

# DOES THE INTRODUCTION OF THE BOND MARKET REDUCE THE INTEREST RATE ON KOSOVO BANKING INDUSTRY?

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## **Abstract**

Kosovo does not have a bond market which would enable companies, people and other economic agents to have access to it, that would have been a substitute for the companies to get other sources of funds beside banking sector. The Kosovo economy has only one source of institutional money injected into the economy and that is the banking industry. Bringing back the money of Kosovo Pension and Saving Trust (KPST) to Kosovo would have been a huge injection for the economy to raise GDP and lower unemployment. Since the companies in Kosovo contain a lot of asymmetric information within their financial statements, clearing the way for KPST how to allocate their investments in Kosovo would be through alleviating asymmetric information. The paper stands on the general concepts of the asymmetric information and how to alleviate it within the financial market and particularly within the bond market. The other part of the paper concentrates on theoretical framework how to eliminate asymmetric information for the companies who want to get funding from KPST. Therefore, it is necessary to have healthy banks and better environment to have a sound bond market. On the other hand, bond market may increase the health of banks by enhancing market competition.

*Keywords: asymmetric information, Market competition, Kosovo Pension Fund, Interest Rate, bond market*

## **1 INTRODUCTION**

Competition is proven throughout theoretical paradigms and also tested with empirical results that it is the key driver of productivity, innovation and growth acceleration. Since the banking industry in Kosovo is the key institutional money injection into Kosovo economy, there is a huge concern if the interest rates in the Kosovo economy is set up from the competition among the banks or it is driven up by the banks throughout their market power (banks set up interest rates on their own). According to Aliu (2015), the banking industry in Kosovo has higher interest rates on lending activities than regional countries, while all risks are lower, such as public debt, non-performing loans (NPL), exchange rate risk, economic growth and etc. In this paper we built our research questions based on paradox that the risks are lower in Kosovo than regional countries while interest rates spread is higher. In our paper, we will try to find out the answers to these questions: Do the interest rates in the Kosovo banking industry reflect the risks that the industry is opposed to? Does the establishment of the bond market create pressure for the banking industry in Kosovo to lower the interest rates on lending activities while raising the interest rates on deposits? These questions have been intensively debated throughout the paper.

The view that the interest rates spread lies on general microeconomic principles of price signals and market competition has been attracted for many years by scholars in emerging countries to attain research on bond market. The main reasons for starting a bond market in emerging countries were to fund fiscal deficit and sterilise large capital inflows (Turner, 2002). According to Yoshitomi and Shirai (2001) and Shirai (2001), banking markets should be developed before bond market established and they suggested several reasons for this. First, households have a greater preference for liquid short-term bank deposits; second, institutional investors are immatur ; third, very few large companies are enable to issue

bonds; and last main problem is that the legal and judicial infrastructure is not in place. But, some economists believe the health of banks in emerging countries can be increased after developing bond market. For instance, Greenspan (2000) provided that bond markets can act like 'spare tire', they can substitute as a source of finance when banks' balance sheets are frail and banks are rationing credit. Greenspan (2000) stated that in the moment when there is a "loss of confidence" in the economy than the bond market will be a substitute for the banks. But in contrast to Greenspan (2000), Hawkins (2002) considers that in times when banks lose the confidence within the economy, bond market will not be an efficient substitute. Further he comments that asymmetric information is even deeper, because bondholders have even less information for the bond issuers than banks have for their clients. Moreover, previous work of Hanson and Roca (1986) is inventive study on the determinant factors affecting the interest rate spread. Their study contained a sample of 29 countries for a period of eight years where factors such as financial costs, recession, competition and inflation were statistically significant. Our research differentiates itself from the prior studies concerning the banking industry in Kosovo in the following aspects: 1) It gives a clear picture how to bring back to Kosovo allocated investments of the Kosovo Pension and Saving Trust (KPST) as a key ingredient for establishing bond market . 2) It shows clear outlook how to eliminate asymmetric information during the listing process, which would enable all companies in Kosovo to have access in the bond market. 3) It gives practical overview how to ensure competition within the overall financial system.

The paper is constructed under two objectives. First tries to find out the impact of introducing the bond market on the interest rates in the banking industry of Kosovo. The second objective is trying to give theoretical construction how to eliminate asymmetric information during the process of listing companies in the bond market. To this end, we use theoretical justification standing on the microeconomic concepts of market competition, asymmetric information and price elasticity through graphical illustration. The main contribution of our paper lies in practical forms how to ensure a competitive environment within the financial system (reach financial market equilibrium) through the bond market where the banking industry is not the only institutional money injected into the economy.

The remaining structure of this study is as follows: First part encompasses introduction and briefly reviews related literature. The second part contains theoretical background. Used methodology is presented within the third section. Graphical explanation is presented within the fourth section. Authors present overall evaluation and giving conclusion in the last section.

## **2 THEORITICAL BACKGROUND**

According to the general microeconomic principles competition is a key driver of innovation and productivity, also competition among the entrepreneurs and economic agents drives prices down in the industry where the companies are operating ( $P=MC$ ), so it means in a perfect market competition companies are operating with profits close to zero. Basically, economic agents will end up in a price war, which will drive prices down. In perfect competitive environment players do not have a market power to determine the prices compared to monopoly and monopolistic competition where players have some market power. The market consists of many buyers and any single buyer has a small fraction within the market. Since the buyers is a price taker in his purchase, they do not have any impact on determining the price within the market. The market contains many sellers and any single seller has an insignificant impact on the market to affect the prices, so in this case the seller operates as a price taker. Since he operates as a price taker, he only chooses the level of production that maximizes his profit. Firms that sell in the market are free to enter and exit.

The goods sold by the sellers in the market are homogenous. Buyers and sellers in the market are assumed to have perfect information. Both buyers and sellers know the prices driven by the market. The demand side of the market contains all potential buyers, and each of the buyers which compound the demand side have their own preferences, consumption and level of income (Jehle and Reny, 2011).

$$q^d(p) = \sum_{i \in I} q^i(p, P, y^i) \quad (1)$$

In our case the demand ( $q^d$ ) would contain all people, economic agents, government etc., that are looking for recourses to finance their daily activities or their daily needs (Jehle and Reny, 2011). The supply side contains all providers of the products or services ( $q$ ) in a particular market, which non of them has a market power to determine the prices. In a short run, number of players within the market is limited, profit incentives push other players to join the market and drive prices and profits of existing players in the market. On the supply side the equation contains these elements:

$$q^s(p) = \sum_{j \in S} q^j(p, W) \quad (2)$$

Market demand together with the market supply determine the price and the quantity traded on the market. Market equilibrium is achieved at a price ( $p$ ) when  $q^d(p) = q^s(p)$ . So basically under these circumstances, no economic agent in the market is interested to change his behavior (Jehle and Reny, 2011). In order to ensure competition within particular market there are assumptions that should be accomplished which are depicted below:

Assumption 1-Homogenous product: money is homogenous in each bank, moreover the products that banks are offering are almost the same.

Assumption 2- Low transaction costs: For economic agents, is quite easy to have access to the prices delivered from the banking sector through internet accesses or through getting the information directly from the bank. Establishing the bond market would be also under low transaction cost to get the information on the bond prices, interest rates and their denomination, since all the necessary information will be accessible online. Assymetric information is linked with the concept when one party has less information than the other party involved in the transaction (buyers or sellers). Pionering work of Akerlof, Spence and Stiglitz (2001) on market with lack of information shed light on the concept of market disequilibrium, where one part of the market has more information than the other part of the markets. Borrowers know more than the lenders cocnerning their ability to repay their debts, managers are more aware for the compay then shareholders. All these problems involved within the markets lead to disequilibrium and also to speculation concerning particular prices. Moreover, Liu and Wang (2016) concluded that due to market power, information asymmetry may decrease welfare loss.

Assumption 3- Free entry and exist in short run: stands on the general concept of matured industries, if there is a profit realized on particular industry new entries will occur and drive profits down to the level of price equals marginal costs ( $P=MC$ ). This condition in the banking industry of Kosovo is hardly achieved since establishing new bank requires certain rules and regulation that new potential bank should fulfil.

### 3 METOHODOLOGY

There are multiple forms how you can make pressure on the banks to lower interest rates. One is through laws and regulation in force on purpose, of reaching market competition in the industry if they are speculating on the risks. The other is naturally making pressure on them through capital market where money will move toward those segments that return signals offer better prospect.

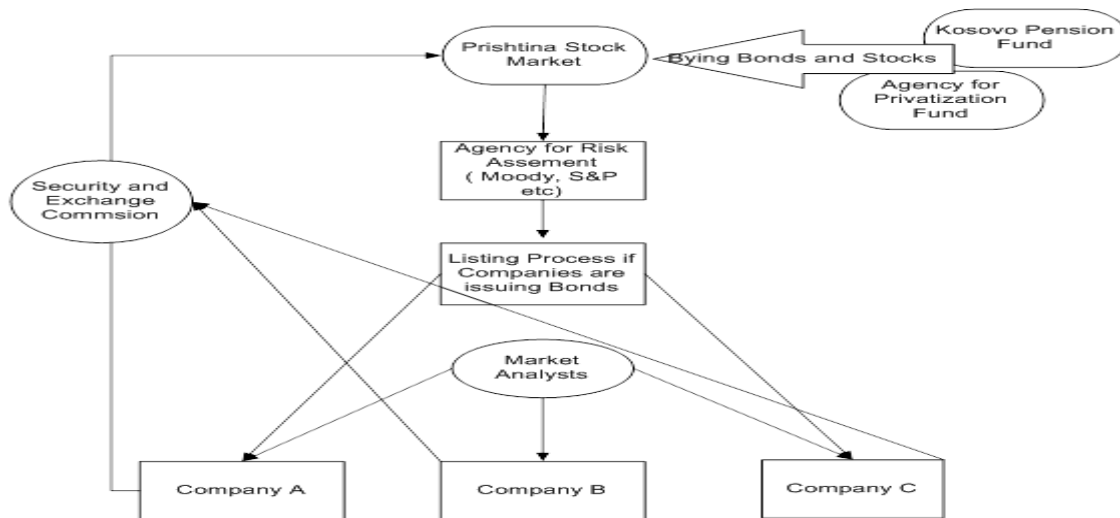


Figure 1 - Investing in Prishtina Bond and Stock Market. Source: Authors own model

Fig. 1 explains one of the forms to bring back allocated investments of the Kosovo Pension Fund, as far as the law constraints investments only on financial assets because of liquidity concerns (KPST, 2004). Kosovo should create Prishtina Stock and Bond Market in order to enable for domestic companies to get listed in it. The efficiency of the stock market is depended on multivariable factors such as volume of trading, information asymmetry, regulatory framework, judicial system, political will and etc. Companies which issue bonds will go through the agency which we have named as ‘Debt Assessment Agency or Rating Agency’. Bond has its price and annual payments reflected by the interest rates. Those companies that are audited from big five worldknown audited companies will not contain asymmetric information on their financial statements, they will be only appraised on the ability to pay back the debts on the time, and consequently they will be appraised on ratios such as performance, liquidity, debt and so forth. Those companies who are not audited from the big five, for them the “Debt Assessment Agency” will decline their interest rate and also will reduce their bond price, which is common law how debt markets operate. For instance, if interest rates on the Prishtina Bond Market are in the range of 8% we will see huge movements from banking deposits toward Prishtina Bond Market. Here, 8% means interest payments for the company that is issuing that bond, and on the other side that is income for a person, company or government who is buying the bond. Equally the issuer and buyer of the bond will be happy to generate that transaction (as far as for the issuer is more profitable to issue that bond than to get credit from the banks, the buyer will earn higher returns than depositing money in the banks) and we will see huge capital movements from the banking industry toward stock market as a result this will make pressure on the banking industry to lower interest rates to the level of 8% or even lower in order to attract their depositors to keep their money in the banking industry.

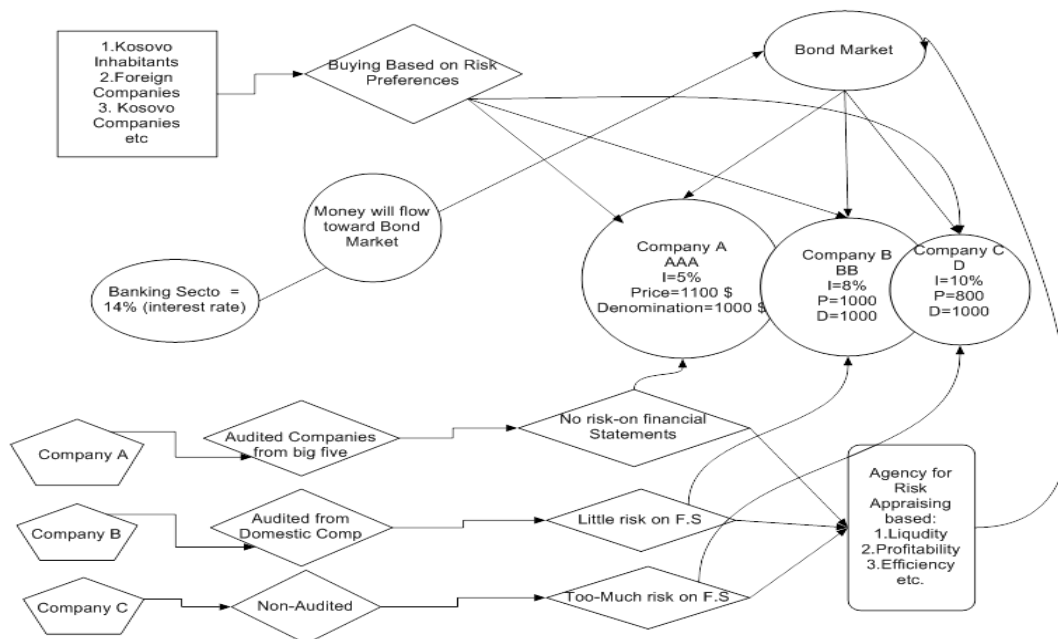


Figure 2 - Process of Risk Appraising. Source: Authors own model

Fig. 2 shows that investments will be allocated on three types of companies based on risk preferences, some people are risk averse and allocate their money in company A, some are risk neutral and they are not concerned at the risk level they just want a certain amount of expected return for a given level of risk and the others are risk lovers which invest in Company C. Money will flow en route on those sectors and industries where prices and profits are increasing. This scheme will push companies toward formalization in order to keep their financial statements not fraud, as far as for them is less costly to obtain credits from bond market if their financial statements are audited. As an outcome banks will feel the pressure of capital flight from their balance sheets on the way to bond market, they will lower interest rates on lending activities and raise interest rates on deposits. It will be more profitable for citizens to invest in bonds than keeping their money on bank deposit which does not cover even the inflation level (CBK, 2013). Kosovo Inhabitants, Foreign Companies and Domestic Companies can buy bonds on the bond market based on their risk preferences. The model is built under the assumption that three companies have strong ability to pay their debts (all the ratios are the same) on time but they are audited from different companies. We are using these assumptions to simplify explanation.

**Company A:** Is audited from big 5 worldknown audited companies which eliminates the risk on financial statements (so if financial statements are fraud the responsibility drops on audited companies), and according to the “Agency for Risk Assessment” the company’s ability to pay their debts on time is high and therefore it is rated AAA. So, the price of the bond has gone up and its coupon down.

**Company B:** Contains more risk for the reason that its financial statements are audited from domestic companies, because of that its coupon rate has gone up while its price has dropped down and is rated BB. Denomination value is all the same for three companies.

**Company C:** which is not audited by any domestic or international audit company, it contains a lot of risk that its financial statements might be fraud. Therefore, its coupon rate is higher

compared to Company A and Company B, as well bond price has dropped down in a much superior range than the other two companies.

## 4 RESULTS

Explanation driven from the (Fig.1) shows how Kosovo Pension and Saving Trust and Privatization Agency of Kosovo could bring back to Kosovo investments that they have allocated outside Kosovo. This will be realized through establishment of the Agency for Risk Assessment and also establishment of the Prishtina Stock Market. Moreover (Fig. 2) which enables creation of the competition within the financial system and in particular pressuring banks to lower interest rates on lending activities and raise interest rates on deposits, shows how the asymmetric information will be alleviated via audited companies and through agency for risk assessment. The other part of the diagram demonstrates how companies, government of Kosovo, Kosovo Pension and Saving Trust, Kosovo Privatization Agency via participating in the bond market will be a significant player to reach equilibrium in the overall financial system (general theory of market competition).

## 5 CONCLUSION

The banking industry is a crucial element of the inclusive economic growth of Kosovo due to the fact that is the fundamental component of funding business ideas and their daily operations. Therefore ensuring competition within the banking industry is decisive for delivering better products, lower prices and higher efficiency. Ensuring competition within banking industry is in line with the laws established from the parliament of Kosovo on competition issues (KCA, 2016). Kosovo have not been able to establish the stock and bond market during the transformation of the real economy in comparison to some countries of ex-Soviet Union such as Czech Republic, Poland, Slovakia, Hungary, Romania etc. Kosovo financial system in order to add one additional source of funding within itself, it is suggested to bring back in Kosovo allocated investments of KPST and Privatization Agency which would create supplementary competition toward the banking industry. Kosovo Pension and Saving Trust (KPST) has allocated investments abroad around more than 1 billion euro (KPST, 2013), bringing back those monies in Kosovo would contribute on raising whole liquidity of the economy, GDP acceleration, lower unemployment. Allocated investments of KPST would generate extra competition within all financial systems (in particular on the banking industry) through lowering interest rates on lending activities and raising interest rates on deposits. Theoretical concepts expressed on (Fig.1 and Fig. 2) shows overview map on how companies can emit bonds and have access to funding, while standing on these statements economic agents will buy bond based on their risk preferences. KPST would have been a one of the key engines on ensuring competition within the financial system.

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