# **Open Market Operations as a Main Tool of Monetary Policy**

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## **Abstract**

Importance of monetary policy is the main indicator of economic condition in the country. Some monetary policy tools used by central banks influence on money supply and short-term interest rate. Open market operation is the monetary policy tool, frequently used by central banks to overcome liquidity problem.

**Key words:** monetary policy, central banks, treasury bonds, open market operations

J.E.L. classification: E52, E580

#### 1. Introduction

USA was the first country where open market operations were first implemented. First communication between Federal Reserve and commertial banks was during Great Depression by purchasing governments securities to assamble free money. This type of relationship pushed financial institutions to realize that Federal Reserve System can influence on countries money supply. Creditability of commertial banks were increased when Federal Reserve was purchasing government securities on open markets. For coordination of open markets there was established Investment Committee on 1922, latelyon 1935 year, Investment Committee was replaced by Federal Open Market Committee.

Georgia is the country where Open Market Operations is used for overcome short-term liquidity problem. For this reason, National Bank of Georgia has refinancing loans, 1-month open market operations, implemented from 2016 year, certificates of deposit and treasury bonds.

#### 2. Literature review

Money turnover in accordance with countries development is the main topic of scientists and government attention. Georgian Scientists (Aslanishvili, 2015; Kovzanadze, 2014; Eliava, 2016; Papava, 2019) studied conduction of monetary policy problems of monetary policy transaction mechanism. Georgian authors working on topic point out that, open market operations play significant role on development of financial markets.

Monetary policy is the government's policy which influence on money turnover (Capmbell; Dolan, 1988). Charles Woelfel defines monetary policy as direction of money consumption in circulation. This means the control on money in circulation. The target of this kind of monetary policy is price stability and economic growth (Woelfel, 2000)

In USA open market operations were largely conducted in government bonds. Open market operations described as market operations in real capital (Wallance, 1979 p 24). Open market operations comprise purchases and sales of securities in the secondary markets either outright transactions or considering resale a purchase agreements (BIS Markets committee, 2019 p 7).

Open market operations have shown their great value in influencing the supply of money in relation to the county's volume of business (Burgess, 1964 p 226).

### 3. Open market operations

Central Banks of developed countries use Open Market Operations as a main tool of monetary policy. Commertial banks liquidity and creditability is regulated by Open Market Operations. It is effective mechanism to regulate creditability and liquidity of commercial banks. In the USA Open Market Operations is conducted by financila institutions (primary dealers), they have legal right to buy and sell government sequrities. Financial institutions have to meet some specific requirements to declare liquidity. (New York Fed, 2007)

Central Banks open market operations influence on commercial banks free money, stimulates or decreases their credit expansion in economics. From 2019 year National Bank of Georgia introduced new monetary policy tool Foreign Exchange options sale to filling up international reserves. According to this tool currency exchange will have strike price with exchange rate of the previous day. Option will only take place if exchange rate will be stronger than previous 20 days. This tool halps to avoid short term fluctuation of exchange rate. Another monetary policy tool Foreign Exchange auction (FX), is broadly used to maintain foreign exchange reserves at a equilibrium level. The interventions are conducted through open market operations. We have to point out that importance of FX arises from the government's position. When operating on international markets, governments' funds turnover (inflows and outflows) are managed by the National bank of Georgia. Thus, despite of positive balance on balance of payments, private sector can have resulted negative foreign balance, at the same time country can have positive balance. Same situation was during 2008-2009 economic crisis. Dynamics of Foreign Exchange auction can be seen in the table 1, below.

Table no. 1. Dynamics of trade on NBG's FX auction 2017-2019 years

Year of auction	Selling of USD	Purchasing of USD
2015	286 960 000	-
2016	280 000 000	293 350 000
2017	-	129 750 000
2018	-	197 500 000
2019	72 800 000	165 000 000

Source: National Bank of Georgia

Examination of the table 1, shows that during 2015-2019 years National Bank of Georgia has sold 360 040 000 USD on commercial banks and purchased 620 765 000 USD. In fact according to this dates currency reserves has been increased by 146 000 000 USD. Despite of currency interventions in 2015 year, exchange rate of Georgian Lari (GEL) was fallen approximately by 30%. On 2016 year exchange rate of Gel to USD was fluctuated from 2.35 to 2.28. Average exchange rate of GEL to USD 2017-2018 years was from 2.60-2.47. Nowadays national bank of Georgia purchased 165 000000 USD despite of currency crisis when exchange rate is fluctuated 2.67-2.96 only on September NBG decided to sell 40 000 000 USD for exchange rate regulation.

Open Market Operations is differentiated by Overnight Purchase agreement and REPO (repurchase) Operations. Repo operation is frequently used in Open Market Operations. During REPO operations government sells and buys treasury securities on previously agreed price. Main aim of REPO operations is to reduce fluctuation of interest rates and increase security market liquidity. REPO transactions is actively used in EU, Switzerland, United Kingdom, USA and other countries. Dynamics of REPO operations is shown on Figure 1. Oppositely in countries like Russia treasury securities are not liquid assets and open market operations aren't popular.

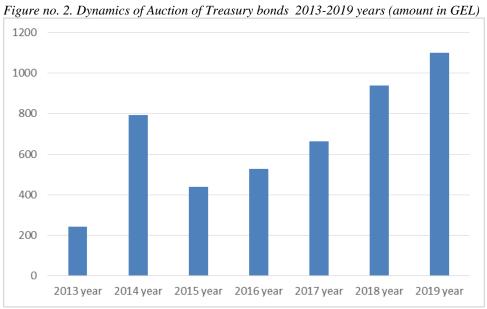
3,000 2,500 2,000 1.500 1,000 500 0 United Kingdor

Figure no. 1. REPO transactions by countries

Source: www.bis.org

Commercial banks liquidity can be managed by open market operations. To acumulate money resources all amount of purchased government securities is transfered on corresponding acounts in commertial banks. It is important that commertial bank starts lending money on business, but when commercial bank transfers money from accounts, it decreases free resources and the business has no funds (Kovzanadze, Kontridze, 2014, p 58). National Bank of Georgia has the Forecasting Group, that predicts liquidity by measuring autonomous sources of liquidity supply, and commercial banks liquidity demand. To resolve resistance with these components, National Bank of Georgia makes different kind of decisions: In some cases it shortens liquidity and sometimes adds liquidity for banks. To determine central bank reserves it is important to take into consideration not only Open Market operations but total size of lendings. In Georgia Open market operations are regulated by -"Regulation on Monetary Operations and Collateral Management", and "Organic Law of Georgia on the National Bank of Georgia".

During 2013-2019 years, the volume of open market operations is increased significantly. (See Figure 2). National Bank of Georgia conducts Open market operations through the auction. It is previously known the date of auction and nominal amount of emission. Information about obligations is derived from results of past auctions. Certificates of deposits, and treasury bonds are actively used by National bank of Georgia for open market operations.



Source: National Bank of Georgia

From January 11, 2012 National Bank of Georgia actively uses treasury notes, in this date they sell 20 000 000 Gel amount treasury notes at the NBG-s auction, there were participated 5 commercial banks and total demand was 44 000 000 Gel. Maximum yield was 8.98%. By end of 2012 year National Bank of Georgia sold 5 000 000 Gel 10 year treasury bonds, auction was conducted between 2 commercial banks and the demand was 5 020 000 Gel. On January 6, 2016 363-day government securities in amount of 40 000 000 Gel were sold at the Treasury Bonds Auction in Ministry of Finance. Total demand was 43 000 000 Gel, maximum yield was 13.3%. On 7 December 2016, 30 000 000 Gel's 2 year treasury bonds were sold at the auction held at NBG the auction conducted between 4 commercial bank. total demand was 52 500 000 Gel, min and max yield was 7.3%-7.9%. During 2017 year the total amount of treasury securities auction was 663 million GEL and average min exchange rate was 8.22 %, on 2018 amount of transactions was-940 million, and average minimum exchange rate -7.9%, on 2019 amount of transaction was -1 100 billion, and average minimum exchange rate was -7.4%. Open market operations take place on Bloomberg trade system, where trading are possible to make during 24 hours.

#### 4. Conclusions

Examination of the issue allowes us to generalize the following conclusions:

- ✓ Development of financial markets and liquidity of banking sector is stimulated by Open Market Operations. To improve condition on financial markets Georgia has to take into account experience of developed countries.
- ✓ In Georgia existance of floating exchange rate is significantly important because of unpredictable shokes on world financila markets. They can prevent domestic economics from negative effects.
- ✓ Highly developed financial markets is main prerequisite that influence on successful open market operations. This tool can play significant role in the economic growth, it is characterized by flexibility, and can be used for management of short-term money resources. Development of financial markets has positive influence on this process.
- ✓ Increase amount of repo operations provides banking sector with reliable funds that will be collateralized by treasury securities and simultaneously there will be possibility increase reserves.

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