DERIVATIVES FINANCIAL MARKET DEVELOPMENT AS A RESULT OF INNOVATION ACTIVITY IN FINANCIAL MARKET

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Abstract:

Development of financial derivatives as financial innovation and development of market of financial derivatives expand in general is the result of the investment activity in the financial market, linked with widening of investment space of the financial capital non-integrated into the production process and which is not a part of capital loan. Thus, implementation of financial derivates was generated by the redistribution of price risks and their economic functions: providing coverage possibilities, insurance against changing prices on the capital market and insurance of financial risks.

Key words: financial derivatives, financial innovation, financial risk, vanilla derivatives, hedging

JEL classification codes: G 15, G 23

Introduction

In the context of financial globalization during recent decades, have appeared premises to unify national capital markets in a single investment space, defining states to place their savings in profitable businesses, affairs around the world. Since 1970 of the 20 century, during development of post-industrial society and changes that have occurred in the financial market, have appeared the derivatives markets or derivative financial instruments. Over 25 years, functioning of this market was not large enough, but high growth rates recorded in the early 21st century had conditioned acceleration of market transactions on financial derivatives market which led to its transformation into a global market.

Description of the problem

The problem of financial derivatives is new one for national banking sector, being conditioned by the transition to IFRS and involves the need for a deeper study in defining and applying them in Republic of Moldova. Thus, in order to solve this problem, National Commission of Financial Market have developed the Regulation regarding derivate financial instruments and requirements for their disclosure, where is mentioned that: "derivate financial instrument represent an asset or financial bond (obligation) whose value depends on/ or derives from the value of other assets such as asset, a bond, a commodity or an index of prices for assets whose value is settled at a future date". As derivatives financial instruments may be a forward contract, futures contract, caps contract and floors on interest rate, a swap contract based on interest rate or an option contract.

Methodology and data sources

The typology of derivative financial instruments is varied and is difficult to classify them according to the features that they represent. Opportune classification of financial derivatives was a point of interest not only for brokers in the secondary market, but also for financial institutions taking into consideration that financial derivatives, in large part, are off-balance sheet financial instruments.
Historical, are known two big categories of derivatives:
a. first generation derivatives, known as traditional derivatives, generic derivatives, ordinary derivatives, standard derivatives. According to exchange language, first generation derivatives are called vanilla derivatives. Standard derivatives are historical derivatives, having classic contractual terms, known and appreciated by all participants of the capital market.

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b. second generation derivatives, are known as non-generic derivatives, non-standard derivatives. According to exchange language, these derivatives named exotic derivatives, has appeared recently (in the 90s) once with development of international capital markets, with the increasing demands from investors, with the necessity of trading some complex products, flexible, at a reasonable costs, etc. They are called exotic derivatives because there are some facilities and contractual conditions different from those of standard derivatives. Exotic derivatives are standard derivative personalized contracts, are contracts that incorporate some facilities and operational technical elements.

Of course, one of the main criteria is one that classified financial derivative by functions or the nature of contracts into: forward, futures, options and swap contracts. The characteristics of these financial derivative were the basis of several scientific researches, such as those of D. Chance, John Hull, W.C. Hunter, D. Marshall, J. Conrad, A. Crockett, Robert W. Kolb, J.F. Sinkey, D.A. Carter, R. Merton, R. Stulz, R. Williamson, F. Allen, A. Santomero etc.

The defining elements of classic financial derivatives are the following:

forward is a simple instrument, personalized between two parties in order to buy or to sell an asset at some moment in the future for a certain price. Instruments are traded outside the stock market, usually, between two financial institutions or between a financial institution and one of its clients. These contracts are non-standardized contracts, each of them is usually adapted to the owner's specific.

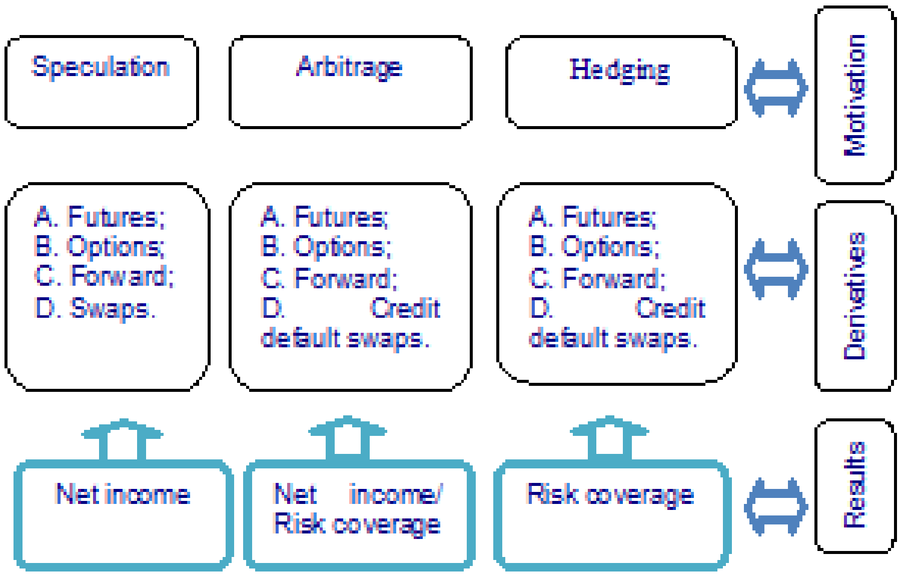
futures are an agreement between two parties in order to buy or sell a quantity of some asset at some time and specific place.

options are the most important group of derivative securities. Options are defined as contracts between two parties, where one part gains the right, but not the obligation, to buy or sell a particular asset, at a specified price on/or before a specific date. The person that obtains the right is called option buyer or option holder, while the other one (who offers the right) is known as an option seller. Option seller gets a option premium for possibilities offered to buyer.

swap in an agreement between two contracting parties in order to change the future financial flows. The swap agreement is used different terms: cash flow maturity, currency that is going to performed payment flows and payment method, all determined by the parties involved in contract. Since its appearance in the 80s, international swap market has known an impressive development, being caused by the growing liquidity of these swap contracts once with development of a strong secondary market.

The most relevant criterion of IFD's classification, in our opinion, would be in addiction of goals: increasing profitability and reducing risk (speculative derivative and hedging), as shown in figure 1.

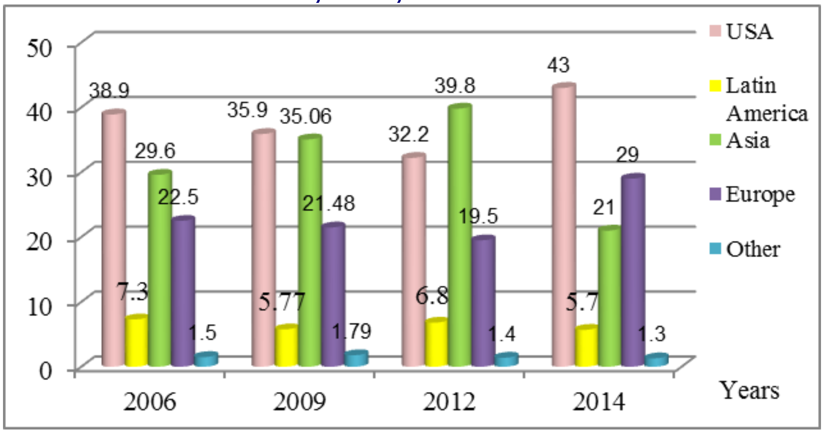
Figure 1 - Classification of financial derivatives after the bank intends to use the underlying impact on bank performance



Source: elaborated by the authors.

Dividing financial derivative market according to geographical criterion (figure 2), we remark that Asian derivatives market registered a growth from 29,6% to 39,8% that force diminishing share of other regions, in special USA and Europe. Safe positions owned by Asian states are due to influence of crisis in USA and Europe, and less in Latin America. One of reasons that caused derivatives market transformation in developed countries is the increasing competitions at the level of forming regional centers. The change in regional structure is presented in 2014, when USA holds its hegemony on financial derivative market, followed by Europe and Asia.

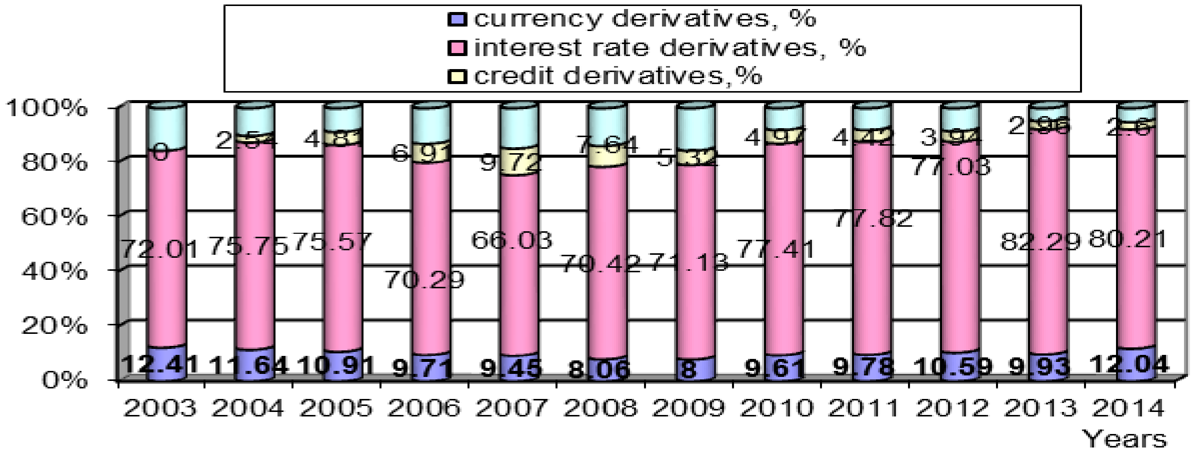
Figure 2 - Regions share in the total volume of financial derivatives in 2006, 2009, 2012 and 2014



Source: elaborated by authors based on BIS data (www.bis.org)

Worldwide, in entire volume of financial derivatives is included derivative on interest rate, currency derivatives, swaps on interest rate and others. Analyzing the structure of financial derivatives, reflected in figure 3, we can see that for period of 2003-2014, in structure of financial derivatives dominate derivative on interest rate, whose major share varies within the interval 66,03% - 82,29%, this shows an increased capacity of these financial derivatives to generate additional income. For the periods of 2003 – 2006 and 2008 – 2014 currency derivatives holds the second position in this ranking, which a share that reduces form 12,41% to 9,71%, and starting with 2008 the situations changes by increasing of their share from 8,06% to 10,59% in 2012, followed with a small reduction to 9,93% in 2013 and increase again during 2014 to 12,04%.

Figure 3. Financial derivative distribution by active



Source: elaborated by authors based on BIS data (www.bis.org)

During the fact that swaps on credit risks hold the third position in the economic growth of 2003 – 2007, in spite of financial derivatives structure, its share register a growth form 2,54% to 9,72%, followed by a reduction to 2,6% at the end of 2014. Causes that determined such a structure are:

- redirecting financial derivatives transactions from mature markets to new markets - Asia, Latin America;
- financial collapse of 2008 - 2010, caused by the structure redistribution of financial derivatives to continued prevalence of interest rate, because they allow both sharp volatility cover the period and offers the possibility of speculative operations;

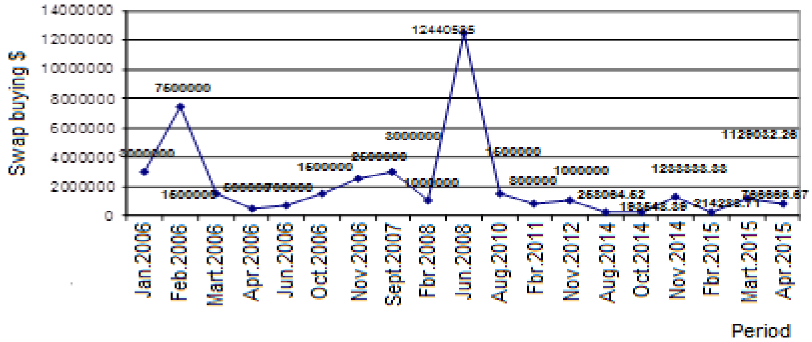
- most bank assets are dependent of interest rates;
- attractiveness of instruments with minimum risk and maximum profit etc.

Results obtained

Currently, in Republic of Moldova are certified only currency derivatives, evolution which is analyzed by NBM (BNM), and presents data regarding swap operations of buying and selling for USD, EUR and forward. Thus, according to data submitted by NBM (BNM) we conclude that:

- USD buying swap (figure 4) evolves non-uniform, being constant for the period of august of 2010 – april 2015, in june 2008 it reached its peak;

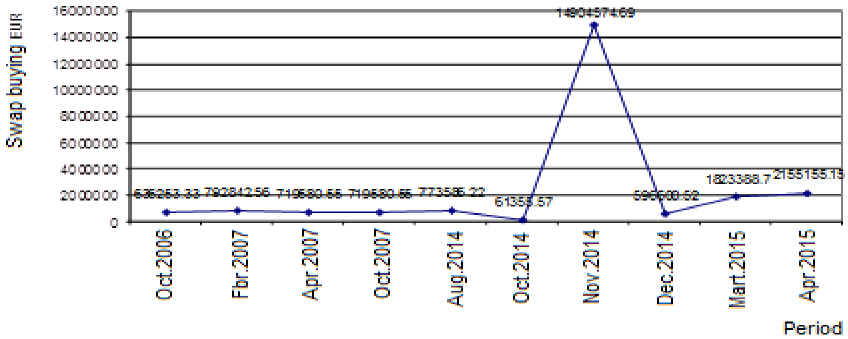
Figure 4. Evolution USD buying swap transactions, in USD



Source: elaborated by authors based on www.bnm.md data

- EUR buying swap (figure 5) doesn't manifest special tendency, being traded almost at the same value in the certified period, its peak being recorded in november 2014;

Figure 5. Evolution EUR buying swap transactions, in USD



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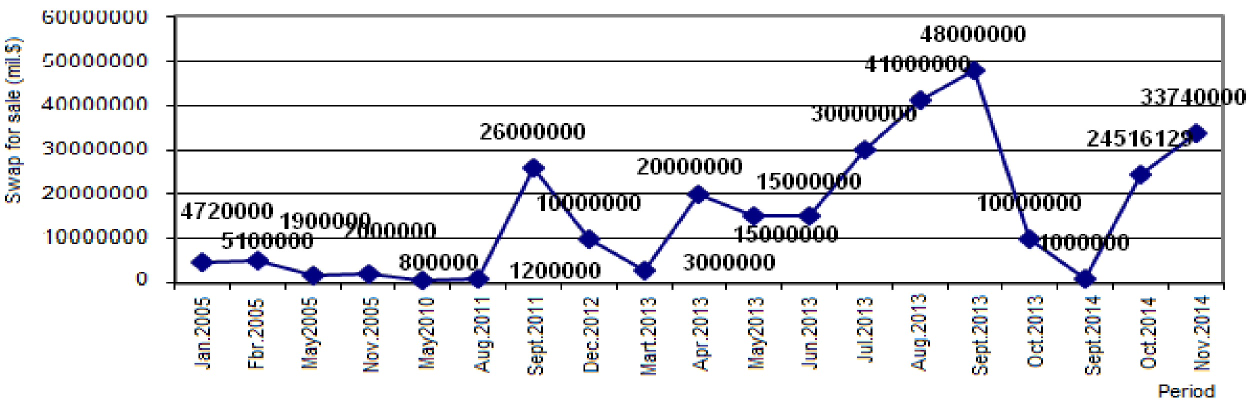
- USD selling swap (figure 6), compared to the buying swap evolves differently, showing a non-uniform evolution, its maximum value being certified in september 2013;

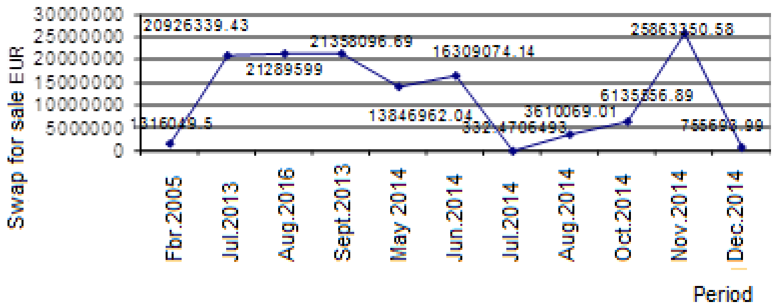
Figure 6. Dynamic of transactions USD selling swap, in USD



Source: elaborated by authors based on www.bnm.md data

- EUR selling swap (figure 7) is not traded regularly, november 2014 being remarked with a significant growth, and a significant decrease during december 2014.

Figure 7. Evolution EUR selling swap transactions, in USD



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USD buying forward transactions compared to currency swap, are non-uniform reflected in NBM reports, being certified at the end of 2012, 2013 and 2014.

For the economy of Republic of Moldova IFD market is necessary for economy only as far as it allows reducing the uncertain in economic activity. According to this criterion, market evolution is acceptable only under proper state policy.

Conclusions

During this research all analyzed data helps us to mention that the financial derivative market is an important part of financial market, its development creates background for development of the entire economy. Nowadays, consequences of global crisis are not analyzed exhaustively. Existence of possibility to choices plays an important role, because we cannot know how the financial market will evolve in uncertain conditions.

Future directions to be approached

Studying world experience, identification of economic laws objective and functional dependence, but also finding optimal conceptual proportions of transaction with the financial derivatives in the market economy is the starting point in determining the strategic priorities of the process of cooperation development between the financial and real sectors of economy by trying to operate financial derivatives in Republic of Moldova.

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