

# THE STRUCTURE OF INVESTORS IN FINANCIAL INSTRUMENTS IN LITHUANIA

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**Abstract.** *The purpose of this article is to review the range of financial instruments available in Lithuania, highlighting their role in the overall financial system and revealing the peculiarities of the structure of investors in financial instruments. The attention of the article is firmly focused on the grouping of investors in financial instruments and analysis of their structure, based on the study of comparative historical data and other macroeconomic indicators, as well as possible development prospects. The methods used include logical and comparative analysis of science literature and legal acts, the study and generalization of statistical data.*

**Keywords:** *investments, financial instruments, securities, residents, households.*

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## Introduction

In Lithuania, as in many other countries, rapid expansion and development of the financial sector and differentiation of income level of the population gives rise to the need to invest free funds. It is determined by a wide range of reasons: some people invest wishing to ensure their safe future, others—seeking short-term goals; some invest

in order to safeguard their money against inflation, others—to protect themselves from unfounded expenses in other spheres.

The market of financial instruments, also called securities market, is a constituent part of economy, which allows re-distribution of financial resources between separate economic entities. As a result, the companies can accumulate necessary financial resources, whereas households and other economic entities have a possibility to invest and expect a return on investment. The behaviour of financial markets makes it possible to understand the general economic status of a country: the rising share prices show positive investor expectations and possible economic growth and vice versa—the falling share prices mark poor activity or prospects for a company or the whole national economy. Economic processes, which are related to the market of financial instruments, not only influence trade inside the country, but also attract foreign and institutional investors, whose capital contributes much to the creation of economic welfare, and increases the liquidity and global competitiveness of the market of financial instruments.

It is important to know who the key owners of the financial instruments are, how they are grouped, and in what they invest—these are the main problems dealt with in this article, and, if solved, will make it easier, I hope, for both the companies and investors to take right investment decisions and, probably, attract new potential investors.

## 1. Financial Instruments and Strategies of their Investment

The term financial instrument has a variety of definitions. According to Dubil financial instruments are classified into: fixed income securities, equities, derivatives (futures, swaps, options, exchange-traded funds, ect.).<sup>1</sup> Fabozzi<sup>2</sup> and Peterson<sup>3</sup> classify financial instruments into securities (shares), derivatives, and short-term and long-term debt securities. For the purpose of this article I am going to mostly follow the abbreviated definition provided in the Republic of Lithuania Law on Markets in Financial Instruments: A financial instrument means any of the following instruments: transferable securities, money market instruments, securities of collective investment undertakings, options, futures, swaps, forward rate agreements and any other derivative contracts relating to securities, currencies, interest rates or yields, or other derivatives instruments, financial indices or options, futures, swaps, forward rate agreements and any other derivative contracts relating to commodities, and financial contracts for differences<sup>4</sup>.

Only equities have been preserved as the “original” financial instruments in the present day Lithuanian financial market, whereas debt financial instruments often have the features of derivatives (e.g. Lithuanian bank bonds are linked with the raw materials

1 Dubil, R. *An arbitrage guide to financial market*. Jon Wiley & Sons LTD, 2004, p. 8–310.

2 Farbozzi, F. J. *The handbook financial instruments*. Jon Wiley & Sons Inc, 2002, p. 67–805.

3 Farbozzi, F. J.; Peterson, P. P. *Financial Management and Analysis*. Jon Wiley & Sons Inc, 2003, p. 27–533.

4 Law on markets financial instruments [interactive]. [accessed 23-10-2010]. <<http://www.vpk.lt/uploads/Law%20on%20Markets%20in%20Financial%20Instruments%20%282%29.doc>>

price index). The CFI (classification of financial instruments) code based on ISO-10962 (2001) standard defines the nature of financial instruments most precisely. Thus the following breakdown of the financial instruments based on that standard is used:

- E - Equities;
- D - Debt instruments;
- R - Entitlements or rights;
- O - Options;
- F - Futures;
- M - Others or Miscellaneous <sup>5</sup>

Although different terminology is used, the financial instruments are classified into three main groups: equities, debt instruments and derivatives.

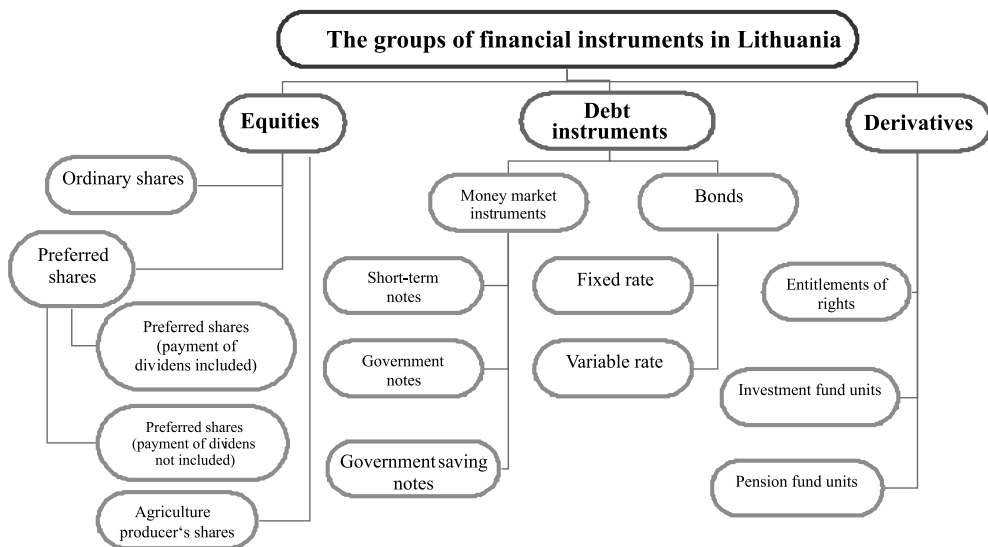


Fig. 1. The groups of financial instruments currently used in Lithuania (Source: compiled by the author and with reference to the Republic of Lithuania Law on Markets in Financial Instruments).

The financial intermediaries licensed in Lithuania can offer from the range mentioned above all financial instruments traded on and off the regulated Lithuanian market and can act as intermediaries almost in all financial markets of the world.

There is no single answer to why a new investor enters the market and what motivates him; however, certain generalization can be made. Investment financial instruments may be treated like business where monetary funds are employed and a return on investment

5 International Standard. Securities and related financial instruments—Classification of Financial Instruments (CFI code) ISO 10962:2001E, 2001.

or at least a protection against inflation is expected in the future. A part of the reasoning of the activity may be simulated using different scientific tools, and according to David G. Luenberger the scientific tools used are primarily mathematical, but in order to be a successful investor one must be aware of the principles of investment science and have an understanding of how these principles can be used in practice to make calculations that lead to good investment decisions. “There is also an art to investment. Part of this art is knowing what to analyze and how to go about it.”<sup>6</sup> One can rely on Robinson’s Crystal ball theory, which includes a scale of assessment criteria according to which the investment is assessed. It is possible to invest independently or hire professional financial intermediaries, after inquiring about their licence and professional level<sup>7</sup>. According to R.J. Shook it is important to know how your money is raised, whether the investment manager chosen by you has been the best choice<sup>8</sup>. The purposeful and professional attitude is important in investing. Jason Zweig admires the author of *The Intelligent Investor*—Benjamin Graham who according to him was “not only one of the best investors who ever lived; he was also the greatest practical investment thinker of all time.” Benjamin Graham has successfully realised his theory in practice. “In 1919, he earned a 250% return on the first day of trading for Savold Tire, a new offering in the booming automotive business; by October, the company has been exposed as a fraud and the stock was worthless”, writes Jason Zweig.<sup>9</sup>

In the review of investment strategies I could not miss mentioning Cunningham, who in his book *How to Think Like B.Graham and Invest Like W.Buffett* reveals in detail the nature of investment motivation and behaviour in the financial market, certain stereotypes of such market and market makers.<sup>10</sup> T. Kyiosaki and L.Lechter in their book, which is accessible to a wide range of readers, analyse the nature of investment, the motivation, and highlight investment traditions. Investment rules are provided in the form of lessons, and a separate section 17 does not forget to reveal “the magic of errors.”<sup>11</sup> Supplementing the authors referred above I could assert that it is rather difficult to learn directly from financial crises as each time they are different, the memory of a financial market is “short,” and speculative wishes are hardly measurable.

## 2. The Classification of Investors by Sectors

The restored financial market of Lithuania is quite young, it has moved to only the third decade. Its establishment gave rise to the need to thoroughly analyse the ongoing processes, make analysis, and statistical calculations. The complex analysis is needed both with regard to investor and the issuer of the financial instrument for the

6 Lungeberg, D. G. *Investment science*. New York: Oxford University Press, Inc, 1998, p. 1–134.

7 Robinson, R. Crystal balls for investor strategy. *Sunday Mail*. The Brisbane, 2006.

8 Shook, R. J. *The winner’s circle: Wall Street’s best mutual fund managers*. Jon Wiley & Sons Inc, 2005, p. 3–109.

9 Zweig, J. *Intelligent Investor*. Haper Collins Publishers Inc, 2003, p. 1–18.

10 Cunningham, L. A. *How to think like Benjamin Graham and invest like Warren Buffett*. MCGraw-Hill Companies, Inc., 2001, p. 1–153.

11 Kiyosaki, T.; Lecher, L. S. *Rich Dad’s. Guide to investing*. Warner Books, Inc., 2000, p. 29–169.

Bank of Lithuania, the Central Securities Depository of Lithuania, and the Securities Commission of the Republic of Lithuania. Following the Council Regulation (EC) No 2223/96 of 25 June 1996 on the European system of national and regional accounts in the Community, the institutions mentioned above have prepared the Rule on the Submission of Information on the Owners of Securities, Balances of Securities and Financial Flows (2005). Drafting of the Rule was based on the May 16, 2001 Decision No 569 of the Government of the Republic of Lithuania on the Implementation of the European System of National and Regional Accounts (ESA'95). According to the Rule the owners of financial instruments, also called securities, are grouped into Lithuanian residents, European Union residents, except for the Republic of Lithuania, and non-residents.

All owners of securities are grouped into the following ESS sectors and sub-sectors:

- **Non-financial corporations** (S.11);
- Public non-financial corporations (S.11001);
- National private non-financial corporations (S.11002);
- Foreign controlled non-financial corporations (S.11003);
- **Financial corporations** (S.12):
- The central bank (S.121);
- Other monetary financial institutions (S.122);
- Other financial intermediaries, except insurance corporations and pension funds (S.123);
- Financial auxiliaries (S.124);
- Insurance corporations and pension funds (S.125);
- **General government** (S.13):
- Central government (S.1311);
- State government (S.1312);
- Local government (S.1313);
- Social security funds (S.1314);
- **Households** (S.14);
- **Non-profit institutions serving households (NPISH)** (S.15).<sup>12</sup>

The owners of securities are classified according to the country of their residence. Each country is assigned a relevant two-letter code based on the international standard ISO 3166-1

Awareness of to which sector an investor belongs, can make it easier to forecast the dynamics of already available investment asset as well as the demand for the financial instruments in issue.

### 3. The Structure of Investments in Financial Instruments

Globalization of financial sector is a part and parcel of general economic tendencies. Foreign investors (non-residents) quite actively invade the Lithuanian economy,

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12 Rule the owners of financial instruments. *Official Gazette*. 2005, No. 44-1438.

taking command of the major part of management in financial sector, oil refinery, and telecommunications. Motivation of foreign investors, lasting direct investment, theoretical background and strategic evolution are analysed in detail by M. A. Marinov and S. T. Marinova. The authors by presenting the business cases for Hungarian and Bulgarian foreign direct investments and takeovers, not only appreciate the penetration of these investments into Eastern and Central European countries, but also identify the structure of investment mechanism, mostly highlighting the importance of their long duration.<sup>13</sup>

In order to provide the schedule of investment by residents and non-residents, I would like to specify the entities the financial instruments of which fall into the data category analysed in the article. They are the following:

- Lithuanian public companies;
- Government of the Republic of Lithuania;
- Management companies of Lithuanian investment funds;
- Various foreign issuers of financial instruments.

Due to the absence of obligations the statistical data do not include the following:

- Lithuanian private companies;
- Management companies of Lithuanian pension funds;
- Other Lithuanian and foreign issuers of financial instruments that have no unique international identification numbering system's<sup>14</sup> ISIN code based on ISO 6166 standard (1994).

It is important to know that the financial instruments, which are included in the data analysed in the article, are assigned to the following groups:

- Shares of Lithuanian public companies (enterprises, banks, etc.);
- Lithuanian money market instruments (short-term debt securities) and debt securities;
- Lithuanian Government securities (saving notes, Treasury bills, and bonds);
- Investment fund units issued in Lithuania;
- Financial instruments issued abroad.

From the given data we can see that during the whole 4-year period equities, also called shares, are the predominant financial instruments. It could be partially explained by the accumulating feature of this financial instrument. As compared with the majority of financial instruments, shares have no maturity date, they represent participation in the authorized capital and last as long as does the company that has issued them. Most other financial instruments have a maturity date—these are short-term or long-term financial instruments, therefore during crisis or stable development their value decreases much more and they have no cumulative growth lever. With the help of these data one can

13 Marinov, M. A.; Marinova, S. T. *Foreign Investors Strategy Development in the Central and Eastern European Context*. Jon Wiley & Sons Inc, 1999.

14 International Standard. International securities identification numbering system (ISIN) ISO 6166:1194E, 1994.

follow the Lithuanian Government’s demand for borrowing in internal market (marked in yellow in the diagram) and the dynamics of the value of debt financial instruments by commercial banks, as well as value proportions with other financial instruments (Fig. 2).

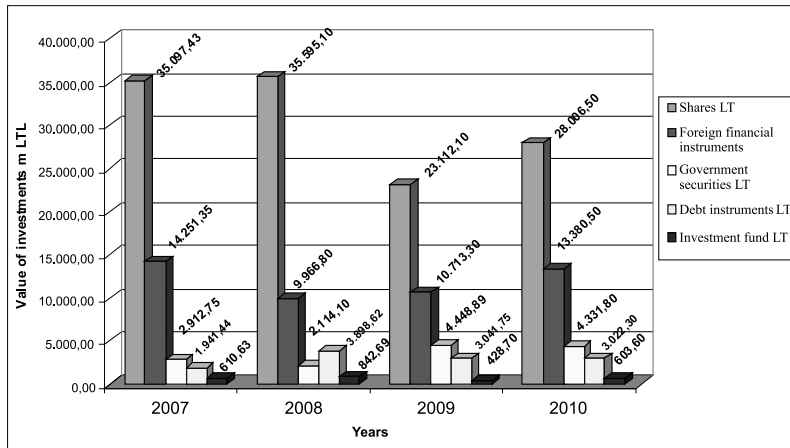


Fig. 2. Types of financial instruments in Lithuania in 2007-2010  
 (Source: compiled by the author and with reference to CSDL statistics <sup>15</sup>)

As seen in the following diagram, the bulk of total investment value in 2007-2010 is attributable to Lithuanian residents and it accounts for LTL 49,344.85 m (the last update to the 4-year data was made on 31 May 2010). The dynamics in the years 2007 and 2009 are quite interesting, showing that as the result of the crisis, with the decrease of the total value of investment in financial instruments the non-resident holdings decreased most of all – from LTL 17,976.66 m in 2007 to LTL 7,760.39 m in 2009. A discrepancy should be noted between the change in value directions of the holdings in 2007 and 2008, while the portfolio managed by residents grew from LTL 36,945.01 m to LTL 40,044.03 m, the holdings of foreign investors reduced respectively from LTL 17,976.66 m to LTL 12,973.25 m – what means that speculative foreign investors leave Lithuanian market of financial instruments and they show higher nervousness during financial disturbances than the residents (Fig. 3).

15 Investors into securities on 2007-2010. AB Central Securities Depository of Lithuania [interactive]. [accessed 23-10-2010]. <<http://www.cSDL.lt/en/general/statistic/gover2007.php>>.

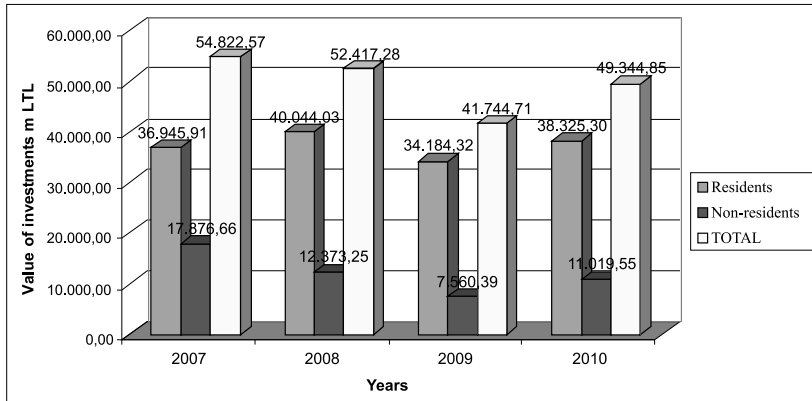


Fig. 3. Investment in financial instruments by Lithuanian residents and non-residents in 2007-2010  
(Source: compiled by the author and with reference to CSDL statistics<sup>16</sup>)

Analysing the ratio between Lithuanian residents and non-residents, it is evident that our market in financial instruments is rather close, and the tendencies of any changes in it will depend on the general changes in the financial system (Fig. 4).

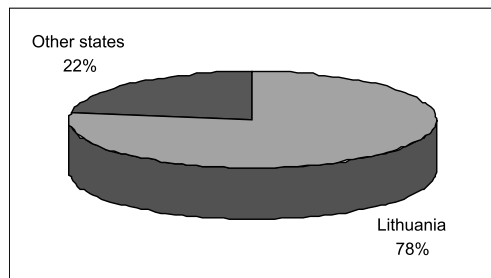


Fig. 4. The percentage ratio of Lithuanian residents and non-residents as on May 31, 2010  
(Source: compiled by the author and with reference to CSDL statistics<sup>17</sup>)

The following diagram by sectors shows the predominant percentage of foreign countries which reflects general situation in the financial market (Fig. 5).

16 Investors into securities on 2007-2010, *supra* note 15.

17 *Ibid.*



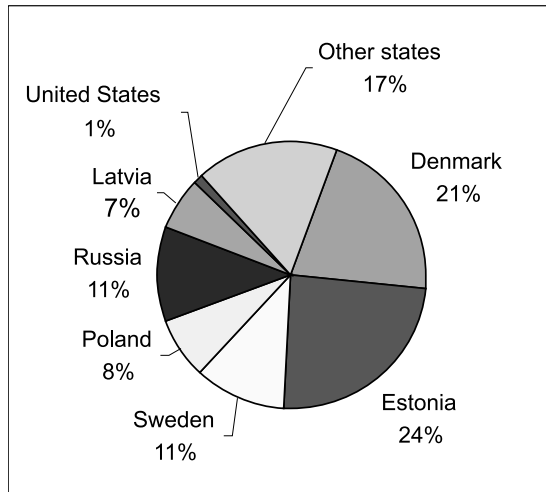


Fig. 5. The percentage ratio of investment in financial instruments by non-residents as on May 31, 2010  
(Source: compiled by the author and with reference to CSDL statistics<sup>18</sup>)

Analysing the structure of investors by groups, mentioned in paragraph 2 of this article, I will use the grouping by major categories:

- households – investment group (14);
- Non-households (Sectors 15, 121, 122, 123, 124, 125, 1311, 1313, 1314, 11001, 11002, 11003).

While identifying the financial market's climate it is important to know how much natural persons trust that market, how many deposits they hold in banks and how much they invest in financial instruments. Possibly incurred changes can be recorded by companies in one or another balance sheet item, whereas the change in the financial portfolio of households is felt directly. As seen from the data provided in (Fig. 6), the major part of the investment portfolio is held by non-households and this is the general regularity of the financial market. One could observe inactivity of household sector and passive redistribution of holdings across different asset classes. With the beginning of the financial downfall from 2007 through 2008, household investment increased and all other sectors maintained downward tendencies. With partial recovery of financial markets from 2009 till 2010 the non-households sectors grew, whereas the households showed downward tendencies (Fig. 6).

18 Investors into securities on 2007–2010, *supra* note 15.

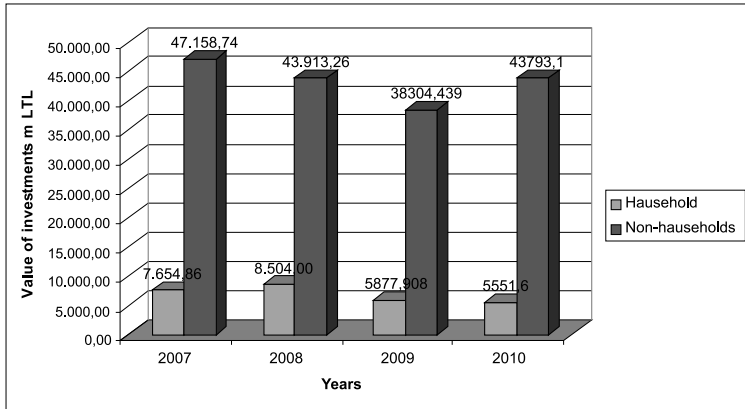


Fig. 6. Household and non-households investment in financial instruments in Lithuania in 2007-2010 (Source: compiled by the author and with reference to CSDL statistics<sup>19</sup>)

Rather informative is the ratio of GDP with the total value of investment in financial instruments. In 2007-2008 the GDP considerably outpaced total investment, and in 2009-2010 a reverse view can be observed. It could be stated that the market of financial instruments being an integrate part both of the overall financial system and the total economy and without any doubt influencing GDP, is rather a stable sector of economy (Fig. 7).

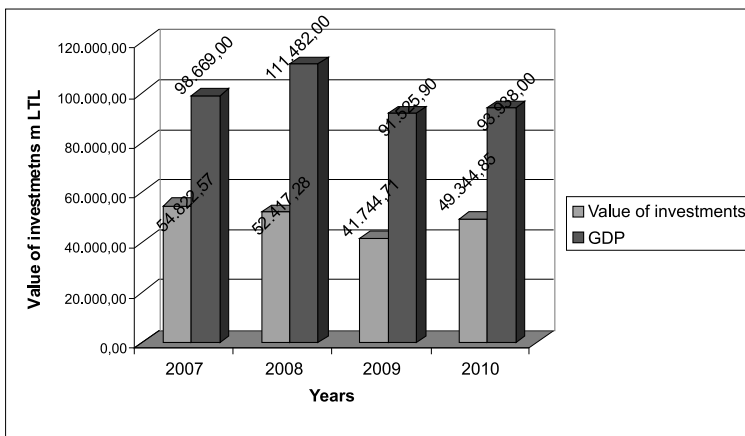


Fig. 7. Investment in financial instruments and GDP value in Lithuania in 2007-2010 (Source: compiled by the author and with reference to Statistics Lithuania and CSDL statistics<sup>20</sup>)

19 Investors into securities on 2007-2010, *supra* note 15.  
 20 Statistical databases on 2005-2010 in Lithuania. The Department of Statistics (Statistics Lithuania) [interactive]. [accessed 23-10-2010]. <[http://www.stat.gov.lt/uploads/docs/Pagrindiniai\\_rodikliai\\_1008.xls](http://www.stat.gov.lt/uploads/docs/Pagrindiniai_rodikliai_1008.xls)>; Investors into securities on 2007-2010, *supra* note 15.

Referring to the data of the performed analysis, I would like to present the dynamics in the Lithuanian household investment in financial instruments in terms of value that shows the first signs of recovery, but noticeably lags behind the 2007 level, when the amount of investment portfolio per capita in Lithuania exceeded 2 thousand Litas. It is evident that the real value of the holding of household investors is much higher than shown by the data in Fig. 8, as presently only each fifth natural person is involved in investing.

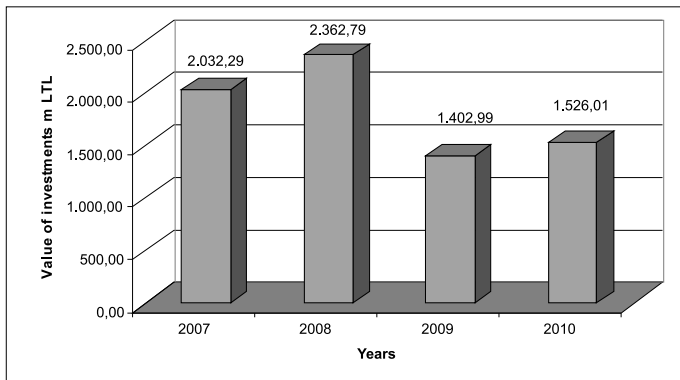


Fig. 8. The dynamics of investment in financial instruments in Lithuania in the years 2007-2010 (Source: compiled by the author and with reference to Statistics Lithuania and CSDL statistics<sup>21</sup>)

## Conclusions

With regard to the purpose of the analysis, we can see that a rapidly changing financial sector in Lithuania is like a general indicator of economic “health,” which shows the signs of both the “overheating” and the “freezing that impact the activity and welfare of all economic entities. The market of financial instruments in our country has been under development so far, its development, the level of maturity and the range of financial instruments are determined by market participants’ sophistication and real economic needs.

Presently, the financial instruments used in Lithuania are equities, debt securities and derivatives.

It is advisable to narrow the structure of investors by breaking it into two groups – households and non-households.

Investment traditions are in the process of formation yet. In order to stimulate the activity of investors and development of the whole financial sector, I propose to:

- develop investor education;

21 Statistical databases on 2005-2010 in Lithuania, *supra* note 20; Investors into securities on 2007-2010, *supra* note 15.

- encourage arrival of new issuers into the market;
- use the methodologies based on international standards for grouping of financial instruments and investors;
- purposefully reduce the tax “burden” related to investment;
- enhance international integration of trade and settlement systems and promote creation of new high technologies in this sphere in Lithuania; and
- improve the activity of risk capital institutions.

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## INVESTUOTOJŲ Į FINANSINES PRIEMONES STRUKTŪRA LIETUVOJE

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**Santrauka.** Straipsnyje narinėjama finansinių priemonių rinka Lietuvoje, jos svarba bendroje finansų sistemoje. Detaliai analizuojama finansinės priemonės sąvoka, apžvelgiamos įvairių autorių siūlomos šių priemonių skirstymo metodologijos, atskleidžiant terminologijų panašumus ir skirtumus, priklausančius nuo geografinių ir investavimo tradicijų veiksnių. Sustambintos finansinių priemonių, kitaip dar vadinamų vertybiniais popieriais, grupės – nuosavybės ir skolos vertybiniai, taip pat išvestiniai finansiniai instrumentai. Tiriant investuotojų į finansines priemones struktūrą, skiriamos Lietuvos rezidento ir nerezidento sąvokos bei pagal ESS 95 sektorizavimą pagrindinės grupės. Pateikiamas aktyviausiai investuojančių užsienio šalių procentinis pasiskirstymas. Tiriamoje dalyje aptariamos dvi sustambintos investuotojų grupės – namų ūkiai (14) ir ne namų ūkių sektoriai (15, 121, 122, 123, 124, 125, 1311, 1313, 1314, 11001, 11002, 11003). Lyginama šių sektorių struktūra lyginamąja verte mln. Lt bei procentine išraiška, investavimo psichologija, strategijos bei investuotojų elgsena staigiomis finansinių priemonių rinkų pasikeitimo sąlygomis. Atskleidžiant namų ūkių investavimo į finansines priemones tradicijų skvarbą ir jų svarbą bendroje ekonominėje raidoje, pateikiamas investicijų vertės ir BVP santykis bei investicijų Lt vienam Lietuvos gyventojui dinamika 2007–2010 metais.

Straipsnį sudaro trys skyriai: pirmame nagrinėjama finansinių priemonių struktūra ir jų investavimo strategijos, antrame pateikiama investuotojų sektorizavimo metodologija ir standartai, trečiame atskleidžiama investicijų į finansines priemones struktūra, remiamasi literatūros sąraše nurodytais šaltiniais bei šio straipsnio autoriaus ne pirmus metus atliekamais ir skelbtais <http://www.csdl.lt/lt/aktualijos/statistika/> bei dar neskelbtais skaičiavimais.

**Reikšminiai žodžiai:** investicijos, finansinės priemonės, vertybiniai popieriai, rezidentai, namų ūkiai.

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