# **STUDY ON MOLDOVAN BANKS' SECURITIES PORTOFOLIO**

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#### Abstract

Investment in securities, along with bank loans, represents a significant source of bank earnings and generally performs two key functions: it serves as a source of bank <u>liquidity</u>, i.e. funding resources to meet loan demand or customers' needs for cash, and as an additional source of earnings from capital gains obtained when portfolio securities are sold. This paper presents an interesting and actual topic because in national specialized literature there are few researches on Moldovan banks' securities investments.

Keywords: Republic of Moldova, bank, securities portfolio, yield of securities portfolio.

JEL classification: G21, G28

### 1. Introduction

Investment in securities, along with bank loans, represents a significant source of bank earnings and generally performs two key functions: it serves as a source of bank <u>liquidity</u>, i.e. funding resources to meet loan demand or customers' needs for cash, and as an additional source of earnings from capital gains obtained when securities from portfolio are sold. This paper presents an interesting and actual topic because in national specialized literature researches on Moldovan banks investments in securities are few. The paper is structured as follows: the first section presents the researchers in the field of securities investments of banks. In the second section we have conducted a study case on banks securities portfolios. In the third section there are presented conclusions on the study carried out in the second section.

One must note that the analysis was performed for 2009-2012 because about  $\frac{1}{2}$  half of the banks have not yet published their 2013 financial statements and balance sheets.

# 2. Literature overview on bank investments in securities

In specialized literature there are few researches on securities investments of banks. In 1970, Melnik suggested that at any point in time the quantity of a given asset held by bank is a function of the total amount of assets available, relative yields and liquidity considerations. In the banking industry assets and liabilities are managed to overcome volatilities or uncertainties arising from business activities [3, p. 158].

Modern banks are very vulnerable to higher levels of volatilities in the market and need to manage

their portfolios efficiently. In this regard, in almost all countries, banks use treasury bills as part of their dynamic portfolio management strategy. In other words, banks need to manage their cash flows, cost of funds and return on investments while maintaining liquidity all the time.

Recently, Lin [2, p.97] published a research and concluded that diversification activity in the banking industry has become an important trend. At the same time, the existing literature on the determinants of bank interest margins does not address the effect of such diversification. In 2009, Maudos & Solís [1, p.1922] have found in their studies that diversification of banking activities bears a high risk, and thus, charge higher margins to improve their performance. In the opposite way, in 2008, Hawtrey and Liang have found that the size of bank transactions is inversely related to bank's margin.

In the national specialized banking literature there is an insignificant number of researches on banks' securities investments.

## 3. Study case on securities portfolio held by banks from the Republic of Moldova

In the Republic of Moldova banks invest in securities in order to achieve the following objectives:

- a) To increase the portfolio value by raising the market price of securities;
- b) To create reserves of liquidity. By placing financial means in liquid securities banks can always solve liquidity problem, quickly and efficiently operating these instruments on the market;
- c) To use securities as guarantee for obtaining credits on the inter-banking market and from the National Bank;
- d) To attract new clients from participating in traders' capital;
- e) To ensure participation in the management of companies which the bank is interested in.

The number of financial instruments that can be included in the bank's securities portfolio is large and continues to rise. More than that, every financial instrument holds characteristics

toward risk, sensitivity towards inflation as well as toward changes of state politics and of economic conjuncture.

In terms of evaluation, corporate securities are the most complicated financial instruments. Or, the last is obligatory according to the goal. The main goal, when the portfolio of securities is constituted, is the maximization of incomes and minimization of risks. Both the management of securities portfolio and variation of its structure in order to maximize the incomes are based on the analysis and forecast of yields' trend from the financial market. Thereby, the expected income from such assets as different kind of securities should not be lower than the interest rates on deposits.

In the Republic of Moldova the balance sheet of licensed banks includes the following division of securities portfolios:

- securities for selling (securities for trading and marketing);
- Investment securities (or securities held until maturity).

It is worth mentioning that some banks additionally divide both selling securities and investment securities in equity instruments and bonds as well.

Detailed analysis of bank reports showed that some banks have included state securities in the category of investment ones and equity securities in the stock, while other banks included in the investment category equity securities as well as the state ones.

Particularly, we drew attention to this fact because some banks included equity securities, namely those held in such companies as joint stock companies, in selling securities, while other banks have reported the shares of the same companies as investment securities. Therefore we analyzed only selling securities and investment securities portfolios.

In Moldova, banks that hold most of their securities for sale are "Victoriabank", "Moldova-Agroindbank" and "Eximbank-Gruppo Veneto Banca" (see Table 1).

				thousand lei
Year Bank	2009	2010	2011	2012
CB "Comerțbank" JSC	0	0	100	100
CB "Banca Socială" JSC	0	0	7018	12763
CB "Victoriabank" JSC	5063	2291	34614	61419
CB "Moldova – Agroindbank" JSC	158419	132950	216227	140949
CB "Moldindconbank" JSC	0	0	1600	26485
"Banca de Economii" JSC	4117	461	8990	9342
CB "EuroCreditBank" JSC	0	0	1316	1271
CB "Unibank" JSC	0	0	0	320
"Banca de Finanțe și Comerț" JSC	0	0	6928	7149
CB "Energbank" JSC	0	0	1075	1139
CB "ProCreditBank" JSC	0	0	12000	1200
"Banca Comercială Română Chișinău" JSC	0	0	112480	65710

Table 1: Value of securities for selling portfolio held by licensed banks in the Republic of Moldova during 2009-2012

thousand lei

CB "Eximbank-Gruppo Veneto Banca" JSC	384	392	447890	427752
CB "Mobiasbancă -Groupe Societe Generale" JSC	0	0	1483	1479

Source: Developed by authors based on [4-30].

From Table 1 it can be observed that the value of securities portfolio held for sale increased by 2012 compared to 2009, as well as the number of banks that hold these types of securities (in 2009 only 5 banks were holding securities for sale, while in 2012 all 14 licensed banks in Moldova had these).

Regarding investment securities portfolios it can be noticed that practically all banks hold investment securities, except for BC "Eximbank-Gruppo Veneto Banca" which in 2012 registered "0" value for this position.

Table 2 shows an increase in the investment portfolio during 2009-2012, except for CB "Moldova-Agroindbank", which, after transition to reporting under IFRS rules (International Financial Reporting Standards) and re-evaluation of investment securities, recorded in 2011 and 2012 a negative value of investment securities portfolio.

It is worth mentioning that most of the banks have also included government securities and National Bank Certificates (NBC) in investment securities portfolios, thus completing a significant part of these portfolios.

One of the reasons to use state securities and NBC in bank portfolios is that these securities are almost similar to holding cash while receiving a reasonable return. The level of treasury bills held by any bank will depend on the level of business activity as well as on the level of other portfolios, e.g. loan portfolio of a particular bank.

	-			thousana lei
Year Bank	2009	2010	2011	2012
CB "Comerțbank" JSC	55214	110268	108754	1080292
CB "Banca Socială" JSC	308290	389856	173866	255733
CB "Victoriabank" JSC	801717	1340394	1384712	1324494
CB "Moldova – Agroindbank" JSC	1213773	1335494	-695854	-1101377
CB "Moldindconbank" JSC	824275	771424	653980	700557
"Banca de Economii" JSC	1058463	507482	1232986	1845399
CB "EuroCreditBank" JSC	59535	24874	27659	6641
CB "Unibank" JSC	39827	112812	32844	33558
"Banca de Finanțe și Comerț" JSC	205312	302188	249036	262039
CB "Energbank" JSC	187125	350913	139015	274650
CB "ProCreditBank" JSC	17930.47	112882	95357	237359
"Banca Comercială Română Chișinău" JSC	276250	190550	177689	135256
CB "Eximbank-Gruppo Veneto Banca" JSC	344537	481264	448554	0
CB "Mobiasbancă -Groupe Societe Generale" JSC	490967	467583	521861	557900

 Table 2: Value of investment securities portfolio of licensed banks in the Republic of Moldova during 2009-2012

 thousand lei

Source: Developed by authors based on [4-30].

Another element which deserves attention is that in the Republic of Moldova licensed banks maintain investment portfolios of state securities to ensure the liquidity of their assets, the latter having a "0" value of risk (they are considered risk-free assets).

However, the share of securities for sale in the total amount of assets in Moldovan banks is insignificant (about 1-2%), except for CB "Eximbank-Gruppo Veneto Banca" and "Banca Comercială Română Chişinău" during 2011-2012 (seet Table 3)

1				%
Year Bank	2009	2010	2011	2012
CB "Comerțbank" JSC	0	0	0.016	0.012
CB "Banca Socială" JSC	0	0	0.214	0.396
CB "Victoriabank" JSC	13.19	0.03	0.414	0.606
CB "Moldova – Agroindbank" JSC	2.026	1.58	2.248	1.204
CB "Moldindconbank" JSC	0	0	0.023	0.308
"Banca de Economii" JSC	0.08	0.009	0.145	0.142
CB "EuroCreditBank" JSC	0	0	0.287	0.344
CB "Unibank" JSC	0	0	0	0.016
"Banca de Finanțe și Comerț" JSC	0	0	0.409	0.42
CB "Energbank" JSC	0	0	0.065	0.061
CB "ProCreditBank" JSC	0	0	0.674	0.045
"Banca Comercială Română Chișinău" JSC	0	0	8.67	5.89
CB "Eximbank-Gruppo Veneto Banca" JSC	0.1	0.011	11.63	10.4
CB "Mobiasbancă -Groupe Societe Generale" JSC	0	0	0.049	0.04

Table 3: Weight of trading securities portfolio in the total assets of licensed banks in theRepublic of Moldova in 2009-2012

Source: Developed by authors based on [4-30].

Table 3 shows that during 2009-2012 the weight of securities portfolios held for trading has grown by 2012. Apparently, Table 1 and 3 show not only the increase of portfolios value but their share as well.

Table 4 shows that during 2009-2012 the weight of investment securities portfolio in the total assets of banks has increased as a whole.

However, the weight of investment securities as a percentage of total banks assets varied from one bank to another in the period 2009-2012. Thus, it can be mentioned that CB "Unibank" and "EuroCreditBank" held the most insignificant percentage of securities from total assets, although by 2011 and 2012 "Banca de Economii" has increased the share of its investment securities in total assets.

				/0
Year Bank	2009	2010	2011	2012
CB "Comertbank" JSC	12.81	21.68	18.44	21.69
CB "Banca Socială" JSC	12.44	13.78	5.29	7.944
CB "Victoriabank" JSC	13.11	18.2	16.57	13.08
CB "Moldova – Agroindbank" JSC	15.52	15.92	7.23	9.41
CB "Moldindconbank" JSC	18.09	15.09	9.64	8.16
"Banca de Economii" JSC	20.66	9.58	19.98	28.02
CB "EuroCreditBank" JSC	21.24	8.07	6.04	1.79
CB "Unibank" JSC	9.98	26.78	5.34	1.67
"Banca de Finanțe și Comerț" JSC	11.005	18.49	14.71	15.43
CB "Energbank" JSC	14.43	23.79	8.39	14.83
CB "ProCreditBank" JSC	3.01	8.5	5.36	9.06
"Banca Comercială Română Chișinău" JSC	13.77	15.5	13.7	12.1
CB "Eximbank-Gruppo Veneto Banca" JSC	9.45	14.05	11.65	0.08
CB "Mobiasbancă -Groupe Societe Generale" JSC	15.34	16.27	17.92	15.62

Table 4: Weight of investment securities portfolio in the total assets of licensed banks in the Republic of Moldova in 2009-2012

%

Source: Developed by authors based on [4-30].

Table 4 also shows that CB "Comerțbank", "Victoriabank", "Banca de Finanțe și Comerț", "Energbank", "Banca Comercială Română Chișinău", "Mobiasbancă -Groupe Societe Generale" and "Banca de Economii"were holding the largest share of investment securities in the total assets during the analyzed period, especially in 2012.

Such developments are determined by the fact that banks, in order to undertake risky lending activities and to meet liquidity state requirements, will purchase securities that are included in investment securities portfolios. Otherwise, for all investments in stocks, the state limits the influence of bank capital on economic agents in order to prevent conflicts of interest and to limit competition. Thus, in accordance with the Regulation on banks holding shares in the capital of other entities, no bank, alone or in accordance with one or more persons acting together, without the written permission of the National Bank, directly or indirectly can hold shares in the capital of a legal entity (except holding shares in the capital of other banks in the Republic of Moldova): a) share that is substantial compared to the capital of the economic entity; b) share which, according to its current value, exceeds 15 percent of total regulatory capital of the bank.

Similarly, the bank cannot hold shares with the total current value exceeding 50 percent of total regulatory capital of the bank.

The banks are also investing in securities in order to achieve direct or indirect incomes. *Direct incomes* from investment in securities can be obtained as dividends, interest rates or by selling these securities at a higher price. *Indirect incomes* are formed based on the increasing in services market of activities related to securities transactions.

Based on the research topic direct revenues were analyzed as the yield of securities portfolio obtained from investing in securities both for sale as well as those held to maturity.

Table 5 shows that the interest rate on securities purchased for sale was about 22 to 28% for CB "Victoriabank" and "Moldindconbank" in 2012. The CB "Moldova-Agroindbank", "Eximbank-Gruppo Veneto Banca" and "EuroCreditBank" has recorded a low efficiency from holding securities for trading (about 0.3 to 7.08% during 2011-2012). The remaining banks don't reported income from securities for trading.

Table 5: Average interest rate of portfolios securities held for trading by licensed banks in the
Republic of Moldova in 2009-2012

				%
Year Bank	2009	2010	2011	2012
CB "Comerțbank" JSC	0	0	0	0
CB "Banca Socială" JSC	0	0	0	0
CB "Victoriabank" JSC	0	0	0	22.59
CB "Moldova – Agroindbank" JSC	0	1.93	4.05	7.08
CB "Moldindconbank" JSC	0	0	0	26.81
"Banca de Economii" JSC	0	0	0	0
CB "EuroCreditBank" JSC	0	0	0.075	0.3147
CB "Unibank" JSC	0	0	0	0
"Banca de Finanțe și Comerț" JSC	0	0	0	0
CB "Energbank" JSC	0	0	0	0
CB "ProCreditBank" JSC	0	0	0	0
"Banca Comercială Română Chișinău" JSC	0	0	0	0
CB "Eximbank-Gruppo Veneto Banca" JSC	0	0	0	5.14
CB "Mobiasbancă -Groupe Societe Generale" JSC	0	0	0	0

Source: Developed by authors based on [4-30].

To determine and analyze the interest rate of securities purchased for sale the following was calculated: the interest income on securities purchased for sale/total value of securities purchased for sale.

Table 6 shows that the interest rate from investment securities is lower comparative to trading securities, but the banks hold more this types of securities in their portfolio (Table 4). One reason for these variations is that, beside the related interest rates on holding state securities (SS), banks hold corporate securities that also bring dividends, finally.

Table 6: Average interest rate of investment securities portfolio of licensed banks in the Republic of Moldova in 2009-2012

Year Bank	2009	2010	2011	2012
CB "Comerțbank" JSC	4.87	5.78	8.67	5.69
CB "Banca Socială" JSC	5.87	7.705	0.006	0.004
CB "Victoriabank" JSC	5.37	4.77	9.76	7.747
CB "Moldova – Agroindbank" JSC	2.23	5.66	-3.66	9.24

3.707	7.57	0	0
5.71	9.7	4.81	0
9.95	13.14	12.63	0
7.68	6.44	27.42	3.03
7.49	5.38	0	0
4.94	5.32	0	0
2.45	1.327	5.0	0
3.88	11.1	0.01	9.48
4.809	6.39	6.99	0
8.58	8.22	10.08	8.9
	5.71 9.95 7.68 7.49 4.94 2.45 3.88 4.809	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Source: Developed by authors based on [4-30].

Another reason results from researches of Yitbarek Takele [3, p.1859], who found in 2009 that when the market is highly competitive banks cannot charge different rates on assets and pay for liabilities; they rather are constrained to take the given rates of the market. In that case all banks in a particular market should have similar profitability or rate of return on their assets. But in reality we observe a wide variation in the return among banks. An explanation of this disparity could be that different types of assets and liabilities have different rates of return and costs, so banks can change their profitability by simply changing the composition of the portfolio of assets and liabilities.

Most Moldovan banks hold corporate securities portfolios of joint stock companies like "Moldova Stock Exchange" and "Depozitarul Național de Valori Mobiliare (National Securities Depositary)". Owning shares in these companies is determined by the fact that banks that want to operate on the capital market as a professional participant should hold a certain share in the respective companies' capital.

### 4. Conclusions

The majority of banks in the Republic of Moldova hold investment securities portfolio. In most cases, banks include in trading securities portfolio shares of insolvable debtors because their property is transferred to the balance sheets of banks.

The comparative analysis of investment portfolio for trading securities versus investment securities portfolio demonstrated that securities portfolio mostly consist of state securities. We noted that state securities have a higher share in securities portfolio because state securities are risk-free assets and contribute to maintaining the liquidity of banks.

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