A STUDY OF THE DYNAMICS OF CUSTOMER DEPOSITS AND INVESTMENTS IN FINANCIAL INSTRUMENTS IN BULGARIA FOR THE PERIOD 2013–2023

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Abstract: The globalization of financial markets and the dynamic development of information and communication technologies over the past two decades have become key drivers of significant changes in the financial system. New and increasingly complex financial products and services are emerging, competition among financial institutions is intensifying, and traditional financial services are becoming digitalised. Many financial products offered today did not even exist a few years ago, and almost all transactions, both at the individual and institutional level, are now conducted electronically at the click of a button. In this environment where there are abundant investment opportunities and simplified access to financial markets, deposits remain the preferred instrument for holding savings. This trend is evident not only in Bulgaria, but also in many other countries. This study focuses on examining deposits and investments in financial instruments in Bulgaria over the period 2013 – 2023.

Key words: deposits, financial instruments, Investor Compensation Fund, Deposit Insurance Fund.

This article shall be **cited** as follows: **Kazandzhieva-Yordanova**, **I.**; **Ralinska**, **E.** (2024). A Study of the Dynamics of Customer Deposits and Investments in Financial Instruments in Bulgaria for the Period 2013 - 2023, Economic Archive (3), 3-23.

URL: www2.uni-svishtov.bg/NSArhiv

DOI: https://doi.org/10.58861/tae.ea-nsa.2024.3.01.en

JEL: G21, G23.

Introduction

he structure of the financial system in Bulgaria continues to be dominated by deposits as the primary asset in which Bulgarians hold their savings. According to a study by EFAMA (EFAMA, 2024), the share of deposits accounted for 73% of the total financial assets held by households in Bulgaria at the end of 2022, while investments in debt instruments, investment funds and public company stocks made up only about 6.4%. The average share of investments in investment funds across the EU is 10%, with Belgium leading at 23%, whereas in Bulgaria it stands at only 2%. EFAMA's study indicates that the financial sector in the EU is quite fragmented, with some countries, including Bulgaria, showing a significant imbalance in wealth distribution between deposits and funds invested in financial instruments and other assets.

Although economic agents in Bulgaria today have access to foreign capital markets, investments in financial instruments remain limited against a backdrop of continuously rising deposits in the banking system despite near-zero interest rates. This trend cannot be explained by the classical financial theory, which posits that economic agents act rationally and base their long-term views on newly acquired information about various instruments. Greed and fear are considered to be the primary emotions driving investor behavior in the financial markets. In addition, the attitudes of economic agents towards investing and the capital market are sstrongly influenced by cultural factors, education, upbringing, history and other elements (Hietanen, 2017). Specifically in Bulgaria, the conservatism of the average Bulgarian and the lack of investment traditions are often cited as primary reasons for limited investments in financial instruments. Added to this is the growing number of defrauded investors, which further erodes trust in the capital market and leads to investor withdrawal.

This study examines the dynamics of deposits and investments in financial instruments in Bulgaria over a ten-year period from 2013 to 2023. It aims to highlight trends and specific characteristics within this timeframe, which includes the 2014 "mini-banking crisis" resulting from the collapse of Bulgaria's fourth-largest bank (KTB) and the COVID-19 health crisis (2020–2022) that significantly impacted economic life in Bulgaria and internationally. The focus of the data on ccustomer deposits and investments in financial instruments will center on those protected by the Bulgarian Deposit Insurance

Fund (BDIF) and the Investor Compensation Fund (ICF) due to the availability of public information. The purpose of this study is to identify trends in changes in customer deposits and investments in financial instruments based on an analysis of the dynamics of deposits and investments in financial instruments and based on these trends to attempt to explain the behavior of retail customers. The findings of this research conclude that a discernible, albeit not strongly defined, dynamic in customer deposits and investments in financial instruments can be observed over the 2013–2023 period, influenced by the level of protection provided by Bulgaria's financial security network (the deposit guarantee scheme and the investor compensation scheme).

The study is dedicated to the dynamics of ccustomer deposits and investments in financial instruments in Bulgaria without making comparisons with other countries. Such a comparison would undoubtedly be valuable, however but for the authors it would be the subject of additional research and publications. Similarly, our approach excludes macroeconomic indicators such as inflation rate, employment, GDP growth and others, which have an impact on changes in customer deposits and investments in financial instruments. For reasons of article length, we have not included these elements as additional factors in this study.

Literature review: Regarding the deposit dynamics, we would like to draw attention to a study by Dursun-de Neef and Schandlbauer (2022), in which the authors have demonstrated that during the Covid-19 pandemic, countries with a slight increase in unemployment experienced an increase in bank deposits. This phenomenon, attributed to "forced savings" was due to the inability to spend on leisure and travel activities. In their research, they show that such an increase occurred particularly among households whose deposits were below the limit guaranteed by the deposit guarantee scheme. The authors also found that the average deposit size also grew during the pandemic.

Yakubu and Abokor (2020), based on empirical data from Türkiye show, that in the long term, a strong positive relationship exists between bank stability and deposit attraction. They also observe a positive correlation between rising inflation and deposit growth, which they explain as being driven by a precautionary saving motive. Cekrezi (2022) studying the Albanian market, finds that an increase in capital adequacy and in transfers from abroad has a negative effect on deposit growth, explained by the fact that banks with high capital adequacy levels do not rely on external funding and make little effort to attract deposits, while transfers from abroad are not typically saved.

Weinstein and Muradoglu (2023) analyze depositor behaviour during banking panic, conducting a survey among respondents from seven countries. They show that customers are far more likely to withdraw their funds when they are unaware of the existence of a deposit insurance scheme. Morina and Osmani (2019) examine the influence of macroeconomic factors on deposit dynamics in the Western Balkan countries, finding that inflation has only a minor effect on deposit behaviour.

Yordanov (2022) demonstrates that deposits in Bulgaria declined as a share of household financial assets in 2018. The author attributes this decrease to the development of insurance, pension and standard guarantee schemes, rather than to an increase in the share of investments in debt instruments and shares of investment funds. Vassileva (2023) points out that the capital market in Bulgaria remains small, underdeveloped, and has low liquidity, with a relatively limited free-float volume. She concludes that the market has serious potential for development. An analysis by EFAMA (2024) indicates that the factors that contribute to the high share of deposits held by households in many countries and the correspondingly low investment in financial instruments include low national income per capita, low financial literacy, and the lack of tax incentives for investors in financial instruments.

A study conducted by the Committee on the Internal Market and Consumer Protection at the request of the European Parliament (2014) found that consumers rarely purchase financial products, which means that they have little experience and knowledge about a wide range of financial products. The study also found that during this period, consumer trust in financial service providers was among the lowest.

Erta et al (2013) demonstrate that behavioural aspects significantly influence how people make economic decisions and identified a number of reasons why consumers often make irrational decisions in financial markets. Hastings et al (2013) find a positive relationship between low financial literacy and poor financial performance of economic agents.

Deposit market dynamics for the period 2013-2023: In emerging markets, deposits form the core of banking operations. In Bulgaria, there is a pronounced seasonality in deposit dynamics, both in deposits from non-financial enterprises and households. This seasonality affects both the number of deposit accounts, and the amounts held in these accounts, with households showing peak parameters at the end of the year. In contrast, non-financial enterprises show peak deposit amounts in the third quarter of the year. This analysis of deposit dynamics is based on quarterly data for the period Q1 2013 – Q4 2023, published on the website of the Bulgarian National Bank (BNB).

The average balance per household deposit account shows a distinct upward trend over the period 2013 – 2023, with annual growth rates ranging between 9% and 12%. (Min=3,032 BGN in 2013, Max=8,630 BGN in 2022). The trend observed for non-financial enterprises is mixed, with changes in

the average deposit amount ranging from -5% to 25% (in absolute terms Min=28 222 BGN in 2014, Max=70 217 BGN in 2023). If we assume that the negative value in 2014 for average deposit volumes resulted from the insolvency of the fourth-largest bank and the loss of deposits of non-financial enterprises due to amounts exceeding the maximum guaranteed limit of 196,000 BGN or interest rates above the bank's standard levels, the general trend for non-financial enterprises over the remaining periods is one of growth in the average deposit amount, though with significant variation (between 2% and 25%).

The dynamics of the average deposit amount for non-financial enterprises a function of the number of accounts and the number of transactions conducted per an account, depending on the type of the company and its activity. For households, factors that may explain the changes in average deposit amount include regulatory requirements, the level of deposit protection, interest rates and various behavioural factors. Appendix No. 1 to the article presents the average deposit amount for households and non-financial enterprises over the 2013–2023 period.

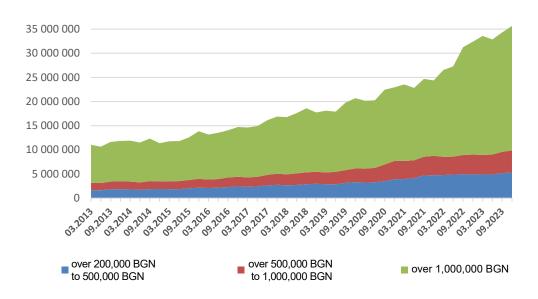
The total amount of deposits in the banking system increased over the period 2013-2023, with this trend observed in both the share of guaranteed and non-guaranteed deposits. During the period under review, the share of non-guaranteed deposits in non-financial enterprises fluctuated between 74% and 82%, with the lowest value recorded in December 2014 (74.19%), which can be linked to the mini-banking crisis in 2014 and the loss of confidence in the banking system. The highest share was recorded in December 2023 (81.37%), with this peak attributed to the upward trend observed over the period. Households showed a similar trend, though their share of non-guaranteed deposits was significantly lower compared to that of non-financial enterprises – ranging between 9% and 16%. For households, the lowest share of non-guaranteed deposits was recorded during the minibanking crisis in June 2015 (9.46%), while the highest was in December 2023 (15.40%).

For non-guaranteed deposits, based on the statistical information published by the BNB, we distinguish 3 ranges – "over 200,000 BGN to 500,000 BGN", "over 500,000 BGN to 1,000,000 BGN" and "over 1,000,000 BGN". Among non-financial enterprises, the growth of non-guaranteed deposits is driven by the increase in deposits in the highest range, "over 1,000,000 BGN". For households, the growth in non-guaranteed deposits is primarily influenced by the increase in the range "over 200,000 BGN to 500,000 BGN". There has been some growth in other ranges as well, but it has not been a decisive factor in the overall increase in non-guaranteed deposits.



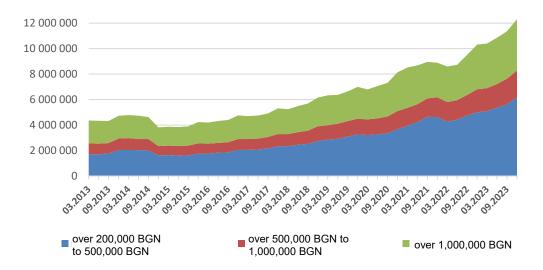
Source: BNB

Figure 1. Guaranteed and non-guaranteed deposits of non-financial enterprises and households (in thousand BGN)



Source: BNB, own calculations

Figure 2. Total amount of non-guaranteed deposits of non-financial enterprises, distributed by numerical ranges (in thousand BGN)



Source: BNB, own calculations

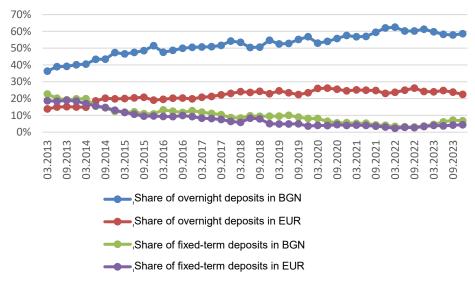
Figure 3. Total amount of non-guaranteed deposits of households, distributed by numerical ranges (in thousand BGN)

Below we explore the dynamics by types of deposits of enterprises and households – overnight deposits, deposits requiring notice before withdrawal (notice deposits) and deposits with agreed maturity (fixed-term deposits). Notice deposits are not typically sought by enterprises; they are more retail-oriented products (with no fixed term, but with a notification period required before withdrawal). These products are not popular among retail customers in Bulgaria, regardless of their intended use. The significant decline in these deposits observed in Q1 of 2020 resulted from a reclassification of savings deposits, which were previously reported as deposits requiring notice, into overnight deposits. Following the reclassification, minimal volumes remain in this category for the "Households" sector, which is indicative of the low demand for this product among retail customers in Bulgaria.

For the examined period, we track the trends in overnight deposits and fixed-term deposits in BGN and EUR held by non-financial enterprises through graphical analysis. We analyze the same types of deposits for households, additionally including notice deposits. Among non-financial enterprises, there is a noticeable downward trend in the share of fixed-term deposits beginning in Q1 2014, accompanied by a sustained upward trend in overnight deposits. The peak share of overnight deposits in BGN was observed in Q1 2022 (63%), while the minimum was recorded in 2013 (around 40% of total deposits). Overnight deposits in BGN are the dominant type among non-financial enterprises, mainly encompassing transaction accounts used to support the business activities of

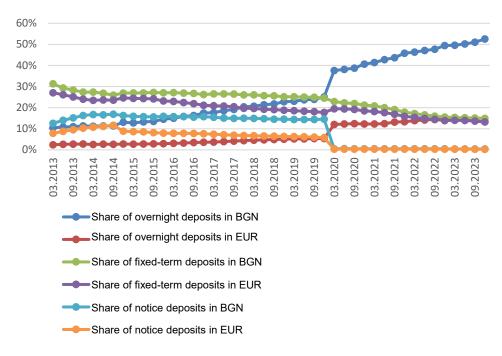
these enterprises. A steady increase in overnight deposits in EUR has been observed since early 2020, with the share of these deposits remaining stable at around 24%–26%. Fixed-term deposits show a slight upward trend following a decline recorded in Q3 2022, with the share of these deposits ranging between 4%–7% for BGN deposits and between 3%–4% for EUR deposits.

For households, until the reclassification of savings deposits as overnight deposits, fixed-term deposits in BGN and EUR held a predominant share of the total deposits. The highest values were recorded in 2013 (31% and 27%, respectively). This period saw relatively high interest rates, and the investment component of term deposits (the opportunity for customers to earn returns) was a key factor driving households to choose these deposit products. The share of fixed-term deposits in both currencies—BGN and EUR—was also similar, resulting from the fixed exchange rate of the BGN to the EUR, which made economic agents indifferent as to which currency to choose for savings and returns. Household overnight deposits in BGN and EUR include transaction accounts and savings deposits. A typical feature of savings deposits in Bulgaria is that they resemble transaction accounts in terms of characteristics, meaning that neither product is attractive to customers in terms of the returns they offer. Even when the effect of the reclassification of savings deposits is eliminated, a steady trend toward an increased share of overnight deposits has been observed since early 2013. This trend can be attributed to low interest rates (due to the interest rate cycle) and the lack of demand driven by the zero return that such products offer for savings purposes.



Source: BNB, own calculations

Figure 4. Types of deposits of non-financial enterprises



Source: BNB, own calculations

Figure 5. Types of household deposits

Below we will analyse the dynamics of deposits based on groups defined by the amount held in deposit accounts, using quarterly statistical information published by the BNB for the period Q3/2013–Q4/2023. This analysis considers the total sums and total number of deposits in each category, aiming to explain how depositor behavior may be influenced by the guaranteed deposit coverage provided by the Deposit Guarantee Scheme. In the period under review, we include the 2014 mini-banking crisis and the Covid-19 pandemic, both expected to have significantly affected depositor behaviour – for example, deposit withdrawals due to increased uncertainty during the mini-banking crisis and increased savings due to the uncertainty brought by the Covid-19 pandemic.

The statistical data published by the BNB are divided into 14 categories according to the amount held in the deposit account for non-financial enterprises and households, respectively. The smallest category includes deposits of up to BGN 1,000, and the largest – deposits exceeding BGN 1 million. For each category, we calculate the average growth rate, standard deviation, and correlation coefficient, presented in Appendix 2. The analysis examines the number of accounts, not the number of customers, as a single client may hold multiple accounts within one or more banks.

Our goal is to identify specific behaviours among non-financial enterprises and households by analysing the quarterly dynamics in deposit sums

and counts, especially considering events such as the mini-banking crisis and the Covid-19 pandemic. During the period under review, the highest positive quarterly changes observed in non-financial enterprises were observed in Q4 2014, in deposit ranges from BGN 2,500 to 5,000, from BGN 5,000 to 10,000, from BGN 10,000 to 20,000, from 20,000 to 30,000 BGN, from 30,000 to 40,000 BGN, from 40,000 to 50,000 BGN, from BGN 50,000 to BGN 100,000. and from BGN 100,000 to BGN 200,000. Notably, there was a reallocation of resources towards the levels that fall within the deposit protection limit. The largest negative change in deposits for amounts between BGN 500,000 and BGN 1,000,000 is observed in non-financial enterprises at the end of June 2014, while deposits over BGN 1 million showed a significant drop at the end of December 2014 in terms of total amounts, and in terms of the number of deposits – at the end of December 2021. For the range between BGN 200,000 and BGN 500,000—which includes non-guaranteed deposits—the data suggests an attempt by non-financial enterprises, in response to the mini-crisis, to reallocate these deposits within the secured ranges.

The largest deposit interval comprises unsecured deposits from large corporate clients, primarily used for operational purposes. Consequently, no significant effects associated with actions taken by these clients to seek coverage under the deposit guarantee scheme are expected. In the intervals above 200,000 BGN up to 500,000 BGN and 500,000 BGN up to 1 million BGN, the highest growth rates were observed at the end of September 2020 and the end of September 2021, respectively. Both periods coincide with the COVID-19 pandemic, and these increases can be explained by heightened economic activity during the summer months of 2020 and 2021, contrasting with the reduced activity for the rest of the year. For deposits over 1 million BGN held by non-financial enterprises, the most substantial growth was recorded at the end of September 2022, which can be attributed to the reversal of the interest rate cycle following a prolonged period of negative interest rates.

For households, the highest values observed in the upper intervals—200,000 BGN to 500,000 BGN, 500,000 BGN to 1 million BGN, and over 1 million BGN—occurred in 2013 and again toward the end of 2022, coinciding with the reversal of the interest rate cycle after a prolonged period of negative interest rates. In these top intervals, the largest decreases were recorded at the end of December 2014. Meanwhile, the highest increases (or close to the highest) were observed by the end of December in the intervals above 40,000 BGN up to 50,000 BGN, 50,000 BGN up to 100,000 BGN, and 100,000 BGN up to 200,000 BGN. Analysis of these fluctuations—particularly the minimum and maximum changes—indicates behaviors shaped by economic agents' sensitivity to the stability of the banking system, the existence of a deposit guarantee scheme and the coverage limit it provides, as well as by interest rate levels.

The standard deviation measures dispersion by calculating the square root of the average squared deviations from the mean values. The calculated standard deviation for deposit changes among non-financial enterprises, at 4.05%, is higher than that for household deposits, which stands at 1.26%. In terms of standard deviation values calculated for changes in the number of deposits, the values are similar for non-financial enterprises (1.13%) and households (1.19%). Notably, for non-financial enterprises, there is a larger discrepancy in the calculated standard deviation between the lower and higher deposit intervals. Among households, the lowest standard deviation for changes in deposit amounts and the number of deposits is observed in the interval above 40,000 BGN up to 50,000 BGN, and the highest values appear in the top deposit intervals, similar to those for non-financial enterprises: for amounts, the highest deviation is in the interval above 1 million BGN (5.96%), and for changes in the number of deposits, the highest deviation is observed in the interval above 200,000 BGN up to 500,000 BGN (5.51%).

The Pearson correlation coefficient indicates the strength and direction of the relationship between changes in deposits within a specific range and the overall change in deposits for the corresponding category (either non-financial enterprises or households). The computed values show positive correlations in both deposit amounts and deposit counts for non-financial enterprises and households, with some exceptions – for non-financial enterprises, negative values are found in the intervals above 2,500 to 5,000 BGN (-0.27) and above 10,000 to 20,000 BGN (-0.02), though these are not statistically significant. Similarly, in households, a negative correlation is observed in the count of deposits for the interval above 100,000 to 200,000 BGN (-0.03), but this value is also insignificant. Among nonfinancial enterprises, the highest positive correlation for deposit amount changes is observed in the interval above 1 million BGN (0.93), with additional significant values in the intervals above 200,000 to 500,000 BGN (0.68) and above 500,000 to 1 million BGN (0.66). For the number of deposits, the strongest correlation is seen in the interval up to 1,000 BGN (0.8), and a significant value is also found in the interval above 10,000 to 20,000 BGN (0.58). For other intervals, the correlation values remain insignificant.

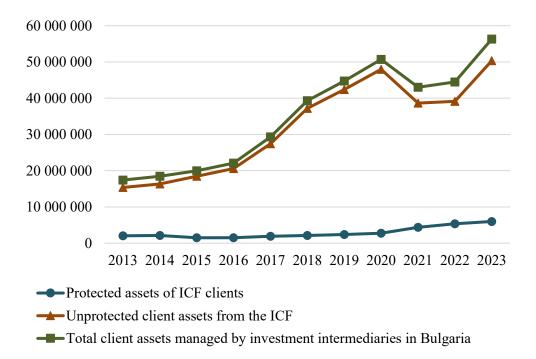
In households, the highest correlation coefficient values for changes in deposit amounts are observed in the interval above 50,000 to 100,000 BGN, with significant values in the ranges above 20,000 to 30,000 BGN (0.84), 30,000 to 40,000 BGN (0.82), and 10,000 to 20,000 BGN (0.81). In the lowest interval, up to 1,000 BGN, the correlation coefficient for changes in deposit amounts is insignificant. However, when considering the number of deposits, the Pearson coefficient is highest precisely in this lowest interval, up to 1,000 BGN (0.88), with insignificant values across the remaining intervals. Based on these calculations, it is difficult to pinpoint a clear trend of deposit fragmentation or

behavior among economic agents in response to deposit protection coverage levels, as provided by the deposit guarantee scheme for households. Both non-financial enterprises and households exhibit a decrease in the number of deposits, which suggests a trend toward account closure or consolidation in the lower deposit intervals.

Market dynamics for investment products in the period 2013-2023: The Bulgarian capital market over the past decade has faced significant challenges, showing persistent low liquidity, a limited number of investors, and a small selection of investable companies. This limited market activity has resulted in Bulgaria ranking at the bottom among EU member states on various indicators of capital market development, lagging behind countries like Hungary and Romania. According to a report by the EBRD (EBRD, 2023), the weak development of the capital market in Bulgaria is attributed to a low level of trust in the market, poor financial literacy, an unfavorable legal and regulatory environment, and a lack of investable assets.

As of the end of 2023, the total number of investment intermediaries in Bulgaria is 50, comprising 16 banks acting as investment intermediaries and 36 non-bank investment intermediaries. In 2013, the total was 67, indicating a consolidation of the investment services market in the country rather than a contraction. Investment intermediaries report monthly to the Investor Compensation Fund (ICF) and the Financial Supervision Commission information about the client assets (financial instruments and other assets) that they hold, administer, and manage on behalf of clients. The information presented is divided into two categories: 1. Client assets that are nonprofessional and are therefore protected by the ICF, and 2. Client assets that are professional and are therefore not protected by the ICF. These data more accurately reflect the activity of professional and non-professional investors in the capital market and in the financial instruments market, compared to more commonly used indicators such as "Market Capitalization" and "Exchange Turnover," as the former provide information on both the investments of economic agents on the Bulgarian Stock Exchange (BSE) and their investments on foreign capital markets and over-the-counter markets. Distinguishing between professional and non-professional investors (retail clients or small investors) is important for tracking the development of the capital market and the activity of various investors in this market.

The figure below presents the values of client assets (financial instruments and cash) that investment intermediaries in Bulgaria manage, hold, and administer by the years and by investor type (i.e., professional and non-professional, or as we have labeled them in the figure, protected and unprotected client assets from the Investor Compensation Fund).



Source: FCI Annual Reports (www.sfund-bg.com)
Figure 6. Client assets managed by investment intermediaries licensed in
Bulgaria (in thousand BGN)

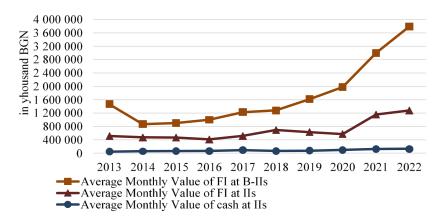
During the period under review, with few exceptions, there was a steady increase in both protected and unprotected client assets. Over the course of 10 years, protected client assets have increased nearly threefold, from 2 billion BGN in 2013 to 6 billion BGN by the end of 2023. Unprotected client assets have also tripled, rising from 15.4 billion BGN at the beginning of the period to 44.7 billion BGN at the end of 2023. To accurately interpret the data, it should be noted that, unlike deposits which are recorded at face value, the price of the financial instruments is taken as of a specific reporting date. The prices of financial instruments are constantly changing due to various factors. This means that fluctuations in the value of client assets may result from both price changes in financial instruments and inflows or outflows of clients, respectively funds. Considering that during the period from 2013 to 2023, leading indices such as the S&P 500, Dow Jones Industrial, DAX, and SOFIX have shown significant growth, we can conclude that the increase in the value of client assets during this period is partly due to the rising prices of financial instruments.

The share of protected assets (i.e., those of small investors) in the total amount of client assets held by investment intermediaries in Bulgaria varies

between 5% and 12%, with the lowest value of this share observed in 2018, 2019, and 2020 (5%), owing to a significant increase in unprotected client assets during this period, primarily assets held by banks as investment intermediaries. This indicates that the financial instruments market is dominated by institutional investors, who hold an average of about 90% of the assets managed by investment intermediaries. Non-professional investors hold approximately eight times less in assets compared to professionals, which shows that in Bulgaria, investing in financial instruments still has very low awareness among small, non-professional clients. On the other hand, the tripling of assets held by non-professional investors over ten years demonstrates that interest in investments in financial instruments is gradually increasing. In recent years, more non-professional investors have been turning to investments in government bonds, not only those of the Bulgarian state, which offer significantly higher returns than deposits and are correspondingly risk-free. In 2023, the yield on long-term Bulgarian government bonds ranged between 4% and 5%, compared to 0% yield on deposits.

Categorized by types of investment intermediaries (see Fig. 7), during the period from 2013 to 2023, banks as investment intermediaries (B-II) held and managed the most financial instruments of non-professional clients, amounting to 4.4 billion BGN at the end of 2023, which is 3.5 times more compared to non-bank investment intermediaries. Until the end of 2018, the gap between the value of assets managed by non-bank investment intermediaries and those managed by B-II was not so significant; however, after that, it consistently widened. This can be explained by the fact that after 2016, due to zero interest rates on deposits, banks directed some of their depositors towards investments in stocks, bonds, and mutual funds. In addition to having a vast client base of depositors, the wealthiest economic agents are clients of banks, and they have personal bankers who assist them in managing their investments.

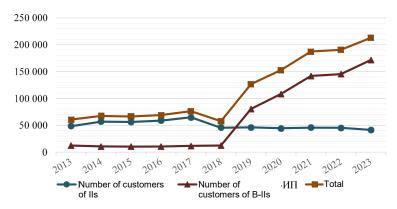
The cash funds reported by investment intermediaries and held by clients are related to transactions on electronic trading platforms for currency trading (Forex market) and financial derivatives. In recent years, investor interest in such transactions has been growing, leading to an increase in cash funds declared by investment intermediaries. Nowadays, anyone with access to a computer and the internet can participate in the market. This type of trading employs leverage techniques that allow clients to trade beyond their deposits (i.e., to trade with much more money than they have available), meaning that even a small amount of money can enable an investor to trade in large volumes.



Source: Annual Reports of the FKI (www.sfund-bg.com)
Figure 7. Average monthly value of the client assets protected by the ICF in the case of IIs and B-IIs (in thousand BGN)

During the reviewed period, the number of (non-professional investors consistently increased, reaching 212,950 by the end of 2023, compared to 60,660 at the end of 2013 (as shown in Fig. 8). This significant growth is primarily attributed to B-IIs, which have shown a clear upward trend since 2018. Notably, until 2018, B-IIs reported considerably fewer clients than IIs. However, after this point, the trend reversed, and B-IIs began to declare a higher client count than IIs. In the current period, B-IIs report having four times as many clients as IIs. This shift is largely due to the zero returns on deposits since 2016 and the extensive client base banks possess, enabling them to redirect depositors toward alternative assets, specifically financial instruments.

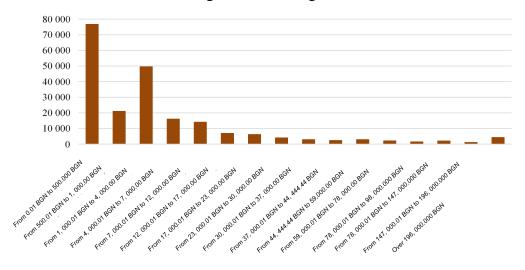
There is no publicly available information on the number of non-professional investors at IIs and B-IIs.



Source: Annual Reports of the ICF (www.sfund-bg.com)

Figure 8. Number of clients to be compensated by the ICF by groups of firms

As of December 31, 2023, the majority of non-professional clients of investment intermediaries and bank investment intermediaries held assets valued up to BGN 4,000 – 76,641 or 36% of all non-professional clients of IIs and B-IIs (see Fig. 9). Only 9% of clients held assets over BGN 30,000, and approximately 2% of these clients held assets exceeding BGN 196,000. Out of a total of BGN 6 billion in assets held by non-professional clients, around BGN 4 billion belonged to clients with assets over BGN 196,000, totalling approximately 4,000 clients by the end of 2023. This indicates that, on average, the non-professional investors with the largest asset holdings possess around BGN 950,000 each. According to data available on the website of the Investor Compensation Fund, the distribution of investors across asset categories in prior years is similar to the distribution observed at the end of 2023. This trend indicates that the market is dominated by a small number of large investors holding high-value financial instruments—about 1% of investors control 68% of all assets owned by non-professional clients. This concentration can be attributed to the rapid economic growth in recent years, which has led to significant wealth accumulation among individuals with substantial assets. These high-net-worth individuals are the most active in the market, benefiting from specialized financial services, including portfolio management, investment advisory, real estate investment planning, trust services, and tax consultations. The majority of investors holding substantial assets are clients of banks, demonstrating the banks' strong ability to attract more investors to financial instruments, including those in the highest economic bracket.



Source: Annual Report 2023 of the ICF (www.sfund-bg.com) Figure 9. **Number of customers by customer asset intervals as of 31.12.2023**

Conclusion

The data presented on deposits and investments in financial instruments indicate that economic agents in Bulgaria continue to hold a disproportionately large share of their savings in deposits. Investment in financial instruments remains underrepresented among non-professional investors, despite a notable increase in financial instrument investments. This increase is largely attributable to a small group of high-net-worth investors. Deposits remain the preferred savings vehicle for households. Among non-financial enterprises, there is no clear savings pattern, with changes in their deposit levels driven mainly by business activity. Nonetheless, there is a discernible, albeit modest, tendency among economic agents to consider the level of protection provided for deposits and investments through the financial safety net—specifically, the deposit guarantee scheme and the investor compensation scheme.

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average balance per deposit account	non- financial enterprises	annual change	households	annual change
12.2013	29 575	2%	3 032	10%
12.2014	28 222	-5%	3 410	12%
12.2015	32 279	14%	3 803	12%
12.2016	32 840	2%	4 224	11%
12.2017	35 482	8%	4 662	10%
12.2018	38 298	8%	5 157	11%
12.2019	43 848	14%	5 630	9%
12.2020	49 855	14%	6 253	11%
12.2021	52 221	5%	7 075	13%
12.2022	65 140	25%	7 819	11%
12.2023	70 217	8%	8 630	10%

Source: FGVB, own calculations.

Appendix №2

Average change, standard deviation and correlation by deposit intervals for non-financial corporations and households

		average	standard	
		change	deviation	correlation
Deposits of non-financial				
enterprises				
to 1000 BGN.	number	-0,16%	1,83%	0,82
to 1000 BGN.	amount	0,30%	2,83%	0,13
from 1000 to 2500 BGN.	number	0,80%	1,47%	0,27
Hom 1000 to 2300 BGN.	amount	0,81%	1,42%	-0,27
from 2500 to 5000 BGN.	number	0,99%	1,31%	0,41
Hom 2500 to 5000 BGN.	amount	0,97%	1,36%	0,13
from 5000 to 10 000 BGN.	number	1,32%	1,98%	0,40
nom 3000 to 10 000 BGN.	amount	1,35%	2,01%	0,35
from BGN 10,000 to BGN	number	1,62%	2,78%	0,58
20,000.	amount	1,64%	2,83%	-0,02
from BGN 20,000 to BGN	number	1,85%	3,12%	0,27
30,000.	amount	1,85%	3,15%	0,60
from BGN 20,000 to BGN	number	2,12%	3,71%	0,26
30,000.	amount	2,12%	3,72%	0,55
from BGN 40,000 to BGN	number	2,12%	3,97%	0,29
50,000.	amount	2,11%	3,97%	0,63
from BGN 50,000 to BGN	number	2,18%	3,48%	0,15
100,000.	amount	2,19%	3,48%	0,58
from BGN 100,000 to BGN	number	2,58%	3,48%	0,24
200,000.	amount	2,64%	3,47%	0,48
from BGN 100,000 to BGN	number	2,79%	4,25%	0,19
200,000.	amount	2,79%	4,30%	0,68
from BGN 500,000 to BGN	number	2,57%	4,59%	0,12
1,000,000	amount	2,52%	4,65%	0,66
over DCN 1 000 000	number	2,49%	4,19%	0,00
over BGN 1,000,000	amount	3,01%	5,95%	0,93
Household deposits				
to 1000 BGN.	number	-1,54%	1,54%	0,88
to 1000 BGN.	amount	-0,56%	2,31%	0,29
from 1000 to 2500 BGN.	number	-0,21%	2,16%	0,45
110111 1000 to 2300 DGN.	amount	-0,19%	2,16%	0,72

from 2500 to 5000 BGN.	number	0,13%	1,60%	0,25
110111 2300 to 3000 BGIN.	amount	0,13%	1,53%	0,67
from 5000 to 10 000 BGN.	number	0,68%	1,38%	0,25
110111 3000 to 10 000 BGN.	amount	0,69%	1,28%	0,73
from BGN 10,000 to BGN	number	1,33%	1,21%	0,31
20,000.	amount	1,36%	1,14%	0,81
from BGN 20,000 to BGN	number	1,89%	1,08%	0,29
30,000.	amount	1,89%	1,01%	0,84
from BGN 30,000 to BGN	number	2,22%	1,13%	0,26
40,000.	amount	2,19%	1,06%	0,82
from BGN 40,000 to BGN	number	2,33%	1,00%	0,28
50,000.	amount	2,31%	0,96%	0,66
from BGN 50,000 to BGN	number	2,54%	1,13%	0,20
100,000.	amount	2,54%	1,13%	0,90
from BGN 100,000 to BGN	number	3,19%	1,38%	-0,03
200,000.	amount	3,31%	1,54%	0,50
from BGN 200,000 to BGN	number	2,95%	5,51%	0,34
500,000.	amount	2,92%	5,42%	0,66
from 500,000 to BGN	number	2,07%	5,10%	0,35
1,000,000	amount	2,02%	5,11%	0,72
over PCN 1 000 000	number	1,81%	5,43%	0,33
over BGN 1,000,000	amount	2,12%	5,96%	0,64

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