

BRIEF REVIEW OF MODERN DEPOSITORY SERVICES

The suggested paper aims to briefly discuss and describe activities and functions of modern securities depositories considering an example of the United States, shortly review its Georgian analogue and at the end, determine how closely a country's securities depository and a stock exchange market relate to and influence each other.

One of the first securities depository appeared in the late 60s and early 70s in the United States [1], [2] as a solution to the so-called "paperwork crisis". At that time, brokers still exchanged paper certificates and checks for each trade, sending hundreds of messengers scurrying throughout Wall Street. Only on New York Stock Exchange used to circulate around 10-12 million paper securities and a single broker used to received and send thousands of them on a daily basis. It seriously hampered the trading process and in order to help reduce the backlog, brokers were forced to stop trading on Wednesdays and additionally reduce daily trading time. This solution on the other hand led to severe financial losses [1].

Two ways were developed to tackle the infamous crisis. The first solution was to immobilize physical stock certificates by maintaining them in a central location or depository, and to record changes of ownership using "book-entry" accounting methods where no certificates actually change hands [1].

The second approach to solving the paperwork crisis involved a concept called multilateral netting. If one broker does 100 trades in IBM, both buying and selling at different prices with a variety of different brokers, there are few opportunities for netting. By interposing a central organization as the counterparty to all trades, that broker's all trades in IBM can settle to one net position, and all money for trades in all securities can settle to a single dollar figure owed to or from the central counterparty [1].

The first modern type depository was created to support the process of immobilization. It was led by New York Stock Exchange and named Central Certificate Service (CCS) [3, 81], [4]. It was succeeded by the Depository Trust Corporation (DTC) and its oldest subsidiary, National Securities Clearing Corporation. In 1999 a holding company the Depository Trust & Clearing Corporation (DTCC) was established to combine the two [1], [2].

In fact, securities depositories can be divided into three categories: those offering settlement services, the so-called custodians and those of a general type – central securities depositories. The first mainly offer clearing and settlement services during securities trading. Such depositories often assume a role of a guarantor during a trade; give loans to trade participants, etc. They may even hold a bank license. Central securities depositories offer such services as well.

Under a target group of custodians fall various shareholders, investors and companies whose stock is traded publicly. The services offered include making deals on behalf of a customer, underwriting securities, securing clients' interests, providing them with necessary information, consulting on various financial issues, etc. Custodians usually offer two stock underwriting alternatives, selling it either under the best efforts or a private placement agreement [5], [6, 591-599].

In the best efforts agreement a securities depository sells the securities on a commission basis with no guarantee regarding the price the issuing firm will receive. In a private placement, securities are sold to a limited number

of investors rather than to the public whole. The buyers of private placements must be large enough to purchase huge amounts of securities at one time [6, 591-599].

Lower level depositories like registrars usually keep a registry of securities traded and serve mainly smaller companies and their stockholders.

Countries having rather meager securities exchange market do not need more than one depository and as a rule, a single central depository can easily satisfy needs of customers. That is why usually there is a word "central" attached in front to the depository name to emphasize its status. In fact, Georgia belongs to countries where securities are traded in small quantities.

Establishing and implementing the unified securities accounting to the system that will be adhered by all types of depository and similar institutions (like banks, brokerage companies, non-resident depositories, etc.) is a core function of a country's central securities depository.

On the other hand, a depository might also intervene in affairs of pension funds. Such funds usually hire another company to manage and invest their customers' deposits to accumulate a serious amount of money. Without gains from investments a fund will be able to give away only as much as there was initially deposited. Usually, a securities depository controls the investment process to make sure that funds are being used in a proper manner and invested according to the country legislation. In another words, a depository overlooks and keeps an eye on a structure of pension funds' portfolios, their content and profitability [19].

According to the legislation of Georgia, safekeeping, consulting and accounting of securities is a privilege of their nominal owners that usually are represented by brokerage companies, commercial or investment banks as well as a central depository. These institutions open securities and money saving accounts for their clients. Although securities are registered under the name of a nominal owner, a depository has a responsibility to deliver dividends paid out on those securities to the investors who really paid for and invested in these capital issues. Nominal owners attend shareholders' meetings and secure interest of their clients [15], [16].

A fortune of a securities depository is closely related to a stock exchange market. The more securities are traded the larger is a demand on services offered by a depository. Thus, as its incomes increase, the organization's motivation and possibility to develop and grow rises.

In order to better imagine what a modern depository looks like, let us consider an example of the abovementioned Depository Trust and Clearing Corporation (DTCC), the US depository. It has more than 40 years of experience and is nearly 30 years older than its Georgian counterpart - Georgian Central Securities Depository. DTCC is a holding company having several subsidiaries and joint ventures and its head office is located in New York [7].

DTCC together with its subsidiaries clears and settles virtually all broker-to-broker equity, listed corporate and municipal bonds, offers support and services regarding mortgage-backed securities, money market securities, and over-the-counter derivatives [8, 9]. Today, DTCC serves not only the securities issued in the US, but also the ones issued abroad [7]. By March 31, 2012 unaudited amount of its total assets reached almost 3,4 trillion US dollars [10].

One of the most interesting and useful services DTCC offers is Inventory Management System (IMS) that allows participants to centrally manage their own settlements as a way of furthering straight-through processing. IMS offers features that allow participants to have greater control over the order and timing of the submission and recycling of their deliveries into the processing system. This eliminates need for each

participant to build and fund its own system. IMS offers ability to re-introduce dropped transaction, greater participant control over the order and timing deliveries, etc. [11].

Moreover, DTCC's Mortgage-Backed Securities Division is the sole provider of automated post-trade comparison, netting, risk management and pool notification services to mortgage-backed securities market. Its mission is to reduce the costs and risks associated with trading in the mortgage-backed securities (MBS) market. This service provides real-time automated trade comparison and confirmation, net settlement and pool notification services, assessing and managing financial risk, evaluating and improving MBS market systems and technologies, and enhancing communication among MBS market participants [12].

The division provides its specialized service to various major companies, such as: Government National Mortgage Association (GNMA), Federal Home Loan Mortgage Corporation (FHLMC) and Fannie Mae (FNMA) MBS programs [12].

In addition, DTCC's Insurance and Retirement Services offer a suite of streamlined processing and compliance-driven solutions for carriers and their distribution partners through a secure, centralized infrastructure. Financial Activity Reporting (FAR) enables insurance carriers to provide distributors with daily annuity and life insurance financial transaction information, giving them a comprehensive and accurate picture of client accounts and helping them supervise and manage those accounts. With FAR, customers can improve compliance oversight by using data to monitor investment activity related to investment suitability, market timing, late-day trading, money laundering, etc. DTCC's Securely Managed and Reliable Technology (SMART) network secures confidential data and provides centralized, end-to-end managed communications for all post-trade clearance and settlement processing [13].

The first securities depository in Georgia appeared in 1999. Today it is known as the Georgian Central Securities Depository (GCSD) [14]. Despite the presence of a word "central" in its name, Georgian legislation does not prohibit having more than one securities depository for establishing of which a special license is required [15].

Joint Stock Company GCSD mostly serves brokerage companies and investment banks. The founders of the depository consist of the Georgian Stock Exchange and commercial banks: Bank of Georgia, TBC Bank, VTB Bank Georgia, and Kartu Bank. Nowadays, there are eight brokerage companies in total using the services of GCSD.

The central depository accounts for securities issued in Georgia and stores them under its name as a nominal owner. During nominal ownership capital issues of an investor are kept and registered under a name of a broker, bank or a depository. Despite it, the only person that can manage the securities entirely is the investor himself. In addition, the depository offers to open, properly maintain and close securities accounts for various individuals and entities. The central depository has a right to be a securities registrar and keep securities register [14], [15], [16].

GCSD offers its customers settlement and clearing services as well. This includes netting, assuming a role of a guarantor for trading parties to fulfill their obligations and controlling the trading process [15], [16].

The depository has a right to dematerialize securities. It is quite the same as immobilization with one exception – during dematerialization securities exist only virtually and are listed in an electronic registry [1, 15, 17]. This ensures that securities stay safe and do not take up space for storage.

In addition, the central depository is responsible for disseminating information about international standards of depository service and participating in creation and propagation of national depository service and electronic registry standards [14], [15], [16].

Number of Securities Deposited in 2011

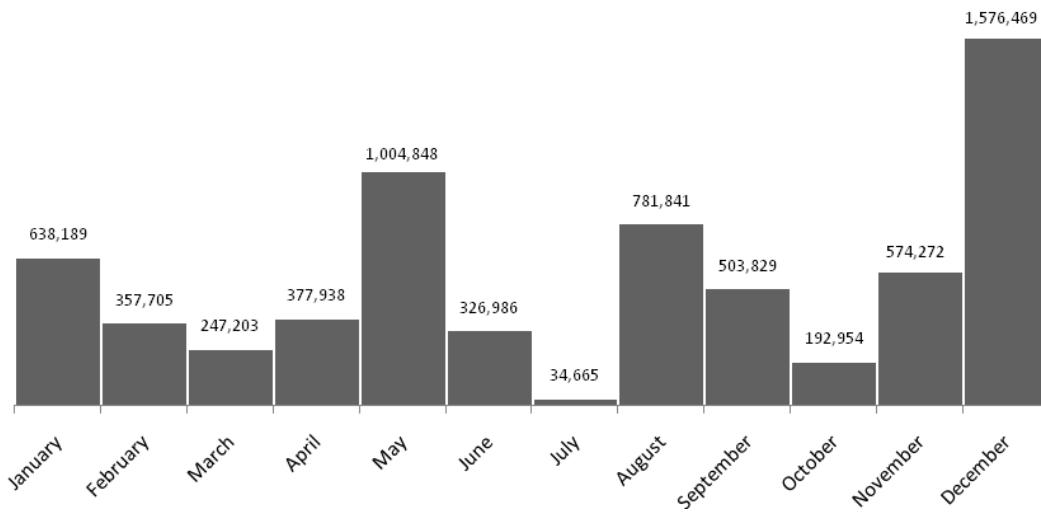


Figure 1

By December 31, 2011 in GCSD it had been deposited total of 6.6 million securities and 14.3 million GEL (see figures 1, 2) that is 0.34 times less than the figure of the previous year. In 2011, 366 843 operations were conducted. As mentioned above, there is a positive correlation between a stock exchange market and a securities depository. In order to find out how closely they correlate, yearly cash flows of the two have been compared. It was found that the correlation is 0.83 meaning that the two are quite interrelated as expected (for calculations see annex 1).

Amount of Funds Deposited in 2011

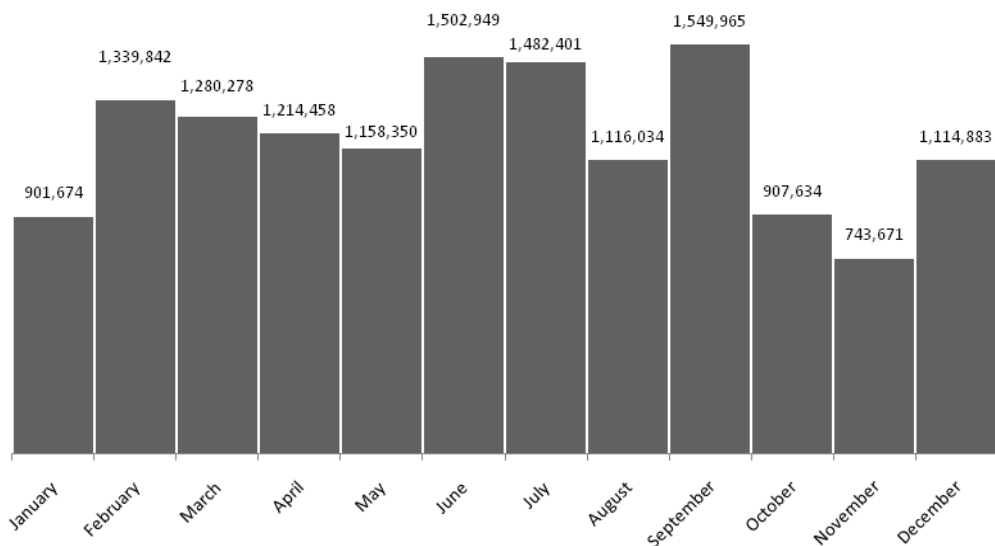


Figure 2

As DTCC is far more refined and sophisticated compared to GCSD, making a parallel between the two is useless. DTCC serves a huge market whereas GCSD is making its first steps right now. Actually, it is no wonder

why two depositories are not alike - the difference between the two is 30 years. However, GCSD has some advantages as it can use the expertise of other more developed depositories and not make the same mistakes they made.

Nowadays, GSCD as well as GSC is an exotic fruit in Georgia. In order the right people to find about them, it is necessary to give them all the needed information. When GSC starts to grow, the demand for depository services shall rise and, eventually, we will get a more stable and stronger economy.

Annex 1

Cash Inflow/Outflow (GEL)						

Cash Inflow/Outflow from Investing Activities (GEL)						

*JSC Georgian Stock Exchange

Correlation was calculated by using the following formulae:

$$r = \frac{1}{n-1} \sum \left(\frac{X - \bar{X}}{S_x} \right) \left(\frac{y - \bar{y}}{S_y} \right)$$

$r_1 = 0.83$

$r_2 = 0.77$

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