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FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION

PhD Thesis:

The Impact of Central Bank Interventionism over the Financial Markets

(Summary)

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INTRODUCTION

Perhaps the most difficult part of the research conducted during the doctoral school is to find a justification for choosing the theme of thesis.

Initially, before beginning the actual work, the idea was to develop a paper that can give a direction or to bring an idea to improve the economic climate. Since the doctoral studies started in 2009, the economic situation was very unstable, with the great financial crisis that had its beginnings in the United States in 2007 booming worldwide. The moment would have been well chosen if the investigation had occurred 5-6 years earlier, but a debut in 2009, could not guarantee that the at end of the period spent in doctoral school we would still have been a crisis, requiring implementing solutions that could emerge from such research.

For this reason, although the start might have been conducive to achieving a thorough research on how central banks worldwide can manage emerging circumstantial situations, the result could not be determined and could not bring useful elements in perspective.

Furthermore, the increasing appetite growing financial markets, especially foreign exchange (FOREX) market that was and still is in perpetual development led to shift from interventionism and methods that are available to central banks in the crisis economy to a less conjectural side, that is the impact that central banks may have on financial markets.

Thus, the primary objective of the study became to determine whether and to what extent central banks can influence the developments in financial markets. The main focus throughout this work was the relationship between the central banks and currency market that took the form of foreign exchange, but these did now stop including in the research the capital markets that took the form of stock exchanges. In these circumstances, attention must be directed first to the various currency pairs, especially the major ones, and in terms of stock exchanges the indices that were in the most indicative for them.

I spent the whole time studying the forex market and significant indexes for major stock exchanges in the world. Thus, the theoretical research combined with empirical, subjective one, based on practical observation on trading platforms. As a result, the initial hypotheses resulting from observation were:

- Measures taken by central banks can impact the parity of national currencies;
- Central bank interventions can influence the prices of stocks on domestic capital markets;
- Central bank interventions have a greater impact on the foreign exchange market than on capital markets.

Thus, the entire research process was focused on trying to find arguments to the three research hypotheses. An additional factor that contributed to the research, was created by the need to find a mechanism for measuring the intensity of movements taking place in the studied markets, following the publication of various last-minute announcements and news that are published and pursued by these exchanges.

The need was also a practical one since as a trader in these markets, I felt the need to find tools that, combined with currently used trading strategies to provide increased profitability. This was amplified by the current strategies I used in trading, based on price and price action, rather than long-latency indicators that can participate undoubtedly to some profitable strategies on their own.

During the research it has been observed that some currency pairs have a higher sensitivity and accuracy than others. Also, some of the elements used in the forex market technical analysis applied were based on the relationship between currency pairs and representative indices of the stock exchanges in the countries whose currencies are involved in the analyzed pairs. Thus, a stronger index may reflect a strengthening of the national economy, which can lead to the strengthening of the national currency, so an increase in its exchange rate.

The relationship between the two markets was obvious, however, the question whether they have the same factors of influence has remained valid.

However, in times of normality in the economy, forex market is one based more on technical analysis than the fundamental, while the stock market is more fundamental than technical. However, while using indices a normalization can occur in this situation.

Continuing research has been marked by a new change occurred when I was hired in a training project of commodities traders at one of the largest companies in the agribusiness and food production on the globe. Thus, the temptation to introduce new activities in the research results, realized on commodity exchangeswas great. But for these markets can be seen that, although there is a higher impact coming from the fundamental analysis in price developments than the other two types of studied markets during the thesis, the central banks do not have a word to say in influencing great moves. An impact between the two can occur and it would take place but indirectly through purchasing power of the currency in which the commodities are traded on the exchange.

Thus, for an example the price of SBM (soybean meal) that is listed on the Chicago Board of Trade, that I trade in the daily work, is expressed in U.S. dollars. Thus, I encountered many situations, especially during the last months when the U.S. dollar appreciated strongly in relation to the European currency remaining a strong sensitivity of SBM price to these changes. This is because the American continent (with all subcontinents) is the largest producer and exporter of the complex of products made from soybeans, while Europe and Asia are the major importers of such products.

However, this market is much more influenced by other factors than those coming from the national banks. Among them we can mention those related to production, imports, exports, so in other words supply and demand. However, there are the speculative supply and demand coming mainly from the hedge funds that speculate on price fluctuations to make profits. The latter are those who mostly print the technical nature of the market. There are moments in the market where technical analysis can have a special significance because of them. During these moments, some central banks interventions could have a significant impact in these markets due to funds shifting to more profitable or safer activities or savings. Thus, if the bank of a state or region (such as the Euro area) gives signals for the market or sell securities that are better paid through open market operations, it may occurs only as funds are attracted by them, selling positions of commodities market investing their capital in new assets that are more profitable.

To this phenomenon also contributes the more special characteristic of this market that is structured on two levels, on the one hand that of the physical commodity transactions, and on the other that of paper transactions, ie those used to hedge physical transactions or speculative.

But these phenomena that are worth studying, are more than occasional, which would make them much less relevant to the study than other markets. The tendency has been to also conduct a study on this side, but after finding the results it was considered more appropriate only to draw some directions for future research.

Thus, the markets that remained to be studied further in order to find correlations between the actions of central banks and concrete situations were forex market as the main element and stock exchanges as secundary.

The model is designed to determine the extent to which central banks have the ability to affect the price or trading ratio of the two markets. For this we developed a model in which several influential factors were embedded for the market reaction when an intervention coming from the central bank. Moreover, it is not just a model designed to show if there is correlation between the two elements subject to study, but the extent to which this happens.

Through the factors taken into account and the way they are structured and divided into exogenous variables, the model is able to predict the minimum number of pips or points that should be expected from an intervention of a given intensity. Mode of data collection and processing is more difficult, because the variables are mostly qualitative and quantitative transformation in variables is very handy, but once acquired how to interpret the information generated by the market, the model has a great accuracy as level of probability of the event especially forex market.

Moreover, one of the advantages of the developed model is that it can be adapted for application to any type of intervention, or any ad published any time, intensity, degree of impact or market expectations. But for this work it was applied strictly to intervention by the central banks.

Certainly the model can be improved, but the found results can be a very good starting point for further research and possible models with high practical usage among traders in these markets.

As a Forex trader, I have obtained improved yields with the design and implementation of the model, in particular by blending forecasts obtained by using it with my trading strategies currently used.

PURPOSE AND SPECIFIC OBJECTIVES

The purpose of this research was, as the title suggests to determine the way that policies implemented by central banks found their results in foreign exchange movements on the one hand and capital markets as mirrors of national economies on the other hand, analysis carried out both in terms of quality and quantity.

For a better understanding of the parameters and the direction in which the paper wants to focus better I will make a research objectives structuring for each chapter:

Chapter 1 – ***The structure of the central bank intervention policies concept***

- Theoretical delimitation of the central bank concept and its role and functions in society;
- Emphasizing the types of policies that are available for the central banks to influence the national economy;
- Observation of the main challenges encountered in central banking activity in contact with business;
- Establish key communication channels and tools in relation to the central bank - economic environment;
- Analysis of optimal monetary and exchange rate policies for different phases of economic cycles, including periods of economic crisis;
- Identify optimal methods of intervention in the economy.

Chapter 2 – ***Types of financial markets - parallel between stock markets and currency exchanges***

- Theoretical approach of the defining elements for the financial market;
- Capital market characteristics delimitation;
- Analysis of the transactions made on the capital markets;
- Approach of indexes as reporting elements of commodity exchanges;
- Addressing the stock exchange characteristics;
- Establishing the significance Forex market;
- Framing the Forex market in global financial markets;
- Delimitation of the elements that define the major currency pairs traded on the forex market;

- Definition of foreign exchange concept;
- Impact delimitation of technical analysis versus fundamental analysis on the foreign exchanges.

Chapter 3 – ***Analysis of the impact of central banks interventionism over the forex market***

- Delimitation of central bank goals and means of intervention on the foreign exchange market;
- Establish the methods and techniques of intervention on the foreign exchange market;
- Addressing the importance of interventions visibility;
- Determination of intervention instruments and their role;
- Study the sensitivity degree of currency pairs to central bank interventions.

Chapter 4 – ***Econometric model used to measure the impact of central bank interventions over the financial markets***

- Approach of the previous literature for model design;
- Establishing the factors that may influence the extent of movement caused by central bank intervention on the foreign exchanges and securities;
- Delimitation of the applied methodology in drawing reliable conclusions;
- Presentation of the applied method in otder to generate the results;
- Explain the selection of data and variables;
- Presentation of the results of the model;
- Comparison of the results for different markets and traded assets;
- Explain the applicability of the results and their impact on future work in the field.

Final conclusions

- Delimitation of research results;
- Plotting directions for future research;
- Establishing paths desirable for the proper functioning of relationship between the central bank and economic environment;
- Setteling final judgments on the relationship between the central banks and the financial markets.

PAPER STRUCTURE

Chapter 1 - The structure of the central bank intervention policies concept

This is a theoretical chapter in which we want to make a presentation from a critical perspective to both the literature on central banks in Romania and abroad, the purpose and the functions they fulfill, monetary and foreign exchange policies, both classified as designed and implemented by the central bank as the monetary authority and ending with section 3 focused on intervention efficiency opportunities by combining monetary and fiscal policy. It also resints a literature review on how the specialized authors see the way of action of the main central banks during the current financial crisis. As the last subsection for the intervention during the crisis, there is a presentation of how the Romanian National Bank managed the situation of the Romanian economy.

Chapter 2 - Types of financial markets - parallel between stock markets and currency exchanges

This is a chapter in which we presented the financial markets in a theoretical perspective, followed by a classification in the category of foreign exchange (forex) as currency exchange markets. This is intended to demonstrate that market-makers with each platform that can be made available to traders by them can be considered currency exchanges.

Chapter 3 – Central bank intervention - impact on forex market analysis

This is a chapter that makes the the transition from the theoretical to the practical part of the thesis. In its order it presents issues, methods and tactics of intervention that are available to central banks, the tools that can be used for this purpose, the importance of interventions visibility and how currency pairs can react to various types of interference coming from monetary authorities. Moreover, within the same chapter the consequences on the foreign exchange market interventions of central banks are presented. Another important aspect captured in the chapter, is that of a practical study on the use of power currency in order to obtain earnings, the case of Switzerland, which benefited from a favorable context during the current financial crisis. This study is framed in the text as the conspiratorial theory, because of how it was perceived in the discussions conducted with well renowned scholars in Romania.

Chapter 4 – Econometric model used to measure the impact of central bank interventions over the financial markets

This is the chapter in which the transition from theoretical concepts to achieving an econometric model able to prove the hypothesis that were considered when choosing thesis topic is made. The model is built on the one hand for theoretical purposes, to demonstrate the relationship between studied central banks interventions and financial market results, and on the other hand, the practical purpose, to show the extent of movement or number of pips on trader could expect from each intervention coming from the central banks. The obtained probability is quite high, and the use the model in addition to normal trading strategies is meant to improve the traders' profitability. Although a large part of the thesis is theoretical, most research was practical, in front of the trading platforms, seeking ways to classify the determinants of exchange movements, especially the currency exchange.

MOST IMPORTANT CONTRIBUTIONS

At the end of this synthesis it is necessary to emphasize the most important contributions that were made during the research and summarized in this paper. Of these, the most important are:

The developed econometric model helps in confirming the assumptions made at the beginning of the thesis, both the relationship that there is a correlation between central bank intervention and foreign exchange movements and stock exchanges following these interventions, as well as the stock exchange that have a higher sensitivity to these interventions than stock exchanges.

Data gathering and processing mode is currently still a pretty heavy and hard and it can be improved and the recommendation for future research is precisely to find a simple solution that can be standardized and transmitted with greater ease.

The model can be used to predict movements caused by banks issuing actions short time frames with a relatively high probability of occurrence, with a high level of choosing significant variables for these movements.

The degree of accuracy in generating favorable results is very high for the studied foreign exchanges in comparison with stock exchanges and actually generate recommendation that it can only be used in trading the forex market, while the stock markets is given using other trading methods and strategies.

The results that were obtained show that the currency pair GBP / USD is very responsive to interventions and announcements coming from fundamentals, and for this reason, combined with graphical demonstration of the early chapters of the work by long candles that can be observed without significant wicks that followed interventions, the pair is shown to be traded using this method.

It is also indicated mixing the results that were generated by the model, with normal trading strategies that are currently used, in order to improve the probability of manifestation of favorable results.

Another important contribution made throughout the paper is that the theory of the capacity of states which have as their power reserve currency to benefit and increase national wealth by using monetary issue since the currency issued is held in very large quantities in international context and their demand is very strong.

Not to forget the parallel between currency exchanges and other types of exchanges, which demonstrated that trading platforms provided by market makers may be deemed to have stock exchange characteristics, so they can be considered similar to stock exchange, and taken as a whole constitute a significant part of the foreign exchange market as it is known.