif, R, Hasanov, F. (2014a), *Oil Exporters at the Cross Roads: It is High Time to Diversify*, *IMF Working Bulletin*
[11].Doyle, D. (2016), *60 Reasons Why Oil Investors Should Hang On, oilprice.com.*
[12].De Gregorio, J. (2012), *Commodity Prices. Monetary Policy and Inflation*, Working Paper no 359, University of Chile, Department of Economics
[13]. Elliott, L. (2016), *Why the falling oil price may not lead to boom*, The Guardian*, UK.*
[14]. England, J, Bean, G. (2015), *Following the capital trail in oil and gas*, Deloitte University Press, Deloitte Center for energy solutions
[15]. Hamilton, J.(2016), *Could Low Oil Prices Cause A Global Recession?,* oilprice.com.
[16]. Kawa, L.(2016), *Natixis: Lower Oil Prices Will Start to Hurt the Global Economy This Year*, Bloomberg Economics
[17]. Lagarde, Ch. (2015), *Avansul economiei mondiale în 2016 va fi dezamăgitor şi inegal*, Agerpres
[18]. Meyer, G. (2016), *Oil industry tormented by latest price slump*, Financial Times
[19].Mohaddes, K., Raissi, M. (2016), *The U.S. Oil Supply Revolution and the Global Economy*, Working Paper No. 263, Federal Reserve Bank of Dallas, Globalization and Monetary Policy Institute,
[20]. Nackhle, C. (2016). *Global trends: low oil prices today may not mean low investment tomorrow*, GIS Report, Geopolitical Information Service, Lichtenstein
[21]. Snyder, C. (2015), *Oil Prices 2015: Why Economists Fear 'Nightmare' Deflation*, International Business Times
[22]. Teague, J. (2016), *Oil industry tormented by latest price slump*, Financial Times
[23]. The Economist (2016),*Who's afraid of cheap oil?*, From the print edition
[24].Vermeulen, Ch.(2015), *The Gold And Oil Guy* , Stock Newsletter Reviews
[25]. Wang, N, Spegele B. (2016),*Why declining Chinese oil production is good for oil prices*, The Wall Street Journal
[26]. Weisenthal, J.(2016), *BofA: The Oil Crash Is Kicking Off One of the Largest Wealth Transfers in Human History*, Bloomberg Economics
[27].Young, E, Stein C, (2016), *BlackRock's Laurence Fink says 400 energy firms may not survive cheap oil*, Bloomberg Economics
[28]. International Monetary Fund (2016), *World Economic Outlook*
[29].International Energy Agency (2015), *Monthly oil market report*, December
[30]. International Energy Agency (2015), *Medium-Term Oil Market Report*