### THE GLOBAL DERIVATIVES TREND IN 2008

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## 1. The economical theory and the derivatives

At the beginning of the '60 was propagated the efficient market theory by Eugene Fama and for decades the economists considered that the price formed on different markets objectively reflect all available information at that moment in time. Therefore they said that anybody couldn't obtain a better turnover that the market output. The last 10 years show us that can be obtained better turnovers that the market efficiency and even when the market decrease high turnovers appear. These new pointed out facts by practice don't demolish the above mentioned theory, but show us that the exchange markets reality is far more complex as our society evolves (not only from the ethnological point of view but also from the material one). Not only Mr. Fama theory was taken down but also Mr. Warren Buffet theory. According to Mr Buffet investment became profitable only after a period of time and only if the investor took risk for only maximum 5 well known titles. This theory became inappropriate for this period of time. The economical life and in special the exchange one proved to be far more complicated that the economists thought. And more important a good theory at one moment in time is not necessary good at moment. Therefore it latter necessary to be flexible in order to keep the rhythm with the exchange market development and most of all with the derivatives market progress. If we don't act according with the progress we can say like Mr. Buffet that the derivatives are the most toxic assets for the real economy life.

The motives, for which the investment theories are no longer fully applicable, are linked with the evolution of the human civilization. Thus the technological progress and pulling down ways of thinking create huge problems for those who analyze the human behavior and the human society. The great phenomenon of globalization changed forever the human perception. If for decades globalization was considered to be only a good phenomenon during this crisis moment, we can see a less favorable side of it. The economists noticed that globalization has characteristic of erasing the differences between peoples even good or bad. A good example could be the well known advertisement from Coca-Cola "Drink Coca-Cola" which changes habit for whole nations from their national drinks to the new international one. A good solution can not to return to old times but to change the objectives to promote qualities differences and between communities. This new concept was named "mondialisation" this means to cooperate and interdependence at a global level keeping the differences and qualities for all groups and individuals which are part of the system.

For decades it was considered that obtaining information is a capital thing. But in the close past we could notice that to gather information is not the main problem but to use it. The modern

<sup>&</sup>lt;sup>1</sup> Catalin Popa – Politics and strategies of the international monetary-financial institutions during the economical integration and globalization, Romanian Academy, 2009;

communication systems, the IT network a full day program for representative exchanges determined an avalanche of news and a lot of possibilities to act accordingly. If 200 years ago to have news from a conflict area was determined for a company or investor in the modern world the news will be available to a lot of investors but how it is used. In the present the markets are the first in touch with all news and after that common people will see the news in media. This is the reason we cannot use that information solely. When derivatives appeared the investors could be profitable even if the spot market decrease. Therefore more and more sophisticated strategies and elaborated analysis appeared. The great market research company in the USA has only two accurate per week, with an efficiency of 34%. Even thus there are a lot of bestsellers out how to invest. But when we try to notice the wealth of those investors we see nothing. The large part of those who invest without the necessary training and natural qualities take no turnover but only tears for loss.

The exchange markets aren't charitable institutions, there goal is profit and consequently "geeks" with money are welcome. In the last 10 years derivatives markets had a lot of historic peeks and frenzy innovation. The notional amount of these markets overcomes the global GDP.

Starting with the middle 2007 appeared the first signals of problems, signals more and more obvious. That was the signal for what we know as the global crisis. First guilty found was the derivative market, which became the place with toxic waste for all large American investors. To find a scape goat was a useful strategy in order to avoid the complex reality of the phenomena and to put into banking system more and amounts of cash by the American government. If we study a little we can notice that the toxic assets are far more great that the liabilities of all nations. According to my opinion to put hundreds and hundreds of billions of dollars are not enough to extinguish the fire caused by thousands of billions of dollars. On the other hand we should take into consideration the credit activity from the USA which caused this frenzy securitization and not at last the errors from rating agencies.

The new derivatives were created by so called "business friendly", in Romanian "baietii destepti". The use of the new and innovative derivatives based on investor trust in forever economical growth and risk dispersion due to securitization. Mr. Greenspan, the man who leads these markets was quite intrigued by the crisis and his conclusion is the capitalist system finds the limits.

We cannot analyze a determined aspect of the actual crisis: the investors' greed for huge turnovers without a vision about medium and long term. We could say that the money take investors minds. Mr. Daniel Daianu, former Romanian Finance Minister, considered that the following caused the crisis:

- A dramatic growth on innovative derivatives, without transparent;
- Interests conflict between the persons who acts on markets;
- Imprudent credit activity for the banks;
  - Errors from rating agencies;
- Unrealistic low risks for some investments;
- Difference between high turnovers and extremely low costs for capital investments constantly growth;
- The inability to respond promptly to early warning signals or to learn from the previous crisis lessons;

An important aspect mentioned by Governor Mugur Isarescu was the fact that there are economists who tried to pull the signal regarding the global trend but this information was never took into consideration by financial markets. Still the actual scale of the crisis wasn't measured correctly, it was underestimated even after it appeared.

One of the crisis motives was the over liquidity from the markets, over liquidity poorly managed by the

regulatory authorities and from the starting point of the crisis almost all investors went for cash making the markets to out of liquidity.

# 2. The trend of the derivatives products

The derivatives markets have two components: stock exchanges and over the counter markets. The explosive development from the last 10 years has generated an unbelievable development of the credit derivatives. That's why the over counter markets have surpassed the stock exchanges on a global level. A characteristic of the actual financial crisis is that certain investors, outside the American space have almost failed. because they exposed themselves on the US mortgage market without participating directly. The reason for this failure was the breakdown of the credit derivatives. fact which initiated the real losses of the foreign banks. A good example is the German Bank - IKB Deutsche Industrie. which in 2007 almost failed on the American mortgage market, because exposed itself without a real participation on the credit market<sup>2</sup>. One of the reasons of the European banks' losses (caused by the mortgage credits) is based on the legislative differences between Europe and America. If the value of the property is lower than the value of the mortgage. the debtor may transfer the mortgage to the creditor, without being responsible for the payment of the differences which may appear. This is a characteristic of the American market, which led the European banks to an erroneous evaluation of the risks.

#### 3. Stock market derivatives

The third trimester of 2008 presented a strong diminution of the stock market derivatives. Globally speaking, the notional derivatives market has fallen from 600 trillion dollars (in the

2nd trimester) to 542 trillion dollars (in the third trimester). The biggest diminution took place on a long term interest rate derivatives market. The short term interest rate derivatives have fallen by 66 trillion dollars during one trimester, from the initial value of 473 trillion dollars. One of the reasons which led to this diminution on the derivatives market is the lowering of the reference interest rate by the Central Banks from USA, EU and Great Britain.

When it comes to equity index derivatives we can speak about a spectacular return; a growth of 9 trillion dollars, up to 76 trillion dollars. The rate exchange derivatives registered a slight growth, only 0,4 trillion dollars, up to 7,9 trillion dollars.

The commodity derivatives have registered a diminution in the third trimester, from 425 million to 410 million dollars. A reason could be decrease of oil price.

The fourth trimester of 2008 has continued the decreasing trend of the derivatives contracts concluded with the stock exchanges, (408 trillion dollars, a decrease by 135 trillion dollars in 3 months). A value decrease by 25%, which continues the one from the third trimester of 2008, bν 10%. This decreasing could be put on a lower risk appetite, a decrease for policy rates on the main markets and a lower activity of the hedge funds.

Decreasing the interest rates determined a decrease interest rate derivatives turnover to 345 trillion dollars. by 27% in three months. Also equity derivatives turnover decrease up to 58 trillion dollars, by 25% in the fourth trimester of 2008. The foreign exchange derivatives decrease tremendously in the fourth trimester of 2008 up to 5.6 trillion dollars, a minus 30% from the last trimester level. The commodity derivatives market was characterized in the last quarter of the year 2008 by an increase of contact number with 10,4%, up to 450 millions if we compare with guarter 4, 2007. An increase in number but not in turnover.

<sup>&</sup>lt;sup>2</sup> www.zf.ro – german bank had losses of 1.3 billion euros in 2007-2008;

#### 4. The Over The Counter markets

The notional amount registered on mid year 2008 was 863 trillion dollars, a growth of 21% from the beginning of the year. Even if it was a growth for the credit default swap derivatives registered, for the first time, it was a decrease of 1%.

The interest rate derivatives growth at the end of June, 2008 up to 458,3 trillion dollars, 17% bigger than the level at the beginning of the year. Another important growth was registered for exchange rate derivatives with 12% compared with January, 2008, up to 63 trillion dollars. Equity derivatives had a plus 20% in the first half of the year 2008, reversing the trend of 2007. The value for this contracts was at end June of 10.3 trillion dollars. Half of these contracts were denominated in European equities. Also commodities derivatives had a strong growth for the first half of the year 2008, 10,3 trillion dollars in figures, and 56% growth from the beginning of the year. For these contracts it was important that non gold derivatives had a notional amount of 12.6 trillion dollars. Gold denominated derivatives decreased with 9% in the first half of the year 2008.

For the OTC markets statistical data are available only until end June 2008 and therefore we cannot analyze the decreasing trend from the second half of the year.

#### 5. The USA derivatives market in 2008

Derivatives market of USA is the most developed and biggest at global scale. The two components of derivatives, the exchange one and the OTC, have almost 64% of all notional amounts traded. The over the counter markets from North American continent have a significant share of financial derivatives. That's the reason of my following analyses of the OTC markets in USA, and their impact on global financial system.

The American commercial banks reported yields from derivatives markets of 1,6 billion dollars in the second quarter

of the year 2008 by comparison with 721 million dollars in the first quarter of 2008<sup>3</sup>. This growth was under the average of the previous 8 quarters of 2 billion dollars. Nevertheless the total notional amount derivatives of the American commercial banks growth with 1,8 trillion dollars in the second quarter of 2008, this growth represent 1% of this market of 182,1 trillion dollars. From all derivatives the interest rate ones represent 80% from all.

Derivatives markets in the USA banking system are controlled by a small group of important financial institutions. Five American commercial banks trade 97% from all notional amounts and 89% from net credit exposure. This market level of concentration is a reason for concern for the authorities. These authorities consider that such concentration is not dangerous for the moment because the derivatives be management needs to hiahly specialized and to have huge costs. Another reason would be the fact that on the OTC markets may also appear other important investors such us investment banks and banks from abroad.

As I have already presented, the American markets registered for the second quarter of 2008 a growth of 893 million dollars, 124% in percents compared with the 721 million dollars in the first quarter of 2008.

The foreign exchange derivatives increased in the fourth quarter of 2008 with 32% to a record level of 4.033 million dollars. Contracts on foreign exchange were the most profitable in quarter 4, 2008<sup>4</sup>. The credit derivatives decreased heavily with 9 billion dollars in quarter 4 after 2.5 billion losses in quarter 3, 2008. As well the interest rate and equities contracts registered losses of 3.420 million dollars and 1.229 million dollars. Losses from trading commodities derivatives were 1% to 338 million dollars.

The banking system went through a harsh climate in 2008 and for

OCC's Quarterly Report on Bank Trading and Derivatives Activities Fourth Quarter 2008;

www.bis.org

the first time in its history had losses of 836 million dollars against 5.489 million dollars in 2007. Banks had losses of 12,6 billion dollars on credit derivatives, on interest rate contracts decreased 7 billion dollars, -89% from the previous quarter, on equity derivatives decreased 2 billion dollars. The only performers were foreign exchange derivatives with revenue of 11,4 billion dollars and commodities with 1.5 billion dollars.

Credit derivatives increased a lot in the last 7 years, due to intense use by the dealers for high yields. From 2003 until the end of 2007, reports for credit derivatives show 100% growth for each year. In the fourth quarter of 2008 credit derivatives decreased by 2%, in figures with 252 billion dollars, and had a level of 15,9 trillion dollars at end of 2008. The fourth quarter of the year 2008 came with a growth of 14%, with 24,6 trillion dollars up to 200,4 trillion dollars.

On this credit derivatives market operates (according to US surveillance authorities), 1.010 commercial banks at the end of 2008, 33 commercial banks more than the previous quarter. Even if this is a high number of participants, the market is strongly dominated by 3 dealers with a market share of 92% from all the contracts. This control is even bigger if we take into consideration the first five dealers with a market share of 97%. For the first 25 dealers we noticed a domination of almost 100%.

A very important aspect regarding the study of credit derivatives is the regulation system or betters the absence of such a system. From one point of view we could say that the actual crisis might be caused by the absence of regulations (deregulation). Mr. Alan Greenspan, former FED Governor, was a supporter of the free market, a market which acts according to its own will.

#### 6. Conclusion

I consider that a highly innovative market, which registers exponential growth for a long period of time, needs to have discipline imposed by authorities. The global crisis appeared as a consequence of the inorganizable market's growth, an innovation tendency far beyond the market limits and last but not least because of the continuous need for profit.

For the moment it is highly accepted the idea of US Government to put liquidity in the system in order to restart the credit activity in order to increase consumption. This action means to consume today what we shall earn tomorrow, a very dangerous situation in a crisis context.

As I have already mentioned in the present article the notional amount of potentially "toxic" derivatives exceeds all economies in the world. The global GBP is about 60 trillion dollars and the derivatives value at the second quarter of 2008 was 600 trillion dollars. This value of 600 trillion dollars is not a fix one. it can fluctuate according to the market. As we could see before, when the crisis took dramatic aspects in the third quarter of 2008, the derivatives decreased to the level of 408 trillion dollars. This figures regards only the derivatives on the exchange markets. If we take into consideration the OTC markets with a level of 800 trillion dollars in July 2008 we could say that the global economy is under an atomic bomb ready to explode. The decrease of the value of derivatives on the market determined and can still determine in the near future huge losses. consider that this is not responsibility of the state, to cover losses made by greedy private investors. The eventual yields obtained from derivatives market belong to their owners but in the case of potential losses we have the theory of governmental help. The story of young wizard who doesn't know what he has done gains new attributes in the context of this financial crisis.

Many studies made by economic researchers, have shown that on a global level USA has an unsupported consumption (in case the entire planet would have US's way of life), because of the extremely limited resources. This

unsupported consumption is an immediate one, it doesn't have a temporal dimension. The reason why the big consumption of the extremely developed countries hasn't produced an immediate collapse is the fact that many countries of the third world have a low level of life, and this can be seen as a counterpart. From this point of view, the present crises reduces the consumption to a tolerable level.

Financial derivatives create problems for the legal context of these markets as well as for the way in which such financial instruments can be controlled by the final user. A derivative product may be an instrument of covering the inevitable risks from any economic activity, or may be a perfect instrument adapted to speculation.

Duality is even greater as it cannot be a hedger without a speculator.

The investors with high risk appetite meet the investors with risk aversion. In order to have a correct environment on the derivatives markets, regulations should establish the market rules, who should participate. how and when instruments should appear. To stop the development of the derivatives market looks like closing the door for evolution, considering that it is too dangerous, due to investors greed. My personal opinion approach on the that a new economical way of thinking is necessary in order to pass from an age of consumption to an age of rationalized needs.

In the end, I consider that a positive aspect of a deeper crisis is a promise of a new beginning with a healthy global economy.

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