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DEVELOPMENT TRENDS OF GEORGIAN CAPITAL MARKET AND PENSION FUND

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ABSTRACT

Since January 2019, a cumulative pension system has been launched in Georgia. The reform's main goals are reducing fiscal pressure and ensuring a "decent" pension at retirement age. In addition, the possible positive impact of the accumulated pension fund on the capital market of Georgia is important. The purpose of the paper is to analyze the current reality of the capital market of Georgia. In order to determine what opportunities it creates in the investment process of the Georgian pension agency. During the research, we mainly used statistical analysis methods. The discussion is based on indicators such as: composition of total debt of non-financial companies in Georgia; liquidity and activity on the Georgian stock exchange; total balance of corporate bonds denominated in GEL; the ratio of the total capitalization of the stock market; assets of the Georgian pension agency and its investment portfolio.
Due to research findings, although there is a lack of institutional investors in the financial markets of Georgia, there are no existing securities in the local market, which would allow the pension agency to make more investments in the local capital market. Growth at such a rate requires investing in assets with a higher risk than the existing ones. In particular, since the capital market assets have a higher rate of return, it is important for the policy of the pension agency to either increase the limits for investing in the foreign market, or to be more opportunities and alternatives in the local capital market.

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1. Introduction.

The purpose of the paper is to analyze the current reality of the capital market of Georgia, in order to determine what opportunities it creates in the investment process of the Georgian pension agency. Despite significant progress in recent years, Georgia's capital markets remain nascent. Key reforms have strengthened the legal and regulatory framework, including the creation of a funded pension fund (a potential addition to the local institutional investor base), the adoption of derivatives legislation and the introduction of a covered bond regulatory framework. Money-market activity has been growing steadily and financial instruments indexed to the reformed interest rate benchmark are becoming established. Still, a high dollarization rate, a lack of diversity of capital market products, low liquidity, and a shallow investor base are limiting long-term local-currency funding options for Georgian issuers.

Georgia's capital market is characterized by a small and less diversified domestic institutional investors' base and limited foreign investors' activity. No large local institutional investor, such as pension fund, insurance sector or investment funds (established under the Law on Investment Funds) is active in the capital market. For example, as a whole, only 2% of insurance sector assets are invested in financial assets. As for the pension fund (its assets have already reached 5 billion GEL), its investments within the country still mainly consist of bank deposits.

The concentration of investors is also a problem. Among local institutional investors, commercial banks are the most active, this trend increases the concentration of specific types of investors. Apart from institutional investors, foreign currency denominated investment products are also preferred by retail investors. A significant share of retail investors' savings is invested in dollar-denominated treasures. This means that a significant share of private savings is less mobilized in instruments denominated in GEL, and therefore the possibilities of financing in GEL for corporations and households are limited.

Since defined contribution (DC) schemes (as the scheme in Georgia) are designed in such a way that the amount of pension to be received depends on the investment returns generated by the pension funds, the aim of the funds should be to maximize these returns. Achieving high returns requires high-risk investment. In October 2022, amendments to the law "On Funded Pension" were initiated, providing for the expansion of investment opportunities. The fund can invest only 20% in global instruments, and therefore only 20% of the portfolio can be denominated in dollars, while the rest is intended for the local market. As such, more than GEL 5 billion are required to be invested in Georgia, at a time when the local capital market, especially for equity securities, is so underdeveloped.

This means that the pension agency does not have a large choice of investment instruments in the local market. Its investments mainly consist of banking products. Banting products do not give a high rate of return. The banking sector is the key actor in the Georgian capital market taking into account the conditions of the capital market indicators such as: **financial markets Index** - the World Bank's financial markets index. Its dataset contains nine indices that summarize how developed financial institutions and financial markets are; **composition of total debt of non-financial companies in Georgia** - variety of the financial products and services of the financial sector to meet the needs of different types of firms throughout their life cycle. The data shows the dependence of companies on foreign financing sources, the volume of corporate bond issuance and the share of short-term debt in their financing structures during 2013-2023; **liquidity and activity on the Georgian stock exchange –** The abolition of the concentration rule in Georgia, led to the shift of transactions from the exchange to the non-exchange environment. The data shows the volume of secondary trade during 2007-2023; **total balance of corporate bonds denominated in GEL** - The index of corporate bonds denominated in GEL includes bonds issued by international financial institutions and the market of non-government bonds during 2014-2023; l**ocal market liquidity index -** the local market liquidity index which is calculated by the ratio of the value of transactions carried out in the secondary market during the year to the average annual bond balance during 2015-2023; **the ratio of the total capitalization of the stock market in relation to the GDP of Georgia -** the capitalization of the Georgian stock market and its share in relation to the GDP of Georgia during 2018-2023; a**ssets of the Georgian Pension Fund -** the assets of the pension fund after the implementation of the reform during 2019-2024 May; **georgia's pension agency's investment portfolio -** the pension agency's investment portfolio, within 5 years after the implementation of the reform during 2019-2023. After reviewing the mentioned indicators, we conclude that the capital market of Georgia was unprepared for the appearance of a large institutional investor in the country.

2. Literature review.

In order to determine the development course of the capital market and pension agency investment activities in Georgia, it is important to get acquainted with the papers of various scientists' due to this issue.

The factors that affect growth and development of the capital market are numerous. Increasing the level of aggregate savings creates a potential pool of funds that encourages the capital market to grow. It follows that a declining level of savings would dampen growth prospects of the market (Serven and Solimano, 1992). When the market is shallow and characterized by low level of demand and competition, increased foreign participation could lead to substantial growth and development. On the contrary, declining rate of foreign participation, according to Mishra et al. (2001), dampens the growth potentials of the market. Due to Silagadze (2022) it is necessary to maximize the use of domestic resources, attract foreign investment, actively implement post-pandemic projects, and meet domestic and foreign demand with competitive domestic products, create an efficient employment system and encourage the establishment of regional financial centers. When talking about the low development level of the financial markets in Georgia, the low development level of one of its main components, the capital market, is implied. This circumstance, as is generally known, makes doubtful the final goal of the financial development of every transitional economy (Papava, 2005).

Georgian researchers emphasize the problem of concentration of institutional investors in the capital market (Aslanishvili, 2020). The author suggests that Georgia needs an independent from Commercial Bank/Holdings and National Bank of Georgia the Supervisor and Stock Market structure - to have the real alternative source of funding. Commercial Banks/Holding should be prohibited from Stock Market activity (depositors risk mitigation- international practice).

The development of the capital market, however, does not depend only on country-specific factors. Bai and Green (2010) attribute the development to the degree of integration among international markets. Integration of markets may be of particular advantage to emerging capital markets, as it tends to shift portfolio holdings of investors away from developed capital markets towards the emerging capital markets (Campa and Fernandes, 2004). This process leads to increased risk-sharing among international investors and therefore emerging capital markets become less sensitive to domestic economic shocks. Bekaert et al. (2008) report that capital markets in several countries are underdeveloped because they are not effectively integrated with other capital markets in the world. The same can be said due to the capital market in Georgia. We consider that it is difficult for emerging country markets to develop without international integration. We will discuss it in more detail in the conclusions part of this paper.

Pension funds play an important role among institutional investors, as they are long-term investors and take on far more risk when it comes to portfolio allocation than non-institutional investors, pension funds are significant players in the institutional investment space.

The literature lists a number of important roles that pension funds play, including building institutional capital, transferring funds, managing risk, lowering price volatility, integrating the global capital market, diversifying financial products, and boosting competition. Davis (1995), Vittas (1998), and Blommestein (2001) claim that these functions will lead to a more developed stock market and to an overall improvement in financial stability. Dayoub and Lasagabaster (2008) cite the positive impact of pension funds on domestic capital markets, both for economies with developed financial systems and for those with less developed financial systems. Studies on the relationship between pensions and capital markets suggested that the growth of pension markets typically induces the development of the stock and bond markets, thus playing an important role in increasing the efficiency of capital markets.

Catalan et al. (2000) validated the Granger causality between contractual savings, including pensions and insurance, and the growth of stock markets for 14 OECD countries and five emerging markets from 1975 through 1997. The results revealed that the impact of contractual savings on the stock market was greater in emerging countries than in developed countries.

On the contrary, Impavido et al. (2003) conducted a 1st-difference generalized method of moments (1st-difference GMM) for 43 countries to analyze the effects of contractual savings on the development of the stock and bond markets over five years from 1998 to 2002. According to the results, first, an increase in contractual savings had positive effects on the size of the stock and bond markets which were non-linear and played a role in increasing the real stock market returns and decreasing the variability of the stock market returns.

Meng and Pfau's (2010) research results indicated that pension assets not only provided abundant liquidity to the stock and corporate bond markets but also drove the development of financial markets with large-scale pension investments. In particular, they demonstrated that pensions had a larger impact on the stock markets than on bond markets. Moreover, they demonstrated that when the countries were classified into those with and without developed capital markets, the impact of pensions on capital market development was more significant in the countries with higher levels of capital market development. However, the impact of pensions was not statistically significant in countries where capital markets were not developed.

Raisa (2012) used data from 1994 to 2011 for European Union countries to analyze the impact of pensions on the stock markets based on ordinary least squares (OLS) and estimated generalized least squares (EGLS). Their analysis reflected the fact that if the old-age dependency ratio declined, the marginal demand for financial assets would decrease, thus negatively impacting capital markets. According to the results, the growth of pensions in EU countries positively impacts the development of the stock markets. The researchers suggested that, as the openness of the capital markets increases, the overseas investment proportion of pension assets surges, with a negative impact on domestic capital markets.

The study by Hu (2006) shows a positive effect of the growth of pension assets on equity prices across OECD economies and EMEs. Hu looked at the relationship for both the short run and the long run. It was found that a 1% increase in the pension assets-to-GDP ratio in OECD countries would result in an increase in equity prices of 0.3% in the short run and 0.1% in the long run. Similar results are observed for EMEs, but the effect is stronger. One reason for this difference might be the smaller market size in EMEs, making it easier for pension funds to influence prices.

Cosmin et al. (2015) estimated the connection between pension reform and capital market development using a sample of 10 CEE countries (Bulgaria, Czech Republic, Hungary, Estonia, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia) for the period 2001–2010. Using a single-equation error correction model as a proxy indicator for capital market development, they expressed the market capitalization of listed companies as a percentage of GDP (MC). The results confirm the existence of a strong positive short-term effect, as well as a positive, albeit weaker, long-term effect of the pension funds' assets on market capitalization.

Rocholl and Niggemann (2010) analyzed 87 pension funding reforms in 57 countries between 1976 and 2007. The authors found evidence that a country's pension system is an important determinant for the development of its capital markets. Furthermore, they found that the effect is particularly significant in emerging markets with less developed capital markets. Further evidence from a cross-sectional analysis suggests that the degree of pension funding is an important determinant of the cross-country variation in capital market development. It remains robust even after controlling for other important determinants of capital market development, such as the legal framework and trade openness.

The study by Bijlsma el al. (2018) suggests that the role of institutional investors as pension funds and insurance companies in financial intermediation will increase in the future. This may positively affect economic growth as these institutional investors can be expected to be more committed to long term investments. The authors analyzed the effect of pension assets on economic growth in OECD countries for the period 2001–2010 using a cross-industry, cross-country regression focusing on the difference in dependence on external finance across manufacturing industries.

Bayar et al. (2022) investigated the effect of pension funds and insurance companies on stock market development in 15 emerging markets over the 2004–2019 period through cointegration and causality tests.The authors findings confirm that financial market development is an important factor that affects the activity of pension funds and insurance companies, but the authors also find arguments for the fact that, in some countries, pension funds and insurance companies contribute to the stock market development in the long term. Therefore, policymakers can contribute to the stock market development and, through this, to a more adequate financing of the economy. On the other hand, they can contribute to the pension funds and insurance companies' good functioning, only considering the institutional investors and capital market relationship and by using the right tools and finding the best strategies that can stimulate investments in equity by pension funds and insurers.

Mandatory funded components in pension systems may promote savings for the economy and investments, and might alter the macroeconomic links between pensions and the economy, while simultaneously contributing to the solution of fiscal dilemmas. They do so by generating income for pensioners and alleviating the general government budget from a part of the implicit pension debt in the long term (Symeonidis et al. 2021).

Pension funds are huge financial assets that have the potential to transform the capital market and promote economic growth. The study by Assefuah et al. (2023) examined the effect of pension funds and institutional quality on capital market development in Africa using a system GMM estimation method. The study found that pension funds and institutional quality have a negative impact on capital market development. This means that pension funds affect capital markets. When pension funds, as a variable, interacted with institutional quality, it was proven to have a negative impact on the capital market development. This may be as a result of the underdeveloped nature of Africa's financial system. However, both pension funds and institutional quality had a positive and highly significant relationship with financial development. This indicates that fund managers are more likely to invest in bonds than stocks because of their volatile nature and may shift more focus to the money market – because of the fixed and reliable income it provides—than the capital market where stocks are volatile in nature.

Due to Symeonidis et al. (2021) funded schemes make contributors more subject to the risks of fluctuations in stock and bond markets, it is very important to anticipate possible rates of return and identify investment strategies to achieve them, especially in an era where quantitative easing has reduced returns greatly. In the long term, different combinations of contribution rates, rates of return and annuity values, indicate that it is possible to achieve a decent replacement rate from the funded component, which can contribute to increasing the total replacement and income for old age. Such a component can make a valuable contribution to overall system adequacy.

In sum, the selected empirical support the hypothesis that pension funds have a positive impact on financial market capitalization. Regardless of the methodological framework, most of these studies conclude that pension funds positively influence capital market development. There are differences in the results that could be related to the financial development of the country and its equity markets.

3. Methodology.

During the research, we used quantitative, qualitative, statistical analysis, grouping, inductive, deductive and synthesis methods. The work is based on the research of Georgian and foreign scientists about the development of the capital market and the role of the pension fund in the country's financial system.

The main goal of the authors is to familiarize with the theoretical guidelines and to compare and analyze the results of the research of local and foreign scientists and, based on this, to offer theoretical discussion and recommendations.

Statistical data of international and local organizations are used in the work; materials of periodicals; statutory and statistical reports of Georgian and foreign central banks and government bodies; as well as actual and theoretical data found in the databases of the Georgian Pension Agency, the Georgian Stock Exchange, the World Bank, the International Monetary Fund, the National Statistical Service of Georgia, the Ministry of Finance of Georgia, the Ministry of Economy of Georgia and many other organizations.

The research consists of several stages:

- In the first stage of the research, we review the research papers of Georgian and foreign scientists about the development of the capital market and the role of the pension fund in the country's financial system.
- The next stage is the process of collecting and analyzing data in order to discern patterns and trends due to the capital market's condition in Georgia.
- After determining the current state of the Georgian capital market based on the analysis of the given indicators, we will consider the opportunity provided by the 5 billion fund of the pension agency of Georgia. What kind of reality does the capital market of Georgia face with this

opportunity and to what extent is it possible that the mandatory accumulated pension scheme contributions become a catalyst for the development of the capital market.

The main challenges.

Three decades after gaining independence, compared to the world's median indicator, the level of development of the financial market of Georgia is still low (chart 1). Despite the progress during the last few years, the challenges remain. For example, a high dollarization rate, a lack of diversity of capital market products and low liquidity on the stock exchange are limiting the ability to frequently tap the local capital market for funding options for Georgia's private sector.

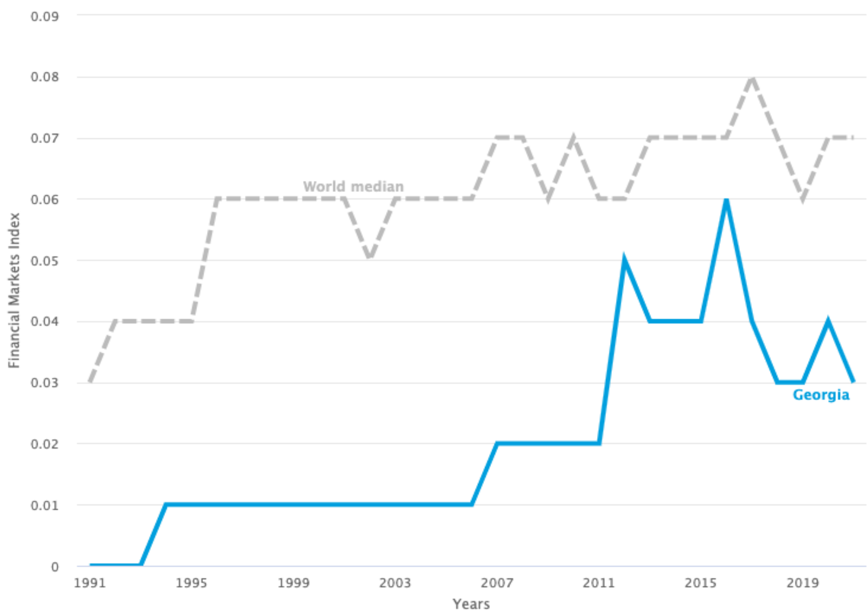

Chart 1. Financial Markets Index, 1991-2021.

Source: World bank https://prosperitydata360.worldbank.org/en/economy/GEO.

(1) Underdevelopment of the capital market implies that there is both a lack of issuance of financial instruments and a scarcity of investors in the market. The largest part of the capital market of Georgia is the state securities market, the secondary market of which is relatively inactive. The activity of the secondary market of government bonds is low. That is a problem because the liquid secondary market helps to form the benchmark curve, which in turn is considered a prerequisite for the development of other segments of the capital market. A well-defined benchmark yield curve is one of the main factors in evaluating investment instruments. The yield curve plays an important role in the development of such private sector investment products as corporate bonds and structured securities.

(2) The debt of the corporate sector consists mostly of bank loans. Businesses in Georgia consider loans from commercial banks as the main source of financing (Chart 2). Therefore, it is important to gradually increase the emission of debt securities along with the development of the capital market. As mentioned in the FSAP report of the World Bank, access to finance in Georgia remains one of the main challenges for the growth of small and medium-sized businesses. High financing costs for SMEs are also caused by the perception of high credit risk due to information asymmetry, as well as demand-side constraints such as informality, weak financial management and business skills. Despite the well-developed banking credit products, the lack of variety in other financial products and services (such as leasing, factoring, and equity financing) limits the ability of the financial sector to meet the needs of different types of firms throughout their life cycle.

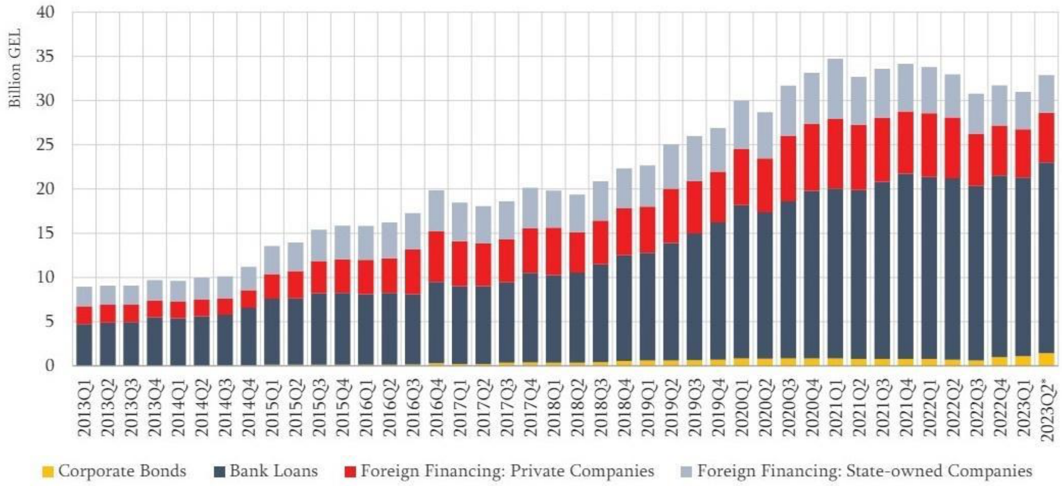

Chart 2. Composition of total debt of non-financial companies.

Source: National Bank of Georgia.

(3) Low liquidity and activity on the Georgian stock exchange. The abolition of the concentration rule in Georgia in 2007, which meant mandatory trading of shares and bonds on the stock exchange, led to the shift of transactions from the exchange to the non-exchange environment. This led to a sharp drop in the liquidity of the stock market. The volume of secondary trade fell from 70 million dollars in 2008 to 10 million dollars in 5 years. The number of licensed investment firms and registrars was halved. According to the amendments made to the Law "On Securities", trading of securities outside the stock exchange and through registrars has been allowed. As a result, 5 years later, by 2013, 94% of transactions were already done outside the exchange, through registrars. If the average volume of share trading on the stock exchange was 50 million GEL in 2004-2007, it decreased to 5 million GEL in 2008-2011, and if the average number of stock exchange transactions was 3,500 in 2004-2007, it decreased to 1,500 in 2008-2011. **This led us to the point where one of the most important financial institutions, in the form of the stock exchange, became virtually non-functional in the country. However, it should be noted that after several years of regression, an increase in activity on the stock exchange was observed during the past year** (Chart 3 and Chart 4). As of December 31 2023, securities of 28 issuers were admitted to the trading system of the Georgian Stock Exchange. In 2023, the total value of transactions recorded in trading sessions and on the exchange amounted to 1.8 billion GEL (19.3 million pieces of securities). But a huge share of this activity comes from only one issuer. In 2023, most of the transactions came from the non-exchange transaction on shares of the Bank of Georgia, which amounted to 1.7 billion GEL.

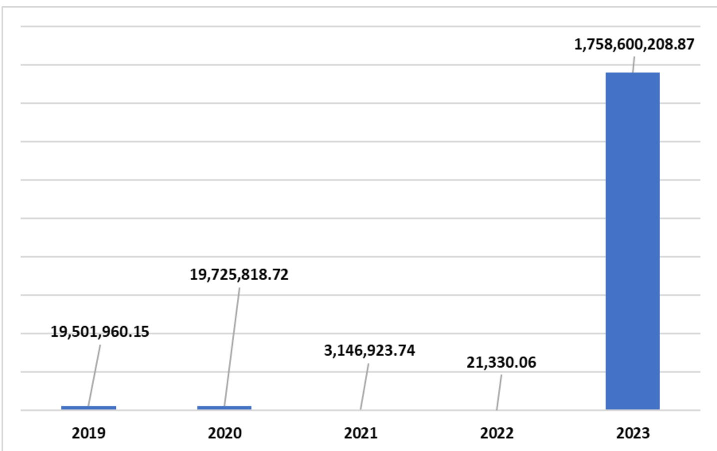

Chart 3. General information of the Georgian Stock Exchange regarding the main indicators of trade by issuers (shares) Value in GEL.

Prepared by the author, using data from the Georgian Stock Exchange https://gse.ge/.

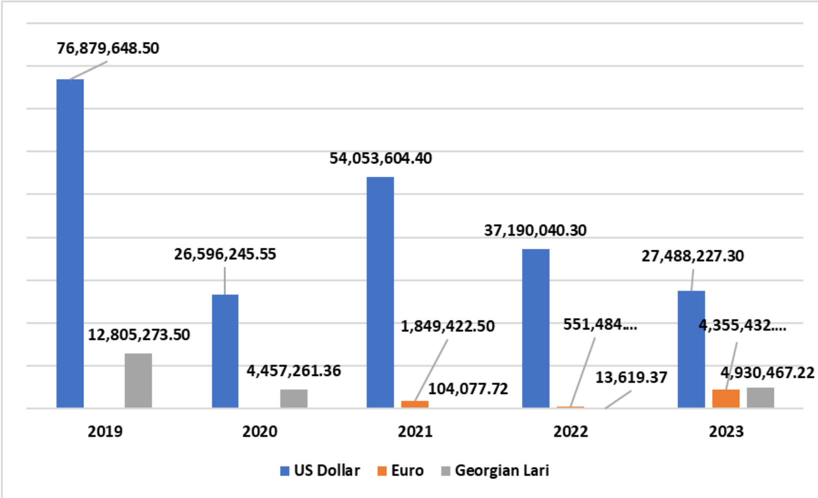

Chart 4. General information of the Georgian Stock Exchange regarding the main indicators of trade by issuers (bonds)[1].

Prepared by the author, using data from the Georgian Stock Exchange[2], using data from the Georgian Stock Exchange https://gse.ge/.

(4) The domestic non-government bond market is mainly represented by international financial institutions. In the direction of increasing access to finance, the most important indicator in relation to GDP is the total balance of corporate bonds denominated in GEL. The index of corporate bonds denominated in GEL also includes bonds issued by international financial institutions. The market of non-government bonds mainly consists of international financial institutions. According to the data of the National Bank of Georgia, in 2023 the bond market increased by 39.6% compared to the previous year and its size was 5.32% of the gross domestic product. **54.4% of the issued bonds were bonds denominated in GEL issued by international financial institutions.** It should be noted that the market of bonds issued by international financial institutions grew by 6.4%, and the segment of corporate bonds grew by 121.9%. As a result, at the end of 2023, the size of the corporate bond market amounted to 1.947 billion GEL. On average, in the period 2018-2023, the growth rate of the public corporate bond market reached 38.7% (Chart 5).

Chart 5. Balances of non-government bonds at the end of the period (2014-2023, Millions of Gel).

Source: National Bank of Georgia.

[1] The exchange rate of the GEL against the US dollar and the euro is taken according to the day of each transaction, at the official exchange rate established by the National Bank of Georgia.

[2] The volume of operations carried out in dollars and euros has been converted into GEL for greater visibility, and the volume in the case of all three columns on the chart is shown in GEL with the corresponding values.

(5) Market liquidity remains a big problem. According to the report of the National Bank of Georgia, the local market liquidity index in 2023 (calculated by the ratio of the value of transactions carried out in the secondary market during the year to the average annual bond balance) is different for various segments of the bond market. For bonds denominated in foreign currency in the corporate securities market, this indicator is 4%. As for treasury securities, the liquidity rate was 13%, taking into account the operations of the National Bank, and without it - 6%. **Liquidity on the GEL corporate bond market is still 0%** (Chart 6).

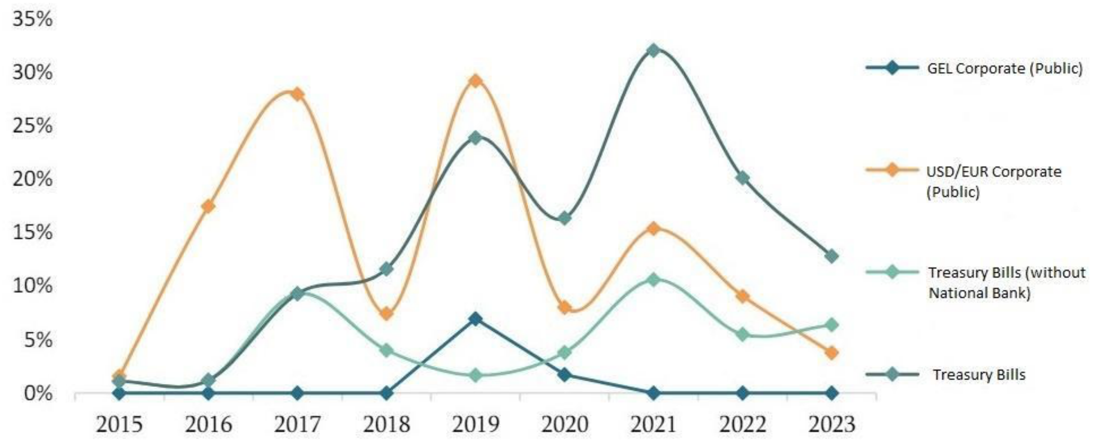

Chart 6. Secondary market activity of debt securities issued in Georgia (2015-2023).

Source: National Bank of Georgia; Stock Exchange of Georgia.

The chart shows the secondary market activity during the year by the ratio of the volume of secondary market transactions to the average annual balances of securities.

(6) To assess the level of development of the capital market, we can also use such an indicator **as the ratio of the total capitalization of the stock market in relation to the GDP.** According to Table 1, the capitalization of the Georgian stock market is increasing after 2018, its share in relation to the GDP of Georgia decreased in 2021-2022, however, in 2023, it increased again and amounted to 4.5%. In line with the 2023-2028 strategy for capital market development, the goal is to increase the market capitalization of listed stocks to 6.5% of GDP by 2025 and to achieve a level of 9% by 2028. Given the strategic intent for the stock market to emerge as a substantial alternative financing source for the private sector, the current dynamics in capitalization underscore the challenges confronting the effective mobilization of required financial resources for development.

Table 1. Total capitalization of the Georgian stock exchange in relation to the GDP of Georgia (million GEL).

	2018	2019	2020	2021	2022	2023
Total capitalization (million GEL)	1,963	1,963	2,366	2,368	2,290	3,548
GDP (million GEL)	44,599	49,253	49,267	60,003	72,266	79,350
Share in GDP	4.4%	4%	4.8%	3.9%	3.2%	4.5%

Source: Georgian Stock Exchange, Ministry of finance of Georgia.

(7) The role of the pension agency. The main challenges facing pension funds around the world are a low level of diversification, rising inflation, and declining real incomes. Pension funds are struggling to achieve planned returns, and investors are asking for investments in novel and potentially riskier products. Obviously, fund managers assess these requirements in the context of their obligations. The Georgian pension agency, which was launched on January 1, 2019, started the active investment process only in August 2023. By May 2024, the assets of the pension fund reached 5 billion GEL (Chart 7). The assets accumulated by the pension agency have been growing rapidly since radical reform was made to the pension system. These assets are increasingly providing a source of investment funds for the domestic financial market. Pension fund investments are expected to increase the availability of long-term funds, enhance competition, induce financial innovation, and improve corporate governance.

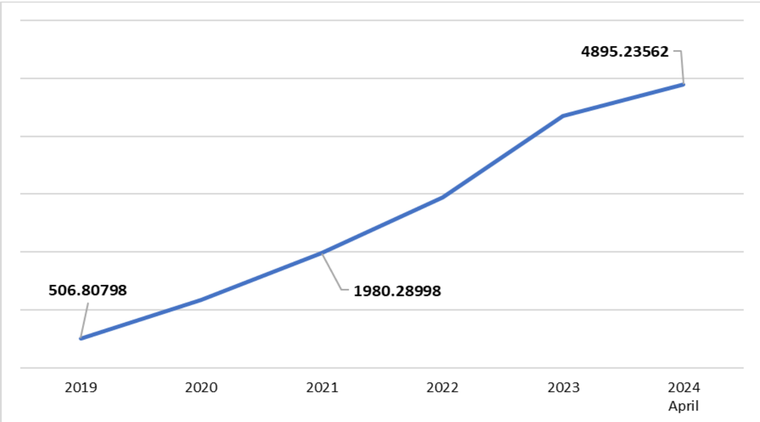

Chart 7. Assets of the Georgian Pension Fund, at the end of the respective year, million GEL.

Prepared by the author, using data from Pension Agency of Georgia https://pensions.ge/.

The risk level associated with pension assets investment can be assessed based on the limitations on certain types of assets. For example, Canada, Sweden, and New Zealand have 100% caps on both high and low-risk assets, meaning they have no limit and can invest 100% of their savings in these assets, which is inapplicable for Georgia. Poland has no restrictions on investing in shares, although, for example, up to 40% of assets are allowed to be invested in bonds issued by the public and private sectors, while investment in real estate is not allowed. The investments of Georgia's Pension Assets shall be carried out through three Investment Portfolios with different risk and expected return (Table 2).

Table 2. Limits for placement in assets carrying different risks for Pension Agency of Georgia.

	Low-risk	Medium-risk	High-risk
Cash, cash equivalents and deposits (including bank CDs)	Up to 75%	Up to 50%	Up to 25%
Fixed Income Securities	Up to 100%	Up to 75%	Up to 50%
Equity securities	Up to 20%	From 20% Up to 40%	From 40% Up to 60%
Other assets		Up to 10%	Up to 10%
Foreign Currency Denominated Assets	Up to 20%	Up to 40%	Up to 60%

Prepared by the author, using data from Pension Agency of Georgia https://pensions.ge/.

As for the pension agency's investment portfolio for 2023, the main burden falls on certificates of deposit. As of December 31, 2023, 1,966 million GEL (45.1% of the total portfolio) was placed in certificates of deposit; 837 million GEL (19.2%) in global shares; 815 million GEL (18.7%) in Georgian treasury bonds; 671 million GEL in current accounts (15.4%) and only 69 million GEL - 1.6% of the total portfolio was placed in Georgian corporate bonds and Eurobonds (Chart 8). As of January 31, 2024, the Pension Agency of Georgia has made only four investments in Georgian corporate bonds (27.5 million GEL and 6 million USD).

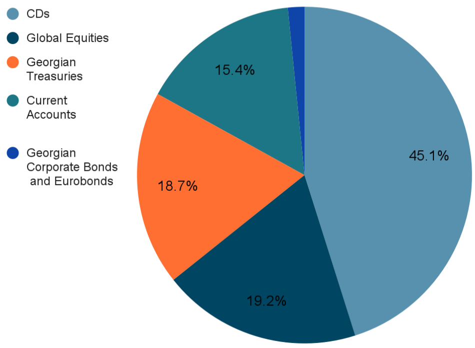

Chart 8. Pension Agency Investments by Portfolios as of December 31, 2023.

Source: Pension Agency www.pensions.ge.

As the theory predicts, pension funds can positively influence the development of capital markets through their long-term investment horizons, by reducing asymmetric information, increasing competition and efficiency in the financial markets, and developing new financial products. However, the current economic performance of the countries and stability, liquidity, and depth of financial markets are also crucial for better interaction between pension funds and capital market development.

4. Discussion and recommendations.

Despite the fact that the largest financial investor in the form of a pension agency appeared on the local market of Georgia in 2019, the market met it unprepared. The current picture allows us to say that although there is a lack of institutional investors in the local financial market, there are no existing securities, which would allow the pension agency to make more investments in the domestic market. The situation on the Georgian stock exchange should be considered a problem, because the equity capital market is an important alternative source of financing for corporations and for investment opportunities for institutional investors.

It is important to take into account that when we are researching the influence of pension funds on the country's capital market, the situation may differ from country to country. The causality analysis disclosed that stock market development had a significant impact on pension funds in the short term, but opposite causality was not identified. However, pension funds can influence the stock market development after a certain threshold over time. On the other hand, the cointegration analysis revealed that pension funds had a positive effect on stock market development in Brazil, Chile, Hungary, Mexico, Peru, and South Africa in the long term and insurance sector development had a positive impact on stock market development in Chile, Indonesia, Korea Republic, Philippines, and South Africa, but had a negative impact on stock market development in Hungary and Peru (Bayar et al, 2022). According to the study examined the impact of pension funds on capital market development in Nigeria from 1995-2022 using ex-post facto research design, capital market data provide evidence in favor of the dominant role of pension funds in capital markets worldwide but its influence on Nigerian capital market is still questionable (Yakubu et al, 2023). Since the defined contribution (DC) pension scheme (as the scheme in Georgia) was launched in Georgia only 5 years ago, it is still too early to talk about its impact on Georgia's financial market. But it is a fact that a large financial resource has appeared in the country, which, if directed in the right direction, can also have a positive impact on the development trend of the local financial market.

DC pension schemes are designed in such a way that the amount of pension to be received depends on the investment returns generated by the pension funds, the objective of the funds should be to maximize these returns. Achieving high returns requires high-risk investment. With the consideration of best international practices, the investment mandate of the pension agency should be further expanded and the riskiness of the investments should be increased within reasonable limits: otherwise, it is difficult to imagine keeping up with inflation.

According to the capital market development strategy of Georgia for 2023-20284, in 2025, the total value of pension fund assets is planned to increase 6.55 billion GEL, 3.25 times the value from 2021. In 2028, it will reach 12.1 billion GEL, which means an increase of 6.02 times the value from 2021. Taking into account all the trends we discussed above, we consider that:

(i) Growth at such a rate requires investing in assets with a higher risk than the existing ones, in particular, since the capital market assets have a higher rate of return, it is important for the policy of the pension agency to either increase the limits for investing in the foreign market, or to create more opportunities and alternatives in the local capital market;

(ii) If the assets are mostly directed to the purchase of shares or other relatively high-risk instruments, it will be possible to increase the returns. It is important to change the volume of pension assets placed in deposits, which are high at the moment. Giving preference to one instrument, such as bank deposits, especially in the face of rising inflation, cannot ensure stable real yields and a "decent" pension at retirement age;

(iii) The pension agency should be given more flexibility in setting limits for placement in low-risk, medium-risk, and high-risk assets to reflect the changing situation, both in international and local markets;

(iv) For countries with a small and emerging economy like Georgia, it is difficult to develop capital markets on their own. Considering the current picture, our recommendation is to create a fund under the leadership of the International Monetary Fund, to develop a regional capital market, which will ultimately be common to all emerging countries in the region. This kind of fund would be an interesting opportunity for developing countries, since many emerging economies have the same situation - countries with small economies are basically facing similar problems due to financial markets development. The fund created by international forces will be, on the one hand, an investment tool for state pension agencies and at the same time, the regional fund can also be a form of insurance for pension contributions. As, if necessary, the fund will insure the investments of the pension agencies. In case of having some kind of insurance, pension funds will be able to make riskier and higher income investments within the country. Which in turn will play the role of a catalyst in the development of the local capital markets. As the pension fund accumulates sizable assets, it should switch its investment strategies towards more risk-oriented portfolios.

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